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PRESSURE, STRAIN AND FORCE

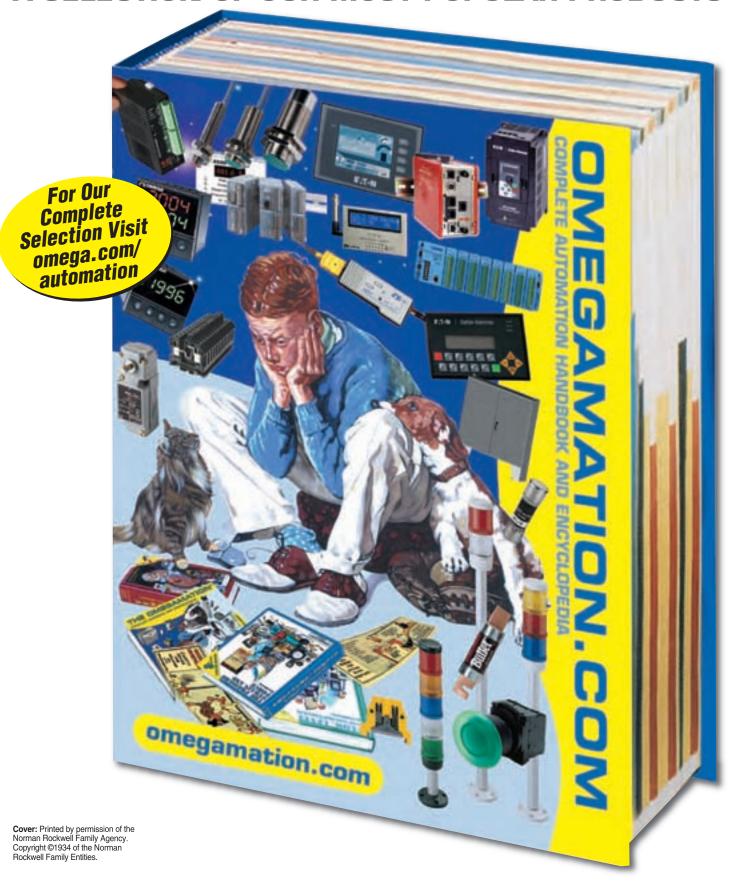
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✓ Fits in the Smallest Panels:
17.5 x 100 x 120 mm (0.69 x 3.94 x 4.72")

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(L to R) HE359DAC007, \$280, HE359ADC107, \$245, and HE359RTD100, \$280, shown smaller than actual size.

MOST POPULAR MODELS LISTED!

To Order (Spec	To Order (Specify Model Number)				
Model No.	Price	Description			
HE359DIQ512	\$200	I/O module, 4 DC inputs (12/24 Vdc), 4 relay outputs (250 Vac, 30 Vdc, 2A max)			
HE359ADC107	245	I/O module, 4 analog inputs, voltage (±10 Vdc), 1 mV resolution			
HE359RTD100	280	I/O module, 4 RTD inputs (Pt-100, Ni-100, Pt-1000, Ni-1000) or resistance inputs (0 to 2000 Ω), 0.1°C resolution			
HE359THM100	280	I/O module, 4 thermocouple inputs (Types J, K, R, S, B, E, T, N) or millivolt inputs (±1000 mV, max), 0.1°C resolution			
HE359DAC107	425	I/O module, 4 analog outputs, selectable between voltage (0 to 10 Vdc) and current (0 to 20 mA), 1 mV/1 μA resolution			

Ordering Examples: HE359THM100, I/O module, 4 thermocouple inputs, \$280. HE359RTD100, I/O module, 4 RTD inputs, \$280.

PLC/HMI Controllers*
Low-Cost Compact "All-in-One" Graphical OCS

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OCS XL Series Starts at \$115



- More Compact and Affordable than Separate PLC and Operator Interface
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- ✓ Removable Mass Data Storage (MicroSD™)



HE-XL102, \$1550.

An Industry-First!
The XL Series Can Store
Data or Easily Upload
Programs Via MicroSD™
Memory Card.

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For Complete Details Visit

omega.com/ ocsxl_series

HE-XT102, \$775.

✓ Two Serial Ports and Downloadable Protocol

Ethernet and Telephone Modem Options Cards for Plant and Remote Connectivity



HE-XE102, \$445.

2

For Complete Details Visit

omega.com/elc_plc

ELC Programmable Logic Controllers and Modules

ELC Series Starts at



- ✓ Base Models with 10 to 14 I/O, Expandable to 256
- Half the Size of Most PLCs
- ✓ 1-, 4-, 8-, 16-and 32-Bit Instructions
- DIN Rail Mountable, No Rack Required
- Built-In Integral LED Display
- High-Level Network Access— MODBUS®, DeviceNet and Profibus
- Remote Analog Modules for Analog I/O, Thermocouples and RTDs

The Eaton Logic Controller (ELC) is Eaton Cutler-Hammer's latest offering into the PLC (Programmable Logic Controller) market. Using the latest technology

this reduced-sized ELC, with its abundant module selection provides a "just right" concept, for delivering only what you want for the price you desire.



Intelligent Relays

EZ Series Starts at





- 8 Digital Inputs/4 Relay Outputs
- ✓ 128 Rungs of 3 Contacts and 1 Coil Each
- ✓ 16 Operating and Message Texts
- 2 Analog Inputs (10-Bit) Optional (Not with 240 Vac)
- ✓ 2 High-Speed Inputs, 1 kHz (Only DC Devices)

The EZ intelligent relays bring timers, relays, counters, special functions, inputs and outputs into one compact device that is easily configured. Providing exceptional levels of flexibility together with substantial savings in commissioning time and effort.





shown smaller than actual size.

MOST POPULAR MODELS LISTED!

To Order (Specify Model Number)								
			Inputs Outputs			Outputs		
Model No.	Price	Description	24 Vac	110 to 240 Vac	12 Vdc	24 Vdc	Analog	Relay
EZ512-AC-RC	\$186	12 I/O, clock, display	_	8	_	_	_	4
EZ512-DC-RC	186	12 I/O, clock, display	_	_	_	8	2	4
EZ512-DC-RCX	143	12 I/O, clock, no display	_	_	_	8	2	4

Comes complete with installation guide.

Ordering Example: EZ512-DC-RCX, 12 I/O, clock, no display, \$143.

Intelligent Relays

EZ700 Series Starts at

- ✓ 12 Digital Inputs
- ✓ 6 Relay Outputs
- ✓ 128 Rungs of 3 Contacts and 1 Coil Each
- ✓ 16 Operating and Message Texts
- 4 Analog Inputs (10-Bit) Optional (Not with 230 Vac)
- ✓ 2 High-Speed Inputs, 1 kHz (Only DC Devices)

For Complete Details Visit omega.com/ezseries

1 Digital **Expansion or** Network Connection

The EZ700 Series is for controlling medium-sized applications with up to 40 input/output signals. DIN rail mounted.



EZ719-DC-RC, \$262, shown smaller than actual size.

MOST POPULAR MODELS LISTED!

To Order (Specify Model Number) Inputs Outputs 110 to 24 24 240 Vac Vdc Model No. **Price Description** Vac Vdc **Analog** Relay \$262 EZ719-AC-RC 18 I/O, clock, display 12 6 EZ719-AC-RCX 225 18 I/O, clock, no display 12 6

Comes complete with installation guide.

Ordering Example: EZ719-AC-RCX, 18 I/O, clock, no display, \$225.

For Complete Details Visit

omega.com/

intelligent-relays

EZ800 Series Starts at

- ✓ 12 Digital Inputs
- 6 Relay Outputs
- ✓ 256 Rungs of 4 Contacts and 1 Coil Each
- 32 Operating and Message Texts
- 4 Analog Inputs (10-Bit) Optional (Not with 230 Vac)
- 4 High-Speed Inputs. 3/5 kHz (Only DC Devices)

- 1 Digital Expansion or Network Connection
- Networkable via **EZ-NET** with Up to 8 Stations
- ✓ 1 Analog Output (10 bit)

The EZ800 Series is for controlling large scale applications with up to 320 input/output signals. Models are available with and without displays. DIN rail mounted.



EZ819-AC-RC, \$415, shown smaller than actual size.

MOST POPULAR MODELS LISTED!

To Order (Specify Model Number)							
			Inputs Outputs			tputs	
Model No.	Price	Description	110 to 240 Vac	24 Vdc	Analog	Relav	Analog
woder No.	Price	Description	240 VaC	vac	Allalog	nelay	Allalog
EZ819-AC-RC	\$415	18 I/O, clock, display	12	_	_	6	_
EZ819-DC-RCX	362	18 I/O, clock, no display	_	12	4	6	
EZ820-DC-RC	465	19 I/O, clock, display		12	4	6	1

Comes complete with installation guide.

Ordering Example: EZ819-DC-RCX, 18 I/O, clock, no display, \$362.

Web Enabled Controllers

CSMSTR Series Starts at \$899

For Complete Details Visit omega.com/ csmstr



- ✓ Up to 5 Serial Communications Ports + Ethernet Port—Runs 4 Ethernet Protocols Simultaneously
- ✓ Supports up to 32 Independent PID Loops with Ramp/Soak
- ✓ Provides IT-Ready Data Logging
- Webserver Provides Worldwide Access to Data Logs and Virtual HMI
- ✓ Virtual HMI Offers Built-In PC-Based SCADA Functionality
- Extensive Built-In Driver List Allows Easy Data Mapping to PLCs, PCs, Motion Controllers, and SCADA Systems

The CSMSTR is a communications and control platform which can turn your PLC or controller into a SCADA system. With its extensive list of built-in drivers, up to 5 serial ports, and an Ethernet port capable of running four different protocols simultaneously, the CSMSTR allows



CSPID1R0, \$227, and CSPID2R0, \$340, shown smaller than actual size.

disparate controllers and devices to communicate with each other.

The CSMSTR can log data from any device connected to it. Log files are stored on a CompactFlash memory card, and can be automatically copied to network storage.

The CSMSTR has a built-in web server which allows remote access from any network-connected PC and can send alarm messages to your email and cellphone.

To turn your PLC into a temperature controller simply add CS-series control modules for PID loop control with ramp/soak capabilities (up to 32 independent zones). Implement PID control of any process variable, including pressure, flow, and strain gauge inputs in addition to temperature.



CSMSTRSX, \$899, shown smaller than actual size.

The CSMSTR allows data to be shared between any connected devices. Data registers from one PLC can be mapped to registers from a different PLC or controller.

Create virtual web pages, incorporating data tags from any connected device, which can be accessed from any network-connected PC or web-enabled phone. The CSMSTRSX provides a QVGA (320 x 240) virtual HMI, while the CSMSTRGT provides full-size VGA (640 x 320) pages.

Log data to a CompactFlash card from any connected device, then automatically copy the commadelimited (.csv) log files to a network drive at pre-defined intervals.

MOST POPULAR MODELS HIGHLIGHTED!

To Order (Specify Model Number)				
Model No.	Price	Description		
CSMSTRSX	\$899	Modular controller master, multiple serial ports and ethernet, protocol converter, data logger, web server, QVGA (320X240) virtual HMI		
CSMSTRGT	1199	Modular controller master, multiple serial ports and ethernet, protocol converter, data logger, web server, full VGA (640X480) virtual HMI		
CSPID1R0	227	Single loop PID temperature module, relay outputs		
CSPID2R0	340	Dual loop PID temperature module, relay outputs		
CSPID1SA	247	Single loop PID temperature module, solid state outputs, analog output		
CSPID1TA	247	Single loop PID temperature module, triac outputs, analog output		
CSDIO14R	247	8 digital inputs, 6 relay outputs		
CSINI800	536	8 analog inputs, 4 to 20 mA		
CSINV800	536	8 analog inputs, ±10 V		
CSSG10RA	320	Single loop PID strain gage module, relay outputs, analog output		

Ordering Examples: CSMSTRSX, master controller with QVGA virtual HMI, CSPID1R0, single-loop PID temperature module with relay outputs, \$899 + 227 = \$1126.

CSMSTRGT, master controller with full VGA virtual HMI, **CSSG10RA**, single-loop PID strain gage module with relay and analog outputs, \$1199 + 320 = **\$1519**.



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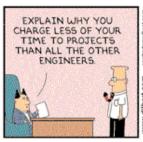
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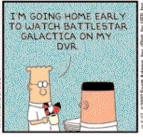
SCE Series Starts at \$105





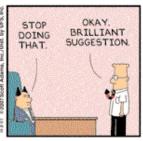












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- Event Storage (History)
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All models shown smaller than actual size.

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MOST POPULAR MODELS LISTED!

To Order (Specify Model Number)					
Model No.	Price	Description			
HMI04BU	\$410	HMI 4" blue mode touchscreen			
HMI06CE	875	HMI 6" color mode touchscreen with expansion slot			

Ordering Example: HMI04BU, HMI 4" blue mode touchscreen, \$410.

GP Series Starts at



- ✓ 10 Programmable **Function Keys**
- ✓ Two Serial Ports (RS232/RS485)
- Supports: Eaton D50/D32LT, D320, ELC
- ✓ MODBUS® ASCII/RTU
- Allen Bradley DF1
- Mitsubishi FX, FX2N **Series**
- ✓ OMRON C-Series
- ✓ Siemens 57-200 Series
- ✓ Koyo K-Sequence
- ∠ LG 200S
- ✓ ASCII Slave Mode And More!



ELC-GP02, \$281, shown smaller than actual size.



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To Order (Specify Model Number)						
Model No. Price Description						
ELC-GP02	\$281 Graphics panel, 160 x 32 pixels, 10 function keys, monochrome					
ELC-GP04	420	Graphics panel, 128 x 64 pixels, 10 function keys, monochrome				

Accessories

Model No.	Price	Description	
ELC-CBPCELC3	\$46	Cable to connect ELC-GP to an ELC controller or PC, 3 m (9.8')	
ELCSOFTGP	289	Programming software for GP units	

Ordering Example: ELC-GP04, graphics panel, 128 x 64 pixels, \$420.

Web-Enabled Operator Interface

For Our Complete

3 to 10" Display

G303 Series Starts at



- ✓ Up to 5 RS232/422/485 **Communications Ports**
- **✓** Built-in Ethernet Port to Network **Units and Host Web Pages**
- USB Port: Download Configuration from PC or Transfer Data to PC
- CompactFlash® Socket to **Increase Memory Capacity**
- Keypad For On-Screen Menus
- Keypad for Data Entry (G303 Series)
- ✓ Power Unit From 24 Vdc Supply

Resistive Analog Touchscreen (All Models Except G303)

✓ For Use in Hazardous Locations: Class I. Division 2, Groups A, B, C, and D; Class II, Division 2, Groups F and G; Class III, Division 2

The G303 Series operator interface terminals combine unique capabilities normally expected from high-end units with a very affordable price. The G303 Series is able to communicate with many different types of hardware using high-speed RS232/422/485 communications ports and Ethernet 10Base-T/ 100Base-TX communications. In addition, the G303 features USB for fast downloads of configuration files and access to trending and data logging. A CompactFlash socket is provided so that Flash cards can be used to collect your trending and data logging information as well as to store larger configuration files. In addition to accessing and controlling of external resources, the G303 Series allows a user to easily view and enter information. The unit uses a Liquid Crystal Display (LCD) module, which is easily readable in both indoor and outdoor applications. Users can enter data through the front panel 32-button keypad (G303) that has user identifiable keys. Other models allow data entry through the touchscreen and/or front panel keypad.



MOST POPULAR MODELS LISTED!

To Order	To Order (Specify Model Number)						
Model No.	Price	Description					
G303M000	\$599	3.2" operator interface, LCD 128 x 64 pixels, indoor use					
G306A000	1299	5.7" operator interface LCD, TFT, indoor, QVGA, 5-button keypad					
G308C000	1499	7.7" operator interface LCD, DSTN, 640 x 480, indoor, 7-button keypad					
G310S000	2599	10.4" operator interface LCD, TFT, outdoor, 8-button keypad					

Ordering Example: G303M000, 3.2" web enabled operator interface, SFCRM200, Crimson programming software, manual and USB cable, \$599 + 62 = **\$661**.

Accessories

Model No.	Price	Description			
G3CF064M	\$90	64 MB compact flash card (industrial grade)			
G3CF256M	235	256 MB compact flash card (industrial grade)			
G3CF512M	368	512 MB compact flash card (industrial grade)			
SFCRM200	62	Crimson programming software, manual and USB cable			
PSDR0100	129	DIN rail power supply, 24 Vdc, 1 A (recommended for G30303/G30306)			
PSDR0200	159	DIN rail power supply, 24 Vdc, 2 A (recommended for G308)			
PSDR0400	199	DIN rail power supply, 24 Vdc, 4 A (recommended for G310)			
CBLPROG0	41	RS232 programming cable			
CBLUSB00	26	USB programming cable (included with SFCRM200)			
G3RS0000	131	Two port RS232/485 (isolated) option card			
G3PBDP00	395	Profibus option card			
G3DN0000	395	DeviceNet option card			
G3CN0000	135	CANopen option card			

Ordering Example: G3RS0000, two port RS232/485 (isolated) option card, \$131.

Power Supplies 1 to 10 Amp Models

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ELC-PS Series Starts at

\$67

((

Universal AC Input (100 to 240 Vac)

24 Vdc Output

- Protections: Short Circuit/ Overload (AutoRecovery)
- UL 508 (Industrial Control Equipment) Approved
- ✓ DIN Rail Mount

AVAILABLE FOR FAST DELIVERY!

To Order (Specify Model Number)					
Model No.	del No. Price Description				
ELC-PS01	\$67	DIN rail power supply, 24 Vdc, 1 A			
ELC-PS02	97				

Ordering Example: ELC-PS01, DIN rail power supply, 24 Vdc, 1 A, \$67.



Visit omega.com/ elc-ps for details on this series.

ELC-PS01, \$67, shown smaller than actual size.

DR Series
Starts at



- Universal AC Input (85 to 264 Vac)
- ✓ DC Compatible Input (120 to 370 Vdc)
- ✓ Protections: Short Circuit/Overload/Over Voltage/Over Temp
- ✓ UL 508 (Industrial Control Equipment) Approved
- ✓ Built-In EMI Filter and Low Ripple Noise

AVAILABLE FOR FAST DELIVERY!

To Order (Specify Model Number)					
Model No. Price Description					
\$144	DIN rail power supply, 24 Vdc, 3.125 A				
R-120-24 168 DIN rail power supply, 24 Vdc, 5 A					
DR-240-24 229 DIN rail power supply, 24 Vdc, 10 A					
	Price \$144 168				

Ordering Example: DR-75-24, DIN rail power supply, 24 Vdc, 3.125 A, \$144.



DR-120-24, \$168, shown smaller than actual size.

Visit omega.com/dr_series for details on this series.

Stepper Drive Power Supplies

- Universal Input Voltage Range from 85 to 265 Vac
- ✓ 24 Vdc (6.3 A), 48 Vdc (6.7 A)
- ✓ Built-In Active PFC Filter, PF>0.95, Conforms to EN61000-3-2
- Peak Current For Motor Application

OMPS Series Starts at

\$180





To Order (Specify Model Number)						
Model No.	Price	Description				

Model No.	Price	Description
OMPS150A24	\$180	24V, 6.3 A power supply with active PFC filter
OMPS300A48	266	48V, 6.7 A power supply with active PFC filter

Ordering Example: OMPS150A24, 24V, 6.3 A power supply with active PFC filter, \$180.



than actual size.

Visit omega.com/omps

for details on this series.



OMEGAMATION offers a robust line of 2-phase step motors ranging in frame size from NEMA 11 to 34. In the most common frame sizes high torque (HT) motors are available. All motors conform to industry-

motors • drives • controls

standard NEMA mounting dimensions, and are offered with a range of well-featured, compatible drives and indexers.

All models shown

smaller than actual size.



Inductive Proximity Sensors
High Performance E57 Premium+ Series

12, 18 and 30 mm Dia

E57 Series Starts at \$60





For Our Complete Selection Visit omega.com/ inductive-prox

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details on this series.

- 2- or 3-Wire, DC, and AC/DC Multiple Range Sensor Models
- Manufactured to Take Abuse
- ✓ 360° Output Status Indicator is Easily Visible
- ✓ Wide Temperature Range

Stainless Steel Barrel and Potting Compound for Robust, High Temp/ Pressure Washdown, and Intense Shock and Vibration Applications

<u> Most Popular Models Highlighted!</u>

To Order (Specify Model Number)

is class (openly mean rannell)								
Туре	Model No.	Price	Operating Voltage	Sensing Range (Sn) mm (in)	Shielding	Connection Type		
2-Wire Sense	ors							
18 mm Dia NO Output	18 mm Dia							
3-Wire Senso	ors							
12 mm Dia NO Output	E57LAL12T110E	\$69		4 (0.16)	Unshielded			
18 mm Dia	E57LAL18T110E	77	6 to 48 Vdc	0 (0 0)	NPN	2 m (6') cable		
NO Output	E57LAL18T111E	77		8 (0.3)				
30 mm Dia NO Output	E57LAL30T110ED	98	6 to 48 Vdc	15 (0.6)	Unshielded NPN	4-pin micro DC connector		

^{*} Avoid wiring these AC/DC models in series as the sensors may not perform reliably. Contact OMEGAs Automation Sales Department with questions. **Ordering Example: E57SAL18A2,** 2 wire, 18 mm (0.7") Dia end sensing proximity switch with NO output and 2 m (6') cable, **\$101.**

Photoelectric Sensors

E58 Series Starts at

\$266



✓ Tempered Glass Lens Cover Protects Against Abrasion



Long Sensing Ranges with Unmatched Optical Performance

Exceptional Background Rejection For Our Complete Selection Visit omega.com/ photoelectric-sensors

Visit omega.com/e58 for details on this series.

Suitable for High Temperature, High Pressure Washdown 83 bar (1200 psi)

E58-18DP100-EL, \$266,

- Visible Sensing Beam for Quick Setup and Alignment
- Available with Both AC and DC Operation in a Single Unit

MOST POPULAR MODELS LISTED!

To Order (Specify Model Number)

	to eraci (openity incure)									
Size/ Type	Model No.	Price	Operating Voltage	Nominal Range ¹	Optimum Range	Cut Off Range ²	Field of View	Conn. Type	Light Operate	Dark Operate
18 mm Perfect Prox	E58-18DP100-EL	\$266	90 to 132 Vac 50/60 Hz or 18 to 50 Vdc	100 mm (4")	13 to 76 mm (0.5 to 3")	127 mm (5") and beyond	10 mm (0.38") Dia. @ 100 mm (4")	2 m Cable	Υ	N
30 mm Perfect Prox	E58-30DPS280-EL	362	90 to 132 Vac 50/60 Hz or 18 to 50 Vdc	280 mm (11")	28 to 228 mm (1 to 9")	318 mm (12.5")	26 mm (1") Dia. @ 280 mm (11")	2 m Cable	Υ	N

1 Sensor will detect 90% reflectance card at this range. 2 Sensor will ignore 90% reflectance card at this range. Ordering Example: E58-18DP100-EL, 18 mm diameter perfect prox reflex with 2 m (6') cable, \$266.

Perfect Prox® Background Rejection Sensors, 2-Wire Sensors

Closed Loop DC Speed Control

OMDC-MD Series



- Adjustable Accel/Decel
- ✓ NEMA 4X (IP66) Rating
- Pulse Input Capacity of 50,000 PPM, 833 Hz
- Programmable Power-On Initial Settings
- User-Friendly Programming from the Front Panel
- Program for Any Engineering Unit

The OMDC-MD Series is a compact, programmable DC speed control with digital closed loop feedback and LED display for DC motors rated to 2 horsepower.











OMDC-MD10P, \$515, shown smaller than actual size.

MOST POPULAR MODELS LISTED!

To Order (Specify Model Number)									
Model No.	Max Arm DC Amps Max Hp								
OMDC-MD10P	\$515	1/2 DIN panel mount	5	1					
OMDC-MD3P	719	¼ DIN panel mount	½ DIN panel mount 10 2						
Optional Sensor	Optional Sensor								
OMDC-PU-40E	\$114	Shaft mounted pick-up sensor, 20 pulses per revolution							

Comes complete with operator's manual.

Ordering Examples: OMDC-MD10P, digital closed loop DC speed control for max 1 HP motor with 5 Arm Amps, and OMDC-PU-40E, shaft mounted pick-up sensor with 20 pulses per revolution, \$515 + 114 = \$629.

> For Complete Details Visit

omega.com/

Variable Speed DC Control

omdc-250 Packaged Bridge Supply (Full Wave)

Adjustable Minimum and Maximum Speeds

- Adjustable Acceleration
- Adjustable Current Limit to 15 A

The OMDC-250 Series variable speed DC control offers superb flexibility, reliability, and value. A general purpose, economical control that is rated and tested to 2 horsepower.

> OMDC-253G-200E, \$299, shown smaller than actual size.



MOST POPULAR MODELS LISTED!

OMDC-250 Series Starts at











- Adjustable Horsepower Settings
- ✓ NEMA 4/12 or 4X (IP66) Enclosure

To Order (Specify Model Number) Model No. Price **Description** OMDC-253G-200E \$299 Dual voltage variable speed DC control in NEMA 4/12 enclosure OMDC-253G-200E-7 Dual voltage variable speed DC control with 4 to 20 mA isolated signal follower 420 in NEMA 4/12 enclosure

Comes complete with operator's manual.

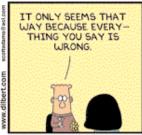
Ordering Example: OMDC-253G-200E, dual voltage speed control in NEMA 4/12 enclosure, \$299.

Visit omega.com/dilbert





DILBERT® by Scott Adams







































U.S.A. and Canada





Drives, Motors and Contactors

AC Drives

MVX9000 Series Starts at \$260



Sensorless Vector Control with Auto Tuning

✓ PID Control of a Process Variable

- Built-In Dynamic Braking Chopper
- ✓ RS485 Communication
- Single-Phase or 3-Phase Input Capability on 240 Vac Rated Units, 3 hp and Below

MOST POPULAR MODELS LISTED!

To Order (Specify Model Number)						
Model No.	Price	Description				
MVXF25A0-1	MVXF25A0-1 \$360 0.25 hp AC drive, 115V 1 ph input, 230V, 3 ph output					
MVX001A0-2	420	1 hp AC drive, 230V 1 ph/3 ph input, 3 ph output				
MVX001A0-4 550 1 hp AC drive, 460V 3 ph input 460V, 3 ph output						

Comes complete with operator's manual.

Ordering Example: MVXF25A0-1, 0.25 hp AC drive, 115V 1 ph input, 230V 3 ph output, \$360.

For Complete
Details Visit
omega.com/mvx9000



MVXF25A0-1, \$360, shown smaller than actual size.

General Purpose AC Motors

OME Series Starts at \$117



Cast Iron AC Motors: 1 to 5 hp

NEMA T-Frame, NEMA Design B

∠ 203 to 230/460V, 3-Phase

✓ TEFC (Totally Enclosed Fan Cooled)

Inverter Duty Capable



For Complete Details
Visit omega.com/
ome_series

OME1-18-143T, \$117, shown much smaller than actual size.

MOST POPULAR MODELS LISTED!

To Order (Spec	To Order (Specify Model Number)							
Model No. Price Description								
OME1-18-143T	\$117	143T frame cast iron motor, 208 to 230/460V, 3-phase, 1 hp, 1800 rpm						
OME2-18-145T 152 145T frame cast iron motor, 208 to 230/460V, 3-phase, 2 hp, 1800 rpm								
OME5-18-184T	221	184T frame cast iron motor, 208 to 230/460V, 3-phase, 5 hp, 1800 rpm						

Ordering Example: OME1-18-143T, 143T cast iron motor, 1 hp, 1800 rpm, \$117.

IEC Contactors

XTCE/XTOB Series Starts at ✓ Modular Design

✓ Compact Frame✓ Easy to Install

asy to Install

For Complete Details Visit omega.com/ xtce-xtob

> XTCE018C10A, \$111, shown smaller than actual size.

MOST POPULAR MODELS LISTED!

To Order (Specify Model Number) Model No. Price Description

IEC EN

 Model No.
 Price
 Description

 XTCE007B10A
 \$72
 Contactor 3P FVNR 7 A Frame B 1NO 110/50 120/60 AC Coil

 XTCE018C10A
 111
 Contactor 3P FVNR 18 A Frame C 1NO 110/50 120/60 AC Coil

 XTCE025C10TD
 155
 Contactor 3P FVNR 25 A Frame C 1NO 24-27 Vdc Coil

Comes complete with operator's manual.

Ordering Example: XTCE007B10A, contactor, \$72.



SIGNAL50 Warning Tower Lights

Assembled Stacklights or Components

WTL-L2B24D3D5D4, \$175.

Basic Systems Start As Low As







Available as Assembled Stacklights or Components

- ✓ Six Lens Colors
- ✓ Variety of Lamp Types and Voltages
- ✓ Single and Dual Bi-Tonal **Audible Alarms**
- Multiple Mounting Options
- ✓ Up to Five Levels of Light or **Audible Signaling Conditions**
- ✓ Interchangeability of Light **Option with Same Light Module**

Visit omega.com/omsl series for details on this series.

MOST POPULAR MODELS HIGHLIGHTED!

To Order (Specify Model Number)							
Model No.	Price	Levels	Color*	Description			
WTL-SNB24D4	\$70	Single	R	24 Vac/dc surface mount ½ NPT base with steady light module and incandescent bulb			
WTL-SNB120D4	70	Single	R	120 Vac surface mount ½ NPT base with steady light module and incandescent bulb			
WTL-SNB24F4	100	Single	R	24 Vac/dc surface mount ½ NPT base with flashing light module and incandescent bulb			
WTL-L2B24Y4	175	Single	R	24 Vac/dc 25 cm pole mount base with steady light module and LED bulb			
WTL-SNB120D3D4	105	Two	G/R	120 Vac surface mount ½ NPT base with steady light module and incandescent bulbs			
WTL-SNB24D3D4	105	Two	G/R	24 Vac/dc surface mount ½ NPT base with steady light module and incandescent bulbs			
WTL-VB24D3D4	110	Two	G/R	24 Vac/dc vertical mount base with steady light module and incandescent bulbs			
WTL-SNB120D3D5D4	140	Three	G/A/R	24 Vac/dc surface mount ½ NPT base with steady light module and incandescent bulbs			
WTL-L2B24D3D5D4	175	Three	G/A/R	24 Vac/dc 25 cm pole mount base with steady light module and incandescent bulbs			

^{*} R=Red, G=Green, A=Amber

Ordering Examples: WTL-SNB24D4, assembled single tier stack light for 24 Vac/dc with surface mounting base with ½ NPT center thread or screw connection, red lens with steady light module and incandescent bulb, \$70.

WTL-L2B24D3D5D4, assembled 3-tier stack light for 24 Vac/Vdc with 25 cm pole mounting base, green-amber-red lens with steady light module and incandescent bulbs, \$175.

22.5 mm Pushbuttons and Indicating Lights

OMPBD7 Series Complete Kits Start at \$22



- Modular Design
- ✓ Tool-Less Mounting Latch
- ✓ Plastic Operators: NEMA 4/4X/13 (IP66) Environmental Rating
- Metal Operators: NEMA 4/13 (IP66) Environmental Rating



MOST POPULAR MODELS LISTED!

To Order (Specify Model Number)						
Model No.	Price	Description				
OMPBD7P-F2PX01	\$22	Plastic black 1 NC momentary-flush				
OMPBD7M-F3PX10	24	Metal green 1 NO momentary-flush				
OMPBD7D-P3D5	26	Green indicating light, 120 Vac, with incandescent bulb				
OMPBD7D-P4N5	26	Red LED indicating light, 120 Vac/Vdc, with bulb				
OMPBD7D-MT44X02	40	E-stop button, 40 mm red plastic bezel, 2 NC contacts				

Ordering Examples: OMPBD7P-F2PX01, plastic black 1 NC non-illuminating momentary, flush pushbutton kit, \$22. OMPBD7D-MT44X02, e-stop button with 40 mm red plastic bezel, 2 NC contacts, \$40.

Heavy-Duty 30.5 mm Metal Pushbuttons

- Heavy-Duty Zinc Die Cast Construction
- Enclosed Silver Contacts with Reliability Nibs
- Diaphragm Seals with Drainage Holes
- Grounding Nibs on Operator Casing



10250T20LB,

10250T21LB,

10250T Series Components Start at \$3875





10250T29, \$85.50

All models shown smaller than actual size.

MOST POPULAR MODELS LISTED!

To Order (Specify Model Number)					
Model No.	Price	Description			
10250T20LB	\$63.00	On/Off switch (black knob switch comes with NO/NC contact block)			
10250T21LB	63.00	H-O-A switch (black lever switch comes with 2 NO/2 NC contact blocks)			
10250T23B	38.75	Start button (black flush button comes with NO contact block)			
10250T25R	Stop button (red extended button comes with NC contact block)				
10250T29	10250T29 85.50 Emergency stop (red jumbo MRH button comes with NC contact block)				

Ordering Example: 10250T29, emergency stop, \$85.50.

Thermocouple Terminal Blocks **DIN Rail Mounting and Audit Capable**

DRTB Series



Free Connections

✓ Type K, J, T, E, N, R/S

and U Calibrations

DIN Rail Mountable— Narrow 10.7 mm Width

✓ Built in Miniature Female

Thermocouple Connector for Auditing and Troubleshooting

Screw Type Terminal for

Secure and Maintenance







DRTB-RAIL-3575, \$9,





AVAILABLE FOR FAST DELIVERY!

To Order (Specify Model Number)					
Model No.					
DRTB-(*)	\$8	Thermocouple terminal block			

^{*} Specify thermocouple calibration: K, J, T, E, R/S, N or U. For IEC color coded product insert an "I" after the calibration letter.

Ordering Example: DRTB-K, Type K thermocouple terminal block for DIN rail mounting, \$8.

Identified with Calibration and "+, -" Connections

DIN Rail Terminal Blocks Feed Through, Sensor, Ground and Fuse Styles

✓ Screw or **Tension Spring** Connection

✓ Full Line of **Accessories-End** Plates, Cross Connectors and **Marking Tags**

Electrical Ratings from 20 to 175 A

✓ Fuse Blocks with **LED Blown Fuse Indicators**

AVK Series Start at

for package of 100





AVK-2.5 to AVK-10 feed through terminal block, AVK-2.5-50PK, \$30 pkg of 50.

For Our Complete Selection Visit omega.com/ terminal-blocks



AVK-2.5/4T-10PK ground terminal block, \$30 pkg of 10.

All models shown smaller than actual size.

PIK/PUK Series Starts at



for package of 50

PUK-3-25PK three level feed through terminal, \$60 for pack of 25.

YBK Series Starts at

for package of 50





YBK-4-50PK, \$28 for package of 50.

ASK T-BLOCK Series Starts at

> ea for package of 20



ASK-2LD-DC-10PK fuse terminal block with LED blown fuse indicator for 5 x 20 mm and 5 x 25 mm fuse, \$48 for pack of 10.

^{**} Specify thermocouple calibration: J, K, T or E.

Standard Terminal Block Relays

XRU1D Series Starts at \$15



- ✓ Functional Plug-In Bridges
- ✓ Screw Connections
- ✓ LED Status Indication
- ✓ DIN Rail Mount
- ✓ Only 6.2 mm (0.24") Wide
- All Common Input Voltages Between 24 Vdc to 120 Vac
- ✓ NEMA 6 (IP67) Protection



AVAILABLE FOR FAST DELIVERY!

To Order (Specify Model Number)						
Model No.	Price	Description				
XRU1D120U	\$21	1PDT relay, 120 Vac/110 Vdc coil voltage				
XRU1D24	15	1PDT relay, 24 Vdc coil voltage				
XRU1D24U	17	1PDT relay, 24 Vac/Vdc coil voltage				

Ordering Examples: XRU1D120U, 1PDT relay 120 Vac/110 Vdc coil voltage, \$21.

XRU1D24, 1PDT relay, 24 Vdc coil voltage, \$15.

General Purpose "Ice Cube" Relays

D2PF Series Starts at \$12

D2PF4AT1

For Complete Details Visit omega.com/ ice-cube-relays

All models shown smaller than actual size.

"Ice cube" relays are general purpose plug-in style relays that are extremely compact and are available with coil voltage of 24 Vdc and 120 Vac. They are available in both the spade base and 8 or 11 pin octal base. Some models have enhanced features including LED status lamp, push-to-test button for manual relay operation, convenient finger grip for relay removal and a write-on label that can be used for identification the relay in multiple relay circuits.

D2PR Series

SO

All Models



D2PR4A, \$9.

D3PF Series Starts at \$14



D3PF2AT, \$14.

MOST POPULAR MODELS LISTED!

To Order (Specify Model Number)					
Model No.	Price	Description			
D2PR4A	\$9	4PDT contact relay, 110 Vac coil			
D3PF3AA	3PDT contact relay, 11 pin octal, 120 Vac coil, requires D3PA3 base, \$80/pkg of 10				

Note: Bases sold separately and include hold down clip.

Ordering Examples: Ten D2PF4AT1, 4PDT 24 Vdc relays (10 x 12), \$120.

D3PF2AT, 2PDT 8-pin octal, 24 Vdc relay, \$14.

D2PA6-10PK,

\$80/package

DIN Rail Fuse Holders

ASK Fuse Holder Series Starts at



- DIN Rail Mounted **Fuse Holders**
- ✓ 1, 2, and 3-Pole Models
- ✓ Models With Blown Fuse Indication
- ∠ 600V, 50 A (ASK 6)





MEN10-10PK 10A fuses, \$26/pkg of 10.

The ASK Series of DIN rail mounted fuse holders provides circuit protection for any industrial control system. Two standard fuse styles are supported: 14 x 51 mm (ASK 6) and (1.5 x 13 /₂") (ASK 4).



For Complete Details Visit omega.com/fuse

ASK-6-11, \$19.

All models shown smaller than actual size.

MOST POPULAR MODELS LISTED!

To Order (S)	To Order (Specify Model Number)							
Model No.	Price	Description						
ASK-4-1	\$4.25	DIN rail fuse holder, 10 x 38 mm (0.39 x 1.50") fuses, 1 pole, no indicator light						
ASK-4-1I	10.00	DIN rail fuse holder, 10 x 38 mm (0.39 x 1.50") fuses, 1 pole, with indicator light						
ASK-4-2I	18.00	DIN rail fuse holder, 10 x 38 mm (0.39 x 1.50") fuses, 2 pole, with indicator light						
ASK-6-1	8.00	DIN rail fuse holder, 14 x 51 mm (0.55 x 2.01") fuses, 1 pole, no indicator light						
ASK-6-1I	19.00	DIN rail fuse holder, 14 x 51 mm (0.55 x 2.01") fuses, 1 pole, with indicator light						
ASK-6-3I	59.00	DIN rail fuse holder, 14 x 51 mm (0.55 x 2.01") fuses, 3 pole, with indicator light						

Ordering Examples: ASK-4-1, DIN rail mount fuse holder for 10 x 38 mm (0.39 x 1.50") fuses, 1 pole, \$4.25. ASK-6-3I, DIN rail mount fuse holder for 14 x 51 mm (0.55 x 2.01") fuses, 3 pole, with indicator light, \$59.

Supplementary Protectors

WMS Series Starts at

For Complete Details Visit omega.com/ wms-series





- ✓ 1 to 30 Amp Ranges
- 3 Different Trip Curves to Choose From

✓ CSA 22.2

Application Description

Cutler-Hammer supplementary protectors are ideal for providing protection in a multitude of applications, including:

- Motor control circuits
- Control power transformers
- ✓ Relays
- Contactor coils
- ✓ PLC I/O points
- Lighting circuits





WMS3C20SP, \$72.

All models shown smaller than actual size.

MOST POPULAR MODELS LISTED!

To Ordo	r (Specify Model Number)							
1-Pole								
Ampere Rating	Model No. Curve B	Price	Model No. Curve C	Price	Model No. Curve D	Price		
10	WMS1B10SP	\$25	WMS1C10SP	\$25	WMS1D10SP	\$25		
15	WMS1B15SP	25	WMS1C15SP	25	WMS1D15SP	25		
20	WMS1B20SP	25	WMS1C20SP	25	WMS1D20SP	25		
30	WMS1B30SP		WMS1C30SP		WMS1D30SP	25		

Ordering Example: WMS1B10SP, 1 pole 10 A supplementary protector trip curve B, \$25.



Single-Phase DIN Rail Mount Solid State Relays AC/DC Input; 25 and 40 A, 660 Vac Output

SSRDIN Series Starts at \$57

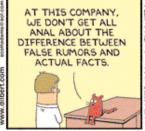
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ssrdin





















MAKE THESE CHANGES AND RUN IT BY ME AGAIN

THIS WEEK I

INCREASED MY

PRODUCTIVITY BY

IMPROVING MY

MORALE.





Definite Purpose Contactors

C25 Series Starts at \$26⁵⁰

Visit

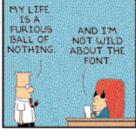
c25















DON'T

WORRY

I'M ALMOST HALFWAY

DONE

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U.S.A. and Canada

20

Non-Metallic Fiberglass Enclosures **NEMA 4X (IP66) Fiberglass JIC Size Junction Boxes with Factory Installed Mounting Flanges**

OM-AMU Series Starts at





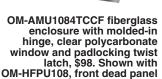








- Protect Controls and Components **Indoors or Outdoors**
- ✓ UL 94 Flammability Rating
- UV Stabilized for Outdoor Use
- ✓ 304 SS Hardware and **Continuous Hinge**
- Multiple Cover Options— Raised or Clear Polycarbonate



All models shown much



OM-AMU1426LWF raised front fiberglass enclosure with stainless steel hinge.

For Our Complete

Selection Visit omega.com/ nema_enclosure

smaller than actual size. Standards: UL Types 1, 2, 3, 4, 4x, 12 and 13; CSA

Specifications

Service Temperature Rating: -35 to 130°C (-31 to 266°F)

3R, 4, 4X, 12 and 13; IEC Type IP66

Types 1,2,3,3R, 4 4X, 12 and 13; NEMA Types 1, 2, 3,

MOST POPULAR MODELS LISTED!

To Order (Specify Model Number)

Screw Closure Models								
Models Dimensions (
Without Hinges	Price	With Hinges	Price	Height	Width	Depth		
OM-AMU664F	\$56	OM-AMU664HF	\$61	6	6	4		
OM-AMU1084F	62	OM-AMU1084HF	68	10	8	4		
OM-AMU2060WF	377	OM-AMU2060HWF	378	20	16	10		

Padlocking Latch Closure Models

	lodels		Models		Dimensions (inches)		
M	/ith Snap Latches	Price	With Twist Latches	Price	Height	Width	Depth
0	M-AMU1084LCCF	\$98	OM-AMU1084TCCF	\$98	10	8	4
O	M-AMU1206LCCF	117	OM-AMU1206TCCF	117	12	10	6
O	M-AMU1426LWF	190	OM-AMU1426TWF	190	14	12	6

Note: "W" indicates models with viewing window, "CC" indicates clear polycarbonate cover.

Ordering Example: OM-AMU664F, solid cover fiberglass enclosure 6 H x 6 W x 4" D with factory installed mounting flange, \$56.

Enclosures



NEMA 4 Enviroline® Series enclosures.



NEMA 12 free standing two-door enclosures.



NEMA 12 pushbutton enclosures.



All models shown much smaller than actual size.



NEMA 12 consoles.

NEMA 12 Continuous Hinge Enclosures

Starts at

✓ 0.075" Carbon Steel

Seams Continuously

Smooth. No Holes

Clamps are Quick and Easy to Operate

or Knockouts External Screw

Welded and Ground









- Standoffs Provided for Mounting **Optional Panels**
- Ground Stud on Door

SCE-1210CH, \$82, shown much smaller than actual size.

for details on this series.



Visit omega.com/sce_conthinge

MOST POPULAR MODELS LISTED!

To Order (Specify Model Number)										
Enclosures		Dimensions: (in)			Sub-Pan	Dimensions: (in)				
Model No.	Price	Height	Width	Depth	Model No.	Price	Height	Width		
SCE-404CH	\$37	4.00	4.00	3.00	No Panel	_	_			
SCE-8066CH	60	8.00	6.00	6.00	SCE-8P6	\$4	6.75	4.88		
SCE-10086CH	73	10.00	8.00	6.00	SCE-10P8	5	8.75	6.88		
SCE-1210CH	82	12.00	10.00	5.00	SCE-12P10	8	10.75	8.88		
SCE-1210CHS	82	12.00	10.00	5.00	SCE-12P10	8	10.75	8.88		
SCE-1412CH	104	14.00	12.00	6.00	SCE-14P12	10	12.75	10.88		
SCE-1614CH	122	16.00	14.00	6.00	SCE-16P14	20	14.75	12.88		

For Complete Selection Visit

omega.com/ operator-consoles

Note: Model numbers ending in "S" are hinged on the width dimension. Ordering Example: SCE-404CH, 4 x 4 x 3" enclosure, \$37.

NEMA 12 Consolets

Starts at











SCE-12C16, \$151, shown much smaller than actual size.



- Seams Continuously Welded and Ground Smooth, No Holes or Knock-Outs
- Captivated Cover Screws **Thread into Sealed Wells**
- ✓ Door Attached with **Continuous Hinge**
- Oil-Resistant Gasket
- Ground Stud on Door
- May Also Be Ordered in Type 304 and Type 316 Stainless Steel

Visit omega.com/sce_console for details on this series.

MOST POPULAR MODELS LISTED!

To Order (Specify Model Number)									
Model No.	Price	Door (in)	Width (in)	Height (in)	Depth (in)				
SCE-8C8	\$105	8.00	8.00	7.09	7.44				
SCE-12C12	136	12.00	12.00	9.09	10.91				
SCE-12C16	151	12.00	16.00	9.09	10.91				
SCE-16C16	177	16.00	16.00	11.09	14.38				
SCE-16C20	194	16.00	20.00	11.09	14.38				
SCE-16C24	212	16.00	24.00	11.09	14.38				
SCE-20C20	223	20.00	20.00	13.09	17.84				
SCE-20C24	248	20.00	24.00	13.09	17.84				
SCE-20C30	237	20.00	30.00	13.09	17.84				

Ordering Example: SCE-8C8, consolet with 8 x 8" door, \$105.

^{*} Consult Omegamation Sales for ordering information.

Solenoid Valve Island

VM10 Series Starts at

\$550



- 4-Way Directional Control Valves
- ✓ 2-Way Solenoid Valves
- ∠ 24 Vdc Operation
- Stock and Custom Made to Order Configurations



To Order (Specify Model Number)						
Pre Configured Valve Stations						
Model No.	Model No. Price Description					
OM-AIR-VM1052140602	OM-AIR-VM1052140602 \$550 4-way NC directional control valve bank, 6 stations with 2 blanks					
OM-AIR-VM1032140402	525	2-way NC valve bank, 4 stations with 2 blanks, 2 valves per station, 8 valves total				

Note: Prices vary according to options, call for details.

Ordering Example: OM-AIR-VM1052140602, 4-way NC directional control valve bank, 6 stations with 2 blanks, \$550.

Push-to-Connect Pneumatic Airline Fittings

OM-AIR Series
Starts at
\$ \bigsize 70

For Complete Details Visit omega.com/ airline-fittings



- Releasable Stainless Steel Grab Ring
- Nickel Plated Brass Components
- Quality Sealing Using Silicone Free U-Packing



MOST POPULAR MODELS LISTED!

To Order (Specify Model Number)							
Model No. Price Tube OD Description							
OM-AIR-C24250210-5PK	\$7.00	4 mm (5/32")	Male straight adaptor with 10-32 thread, pkg of 5				
OM-AIR-C0K510405 5.70 4 mm (5/32") Flow control valve regulating out with M5 thread							
OM-AIR-C20400400-5PK 7.00 1/4"			Elbow union, pkg of 5				
OM-AIR-T51P0006 13.20 6 mm In-line non-return valve							
OM-AIR-M22250105-5PK 8.00 1/8" Miniature male straight adaptor with M5 thread, pkg of 5							

Ordering Example: OM-AIR-C20400400-5PK, elbow union for use with $\frac{1}{4}$ " tubing, \$7/pkg of 5.

OMEGAFLEX® Polyurethane, 95A Shore Durometer, Ether-Based

For a Complete List of Available Sizes, Including Metric, Visit omega.com/tyuth95

TYUTH95 Series
Starts at

MOST POPULAR MODEL LISTED!

To Order (Specify Model Number)

to eraci (epecin) medici raminori)										
	Standard			Dia.			Working psi @	Weight		
Model No.	Price	Coil Length	OD	ID	Tol.	Wall	24°C (75°F)	lb		
TYUTH95-532332-100	\$15	100'	0.156"	0.094"	±0.005"	0.031"	210	0.62		
TYUTH95-18066-50	7	50'	0.156"	0.066"	±0.005"	0.030"	255	0.22		

Standard color is natural (clear). See Color Option Table for color availability and ordering codes.

Ordering Example: TYUTH95-18066-50-BLK, 50 feet of black tubing, 0.156" OD x 0.066" ID, ether-based polyurethane tubing with working pressure of 255 psi, \$7.

Norgren Excelon® Modular Filter/Regulators For Our Complete

B72G Series Starts at

- ✓ In-Line or Modular Installation
- High Efficiency Water and Particle Removal
- Quick Release **Bayonet Bowl**
- Push to Lock Adjusting **Knob with Tamper Resistant Accessory**
- Patented Quarter Turn **Manual Drain or Automatic Drain**

Specifications

Fluid: Compressed air **Maximum Pressure:**

Transparent Bowl: 10 bar (150 psig) Metal Bowl: 17 bar (250 psig) B72G with Metal Bowl and Auto Drain: 10 bar (150 psig) **Operating Temperature*:**

Transparent Bowl: -34 to 50°C (-30 to 125°F) **Metal Bowl:** -34 to 80°C (-30 to 175°F)



\$87.50.



Selection Visit

omega.com/



B73G-3AK-AD3-RMG, \$129.

* Air supply must be dry enough to avoid ice formation at temperatures below 2°C (35°F).

All models, shown smaller than actual size.

MOST POPULAR MODELS LISTED!

To Order (Specify Model Number)									
Model No.	Price	µm Element	Flow SCFM [†] (DM ³ /S)	Drain	Description				
B72G-2AK-QD1-RMG	\$65.50	5	80 (38)	Manual	Filter/regulator with ¼ NPT ports				
B72G-2AK-QD3-RMG	65.50	40	80 (38)	Manual	Filter/regulator with ¼ NPT ports				
B72G-2AK-AE3-RMG	87.50	40	80 (38)	Auto	Filter/regulator with ¼ NPT ports				
B73G-3AK-QD1-RMG	97.50	5	123 (58)	Manual	Filter/regulator with ¾ NPT ports				
B73G-3AK-AD1-RMG	129.00	5	123 (58)	Auto	Filter/regulator with ¾ NPT ports				
B73G-3AK-AD3-RMG	129.00	40	123 (58)	Auto	Filter/regulator with % NPT ports				
B73G-3GK-AD3-RMG	129.00	40	123 (58)	Auto	Filter/regulator with 3/8 G ISO ports				
B74G-4AK-QD3-RMG	117.25	40	212 (100)	Manual	Filter/regulator with ½ NPT ports				
B74G-4AK-AD3-RMG	148.00	40	212 (100)	Auto	Filter/regulator with ½ NPT ports				

Accessories

Model No.	Price	Description
OM-AIR-74316-50	\$7.00	Neck mounting bracket for B72G models
OM-AIR-4324-50	9.25	Wall mounting bracket for B74G models
OM-AIR-5925-02	6.00	40 μm replacement element for B72G models
OM-AIR-4438-03	7.50	5 μm replacement element for B73G models
OM-AIR-18-013-209	13.00	Replacement gauge for B73G and B74G models, 0 to 160 psi (11 bar)

Notes: Models listed include PTF threads, knob adjustment, metal bowl with liquid level indicator, relieving diaphragm, 0.3 to 10 bar (5 to 150 psig) outlet pressure adjustment range ** with gage.

†Typical flow with 10 bar (150 psig) inlet pressure, 6.3 bar (90 psig) set pressure and a 1 bar (15 psig) droop from set.

Ordering Examples: B72G-2AK-AE3-RMG, filter/regulator with ¼" port, flow of up to 80 scfm, metal bowl with liquid level indicator, knob adjustment and PTF threads, \$87.50. B73G-3AK-AD3-RMG, filter/regulator with ¾" port, flow up to 123 scfm, metal bowl with liquid level indicator, knob adjustment and PTF threads, \$87.50. B73G-3AK-AD3-RMG, filter/regulator with ¾" port, flow up to 123 scfm, metal bowl with liquid level indicator, knob adjustment and PTF threads, \$129.

^{**} Outlet pressure can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of the specified ranges.

Air Preparation Products

For Compressed Air Systems

In-Line or Modular Installation for **Complete System**

Air Preparation Modular Unit. Oil Removing (Coalescing) Filters

F72C-2AD-AE0



F72C-2AD-AE0.

Select Components to Build a Complete

- ✓ High Efficiency Oil and Particle Removal
- Standard Visual Service Life **Indicator Turns** from Green to Red When the Filter **Element Needs** to be Replaced
- Quick Release **Bayonet Bowl**
- ✓ Modular Installations with Excelon 72. 73 and 74 Series Can be Made to **Suit Particular Applications**



All models shown smaller than actual size.

For Our Complete Selection Visit omega.com/air-prep

Lockout Valves

T72T-2AA-P1N



✓ Valves can be Locked in the Closed **Position Only**

✓ Excelon® 3-Port/2-**Position Lockout Valves** Help Conform to OSHA **Lockout Regulations in** USA Market



T72T-2AA-P1N, \$33, shown smaller than actual size.

Pressure Relief Valves

V72G-2AK-NMG



- Push to Lock Adjusting **Knob with Tamper Resistant Accessory**
- Helps Protect Air Operated **Equipment from Over** Pressure by Retarding **Excessive Pressure Build Up**



V72G-2AK-NMG. \$50, shown smaller than actual size.

MOST POPULAR MODELS LISTED!

To Order (Specify Model Number)					
Model No.	Price	Description			
V72G-2AK-NMG	\$50	Pressure relief valve with 1/4" port, 0.3 to 10 bar (5 to 150 psig)			
V74G-4AK-NMG	78	Pressure relief valve with ½" port, 0.3 to 10 bar (5 to 150 psig)			
F72C-2AD-AE0	95	Oil removing (coalescing) filter with 1/4" port			
F73C-3AD-AD0	131	Oil removing (coalescing) filter with %" port			
F74C-4AD-AD0	F74C-4AD-AD0 164 Oil removing (coalescing) filter with ½" port				
T72T-2AA-P1N	33	3-port/2-position 1/4" ported lockout valve			
T74T-4AA-P1N	47	3-port/2-position ½" ported lockout valve			

Ordering Examples: V72G-2AK-NMG, pressure relief valve with \(^{1}/_{e}\) port, PTF threads, 5 to 150 psig adjustment range, with pressure gauge, \$50. F74C-4AD-AD0, coalescing filter (oil removing) with 1/2" port, service indicator, automatic drain and PTF threads. \$164.

Pneumatic Precision Parallel
Movement DPP DirectConnect

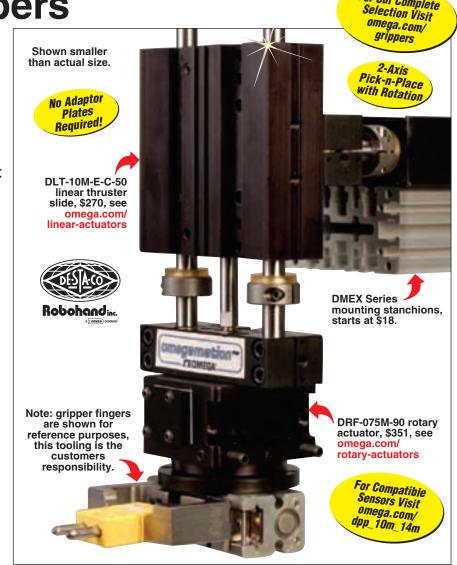
For Our Complete Series Grippers

For Our Complete Selection Visit

DPP Series Starts at \$365



- Precision Gripping—
 Preloaded V Roller
 Bearing Eliminate Side
 Play Resulting in Excellent
 Part Positioning
- Accuracy of ±0.03 mm (0.001") and Repeatability of ±0.01 mm (0.0004")
- ✓ Highly Configurable Modular Automation— Exclusive Direct Connect™ Technology Provides Multiple Mounting Options
- Multiple Pneumatic Port Locations—Tapped Ports on Front, Top and Both Sides are Standard
- Rigid and Low Friction Design Provides Longer Gripper Finger Lengths and the Ability to Handle Delicate Parts
- Non Synchronous Motion Option Provides Independent Jaw Motion
- Up to 5 Million Cycles in Typical Application— Up to 10 Million with Maintenance
- ✓ Temperature Operating Range -35 to 80°C (-31 to 176°F)



System Requires 0.3 to 7 bar (5 to 100 psi) Dry Filtered (40 Micron or Better) Air Supply

 Accessory Equipment Required— 4-Way,
 2 Position Pneumatic Directional Control Valve

MOST POPULAR MODELS LISTED!

To Order (Specify Model Number)											
			Dimensions: mm (in)								
Model No.	Price	Jaw Lgth Closed									
DPP-10M-06	\$365	47 (1.85)	53 (2.10)	25 (0.98)	63 (2.47)	35 (1.36)	6.4 (0.25)	111(25)	0.16 (0.35)		
DPP-10M-12	415	49 (1.93)	62 (2.43)	25 (0.98)	74 (2.90)	35 (1.36)	12.7 (0.50)	111(25)	0.20 (0.45)		
DPP-14M-15	450	63 (2.47)	79 (3.10)	34 (1.34)	90 (3.55)	42 (1.66)	15.9 (0.63)	200 (45)	0.48 (1.05)		
DPP-14M-25	525	82 (3.23)	107 (4.23)	34 (1.34)	119 (4.67)	42 (1.66)	25.4 (1.00)	200 (45)	0.57 (1.25)		

All models come standard with synchronous jaws, if non synchronous is required, consult sales.

* All models with the "-C" option have a spring assist closing mechanism on the jaws to provide fail safe closing and additional gripping force.

Ordering Example: DPP-14M-25, pneumatically powered precision gripper with DirectConnect easy mounting technology,
25.4 mm (1") jaw stroke and 200 N (45 lb) of gripping force, \$525.

Visit omega.com/dilbert

for your daily dose of DILBERT!

18

DILBERT® by Scott Adams



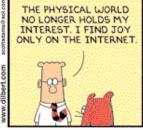


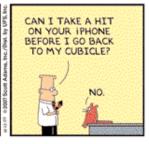






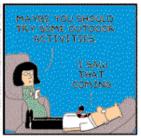






















Robohandin







New Horizons

in Products for Sanitary Applications



Sanitary RTD Probes Standard Duty with M12 Connector

PRS-S-M12 Series



Provides Quick and Easy Installation in **CIP** and Sanitary **Processes**





✓ Standard Duty ¼" Probe Diameter

- ✓ 1½" 16 AMP Tri-Grip™ (Tri-Clamp® Compatible) Fitting Standard
- 4-Wire M12 Male Connector Standard
- 316L SS Wetted Surfaces with 32 µin or Better Finish
- 4-Wire Pt100 Class A Element Standard
- ✓ -50 to 200°C (-58 to 392°F) **Temperature Range**

316L SS 1½" 16 AMP Tri-Grip™

cap standard.

4-pin M12 male connector plug.

PRS-3-100-A-S-0300-D1-M12, \$110, shown smaller than actual size.

PRS-3-100-A-S-0300-D1-CB-120,

\$120, shown smaller than actual size.

Integral cable with nylon cable clamp.

Heavy-Duty Design Also Available

Sanitary RTD Probes Standard Duty with Integral Cable

PRS-S-CB-120 Series

All Models



For Complete **Details Visit** omega.com/ prs-3-100-cb

316L SS 11/21 16 AMP Tri-Grip™ cap standard.

120" (10') of 4-conductor #26 AWG stranded nickel plated copper, PFA insulated and jacketed cable standard.

For Use in

CIP and Sanitary **Processes**

- ✓ Standard Duty ¼" Probe Diameter
- ✓ 1½" 16 AMP Tri-Grip™ (Tri-Clamp® **Compatible) Fitting Standard**
- ✓ 10' PFA Insulated Cable with Strain Relief
- 4-Wire Pt100 Class A Element Standard
- ✓ 316L SS Wetted Surfaces 32 µin or Better Finish
- ✓ -50 to 200°C (-58 to 392°F) **Temperature Range**

1/4" diameter.

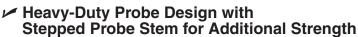
Heavy-Duty Design Also

Sanitary RTD Assemblies **Heavy-Duty with Protection Head**

PRS-H-NB9W Series

All Models





✓ 1½" 16 AMP Tri-Grip™ (Tri-Clamp® Compatible) Fitting Standard

✓ White Polypropylene Head with Screw Cap Standard



✓ 316L SS Wetted Surfaces with 32 µin or Better Finish

- 4-Wire Pt100 Class A Element Standard
- ✓ -50 to 200°C (-58 to 392°F) Temperature Range

Available

For Complete **Details Visit**

omega.com/

prs-nb9w

¾ NPT conduit connection.



316L SS 11/2" 16 AMP Tri-Grip™ cap standard.

PRS-3-100-A-H-0300-D1-NB9W, \$125, shown smaller than actual size.

%" diameter.

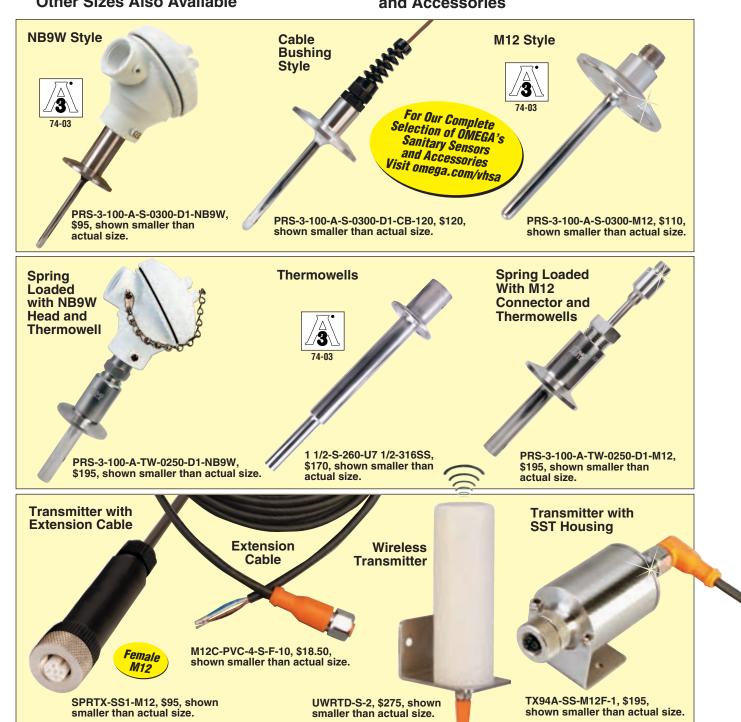
%" diameter.



Sanitary Temperature Sensors and Accessories

- ✓ Includes Direct Immersion and Spring Loaded Thermowell Varieties
- ✓ Connection Head, M12 Connector and Flying Lead Style Connection Options
- Available as RTDs, Thermistors or Thermocouples
- ✓ 1½" 16 AMP Tri-Grip™ Flange Standard, Other Sizes Also Available

- ✓ 316L Stainless Steel Housings
- ✓ Standard Duty ¼" Diameter or Heavy Duty, Stepped ¾ to ¾" Diameter, Probe Stems Available
- ✓ -80 to 150°C (-112 to 302°F) Thermistor or -50 to 200°C (-58 to 392°F) RTD and Thermocouple Temperature Range
- 4 to 20 mA and Wireless Transmitters and Accessories



Sanitary RTD Assemblies Standard Loaded Design with Sanitary Thermowell



- Removable Spring Loaded Probe in Well for Good Thermal Response
- 1½" 16 AMP Tri-Grip™ (Tri-Clamp® Compatible) Fitting



- ✓ Removable Spring Loaded Probe in Well for Good Thermal Response
- ✓ 1½" 16 AMP Tri-Grip™ (Tri-Clamp® Compatible) Fitting

Sanitary Probes with Integral Transmitter and M12 Connector

PRS-S-TMM12 Series \$225 All Models



- ✓ Two Available Transmitter Ranges (4 to 20 mA) Between -40 and 93°C (-40 to 200°F)
- ✓ Standard Duty ¼" Dia Probe (3 to 6" Lengths Standard)
- 1½" 16 AMP Tri-Grip™ (Tri-Clamp® Compatible) Fitting Standard
- ✓ Male M12 Connector





PRS-S-0400-D1-TM2M12, \$225, shown smaller than actual size.

For Complete Details Visit omega.com/ prs_tmm12



- ✓ All Welded 316L Stainless Steel Housing
- Available With or Without Mounting Thread (¼, ¾ and ½ NPT, M8 x 1 or M10 x 1 Mounting Threads Available)

Connector/Transmitter For Sanitary Pt100 Probes with M12 Connector Splash-Proof Body and Integral Cable



SPRTX-SS Series

All Models

SPRTX-SS1-M12, \$95, shown smaller than actual size.

For Complete Details Visit omega.com/ sprtx-ss









- Optional
- Miniature Design Attaches Directly to Pt100 Sensors with M12 Connector
- ✓ 2-Wire, 4 to 20 mA Output
- Upscale Break Protection
- Encapsulated Signal Conditioner with Water Tight Connector Housing
- ✓ Integral 4 m (12') Cable with Stripped Leads on One End



(6.5, 16.4, 32.8') Lengths

✓ Straight or Right Angle Connection

Available in 2, 5 and 10 m

✓ Stripped Lead Termination at Cable End

RTD Temperature Transmitter 316 Stainless Steel Construction Ideal for Wash-Down, Outdoor, Sanitary, or Marine Environments



- Splash-Proof 316 SS Housing with NEMA 4 (IP67) Rating
- Compact Design Attaches Directly to Pt100 Sensors with M12 Connecting Cable
- ✓ 2-Wire, 4 to 20 mA Output
- Zero and Span Adjustments
- Upscale Break Protection

Digital RTD Thermometer 316 SS Enclosure for Sanitary, Wash-Down, and Marine Applications

DTG-RTD100 Series Starts at







For Complete

Details Visit

omega.com/

dtg-rtd100



Antenna connection for wireless option.

✓ Large Multicolor Backlit Display with 25 mm (1") Digits Readable From Over 10.7 m (35')

- ✓ Up to ± 0.2 °C (± 0.3 °F) or ± 0.1 % Rdg Accuracy
- ✓ Connects Directly to 3-Wire Pt100 RTD Sensors
- ✓ User Scaleable 4 to 20 mA, 0 to 5 or 0 to 10 Vdc Analog Output Standard
- ✓ Powered by Internal Battery or External DC Power Supply
- ✓ Included Setup and Service Software Allows for Fast Maintenance and Calibration via USB Connection
- Wireless Transmitter Option Sends Readings to Remote Locations and Allows for PC-Based Chart **Recording and Data Logging**
- ✓ Low Power Operation and Sleep Mode for Long Battery Life

DTG-RTD100-PRS-3-100-AS-300-D1-W, \$590, smaller than actual size.

> **For Complete Details Visit**

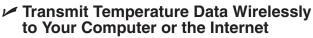
Available with **Built-In Wireless** Transmitter **Option**

Integral

Wireless RTD Probe/ **Transmitter Assembly** For Use in Sanitary Applications

UWRTD-NB9W Series Starts at





- Complete Industrial Assembly—Includes Probe, Transmitter Housing/Head, Integral Wireless Transmitter and Long Life Battery
- Available with 3-A Approved Thermowells for Clean-in-Place (CIP) Applications
- ✓ Transmit up to 120 m (400')
- ✓ Included Software Converts a PC into a Multi-Channel Chart Recorder or Data Logger
- Each Wireless Connector Transmits Sensor Temperature, Ambient Temperature, Signal Strength and Battery Status in Real Time



3-A thermowell. Wells also available separately, see bottom of page 35.

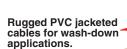






Highly flexible polyurethane cables for Automation applications.

M12C Series Starts at \$**13**50





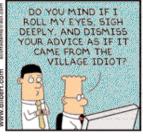


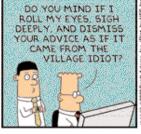


Sanitary Process Transducers Using Micro-Machined Silicon Technology 10 mV, 0 to 5 Vdc, 4 to 20 mA Outputs Visit



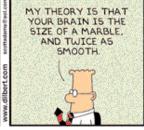


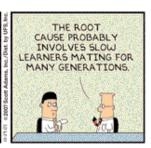






























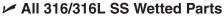
Dilbert © United Feature Syndicate

Sanitary Dial Thermometers

\$233







- ✓ All Welded Construction
- ✓ Easy to Calibrate Reset Screw
- 3-A Certified Design
- Hermetically Sealed
- ✓ 32 Ra Max on All Wetted Surfaces
- ✓ Standard Connection: 1½" Tri-Grip™ (Tri-Clamp® Compatible)
- ✓ 6 mm (¼") Standard Stem Diameter
- ✓ Glass Lens Standard
- ✓ Standard Lengths From 2½ to 15"





JJ-0-200F-2-1/2, \$301, shown smaller than actual size.

Non-Reversible Labels for Low Temperatures

The TL-CC series are used to control and identify problematic temperature conditions that are experienced in transportation of goods, using a low cost method for instance for medical supplies, or to increase food protection in transit to warehouse or depots. Change of state occurs after a short duration not exceeding five minutes, staining of the white paper (to blue/purple) occurs when the specified rating has been exceeded.

Specifications

Type: Non-reversible indicator, circular, self-adhesive Size: 32 mm diameter by 6 mm deep (1.25" by 0.23") Print: 2 colors (blue print onto white background)

Temperature: °F and °C, ±°C accurate

MOST POPULAR MODELS HIGHLIGHTED!

Model No.	Price/Pkg of 10	°C (°F)
TL-CC/-17C	\$18	-17 (+1)
TL-CC/-8C	18	-8 (+18)
TL-CC/-5C	18	-5 (+23)
TL-CC/-2C	18	-2 (+28)
TL-CC/5C	18	+5 (+41)
TL-CC/9C	18	+9 (+48)
TL-CC/17C	18	+17 (+63)
TL-CC/20C	18	+20 (+68)

Ordering Example: TL-CC/5C, 5° low temperature label, package of 10, \$18.

For Complete Details Visit omega.com/ tl-cc



TL-CC/-17C, \$18, shown actual size.

Triple Level Thermal Disinfection Indicator (TDI)

- ✓ Adhesive Backed
- Attach to Trav/Carrier
- Remove and Retain as Permanent Record of Temperature Attained
- Proof for HACCP Compliance Documentation
- Accurate to ±1°C of Rated Temperature Physical Properties

TDI is designed to withstand the extreme conditions within an industrial dishwasher and provide permanent proof that a rated temperature has been reached.

Not one, but 3 distinct temperature levels depending upon need. An

irreversible color change occurs from white/grey to black; at 65°C (150°F) for standard dish washers, at 71°C (160°F) for a thermal/chemical disinfection and 82°C (180°F) when a thermal disinfection temperature has been reached.

Specifications

Adhesive Type: Acrylic with clear polyester carrier

Covering Film: 50 μm Polyester Size: 25 x 35 mm (1 x 1.4") Color Change Material: Non-toxic, white crystalline melt material coated on a black absorbent backing

For Complete Details Visit omega.com/

Application: Peel label from backing paper. Apply to clean, dry surface; ideally a plate or stainless steel surface in the middle of the dishwasher rack. Ensure the entire indicator is in contact with the surface. Remove indicator while the surface is still warm. **Shelf Life:** 12 months from invoice

date when stored at room temperature and humidity [i.e. 21°C (70°F) & 50% relative humidity]



Shown actual size.

Model No.	Price	Description
TL-TI-5	\$17	25 labels per pack
TL-TI-3	30	50 labels per pack

Series S Sanitary Thermowells Standard Threaded Well for ¼ or ¾" Diameter Elements

Other Flange Diameters From 1½ to 4"



11/2-S-385-U1 5/8-316SS, \$110, shown smaller than actual size.

For Complete Details Visit omega.com/ s-260_s-385





Sanitary Current Output Pressure Transducer 0.25% Accuracy

Ranges from Vacuum to 1000 psi (69 bar)

4 to 20 mA Output

PX792 Series Starts at



For Complete Details Visit omega.com/px792-5v

CAUTION AND WARNING!

Sensitive Diaphragm Do Not Touch!





- ✓ NEMA 4X (IP65) Enclosure
- ✓ Dairy, Food Processing, Pharmaceutical, Biotech Applications
- High Reliability

PX792 transducer, Tri-Grip™ clamp gasket and T-fitting.

Fitting Also

PX792-100G5V, with 2" Tri-Grip™ flange, \$420, shown actual size.

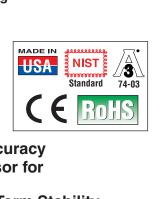
Exploded view showing



Sanitary Process Transducers omega.com/px409 **Using Micro-Machined Silicon Technology** 10 mV/V, 0 to 5 Vdc, 4 to 20 mA Outputs

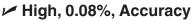
Gage or Absolute* Pressure 10 inH₂O to 600 psi (25 mbar to 41 bar) 1½" or 2" Tri-Grip Fitting *Absolute ≥ 5 psi

PX409S Tri-Grip™ Sanitary Series Starts at



Available style. PX429S15-005GV, \$585, shown slightly smaller than actual size.

Twist-lock



- Solid State Sensor for Durability
- Excellent Long Term Stability
- ✓ Welded Stainless Steel Construction
- 316L SS Wetted Parts
- Shock and Vibration Rated
- High Overpressure Rating
- Ruggedized with **Secondary Containment**

The PX409S Series micro-machined silicon transducers with 11/2 or 2"



sanitary fittings are ideal for pressure or level CIP applications in food processing, beverage or bio/pharmaceutical applications as well as industrial applications that require a rugged, high accuracy transducer. The micro-machined

Cable or M12 mini DIN style. Fast Deliver PX419S20-100AV, \$585, shown slightly smaller than actual size.

> silicon sensor provides a very stable transducer with exceptional high accuracy of 0.08% and a broad compensated range of -6.7 to 85°C (20 to 185°F). The modular construction allows for fast delivery of most configurations and fittings.





LVCN4000 Series Starts at

Accurate and Reliable Measurement

Easy Installation

Rugged Construction

✓ No Moving Parts

LVCN-4151-12, \$400, shown smaller than actual size.

For Complete Details Visit omega.com/ Ivcn4000



Sanitary Electromagnetic Flowmeter

FMG600 Series Starts at

Available



smaller than actual size.

Sanitary Turbine Flowmeters 3-A Label for Process Liquid Measurement MADE IN

USA

For Complete Details Visit omega.com/

ftb400

FTB-400A Series Starts at

Meets 3-A Sanitary Standard No. 28-01

✓ 11 Sizes Available, from 1/4 to 3" ✓ Flow Rates from

0.35 to 650 GPM Suitable for

Cleaning in Place (CIP)



Sanitary Thermal Dispersion Flow Switches

FSW-6000 Series Starts at

No Moving Parts-**Maintenance Free** Reliability

Operates in Temperatures Up to 120°C (248°F) with Sanitary Option

Maximum Working Pressure 300 bar (4300 psi)

✓ Chain of 8 LEDs

1½" Tri-Grip™ Available

> **For Complete Details Visit** omega.com/ fsw6000



smaller than actual size.

Sanitary Conductivity Transmitters For Complete

CDTX-90 Series Starts at





Details Visit omega.com/ cdtx90

CDTX-90-1, \$576, shown smaller than actual size.

✓ 1.5" Sanitary Mount Available

✓ Display in μS, mS, kΩ, MΩ, ppm (TDS)

✓ Relay Options

2 x 16 Character Dot Matrix LCD



Sanitary Medium Viscosity Drum Pumps

FPUD400 Series Starts at



For Complete Details Visit omega.com/ fpud400

✓ Pump Tube and Motor Supplied Separately for **Maximum Flexibility**

Sanitary Polished 316 SS Pump Tubes

✓ TEFC or Air **Driven Motors**

✓ For Fluids up to 2000 cps Viscosity and 1.8 Specific Gravity



All models shown smaller than actual



FPUD4-SNT40, sanitary pump tube, \$1444.

Sanitary Turbine Flowmeters

FTB-970A Series Starts at



✓ NIST Certificate Included

11 Sizes Available

from \(^1\)4 to 3" ✓ Flow Rates from 0.5 to 650 GPM

Suitable for Cleaning in Place (CIP)



FTB-974A, \$1166, shown smaller than actual size.



Sanitary Capacitance Level Switches

LVCN4300 Series Starts at





- Unaffected by Coating **Media or Aggressive Products**
- Accurate and Reliable Switching
- Easy Economical Installation

LVCN4341-12, \$840, shown smaller than actual size

> For Complete Details Visit omega.com/ Ivcn4300

Sanitary Liquid Flow Transmitter and Switch

FSW-9000 Series Starts at



High Reliability— **No Moving Parts**

- ✓ 4 to 20 mA, PNP/NPN (Transistor), or Relay Output
- ✓ Excellent Low Flow Sensitivity
- 1½" Tri-Grip™ Available



smaller than actual size.

LVCF-351, \$352, shown smaller

than actual size.



LVU1502

- ✓ 0.3 to 7.6 m (1 to 25') Range
- ✓ Programmable Zero and Span Through **BCD Switches**
- ✓ STD Near Zone Varies from 152.4 to 305 mm (6 to 12")
- ✓ 1½" Sanitary **Available**



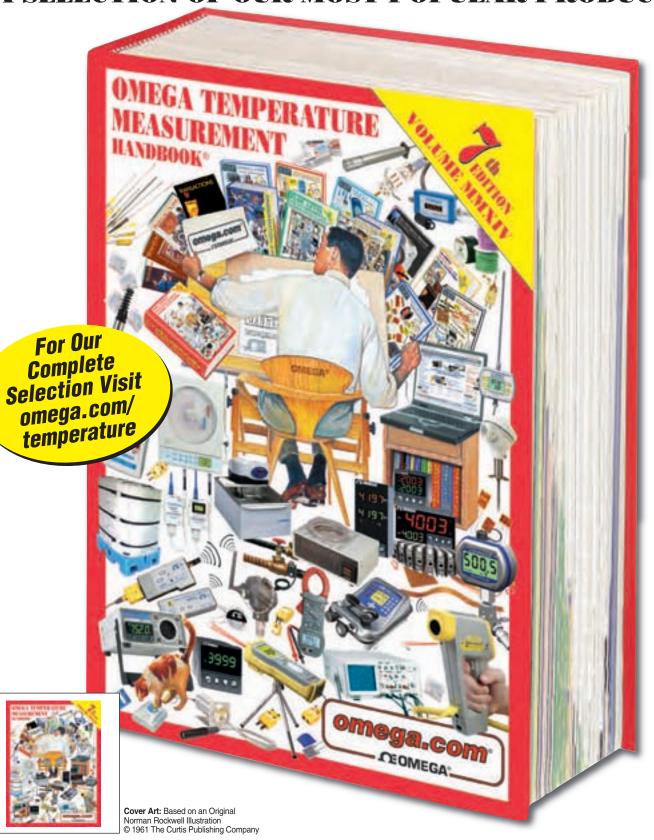
LVU1502, \$1100. shown smaller than actual size

> For Complete Details Visit omega.com/ Ivu1500



TEMPERATURE MEASUREMENT

A SELECTION OF OUR MOST POPULAR PRODUCTS



Thermocouple and RTD Probes With Mounting Threads and M12

Connectors Standard Sizes,

Metric Available

M12 Series Starts at

PR-21 Series Starts at





M12JSS-14-U-6-B, \$47.

Both models shown smaller than actual size.



- -50 to 90°C (-58 to 194°F) Connector Temperature Range
- Many Standard Lengths Available
- Stainless Steel Transition with M12 Connector

PR-21A-3-100-A-0600-M12-1, \$60.

Standard

MOST POPULAR MODELS LISTED!

To Order (Specify Model Number)								
		ice	Probe	Thermocouple		Mounting		
Model Number	1/8"	1/4"	Length	Calibration	Material	Thread		
M12JSS-(*)-U-6-B	\$40	\$47	6"	J	304 SST	½ NPT		
M12KIN-(*)-U-6-B	40	47	6"	K	Inconel 600	½ NPT		

(*) Insert probe diameter "18" for 1/8 or "14" for 1/4" diameter.

For dual element, add "-DUAL" to the model number and multiply price by \$1.75.

For longer probe lengths add the required length in inches to the model number and add \$0.50 per inch to the price for Type J 304 SST, or \$0.65 per inch for Type K Inconel 600 sheaths.

Ordering Example: M12JSS-18-U-6-B, Type J thermocouple, 1/8" diameter by 6" long with 304 stainless steel sheath, stainless steel transition with 1/2 NPT fitting and M12 connector, \$40.

Standard

Model Number	Price	Element	Probe Length	Mounting Thread
PR-21A-3-100-A-1/4-0600-M12-1	\$60	Pt100, Class A	6"	None
PR-21B-3-100-A-1/4-0600-M12-1	70	Pt100, Class A	6"	½ NPT

For lengths other than 6", change "0600" in model number to required length and add \$1 per inch greater than 6" (example: 9" = 0900, 4½" = 0450).

For 1/8" probe diameters, change "1/4" in model number to "1/8", no additional cost.

Ordering Example: PR-21A-3-100-A-1/4-0600-M12-1, 1/4" diameter probe 6" long with Pt100, Class A element, no mounting thread, with M12 connector, \$60.

Molded M8 and M12 Thermocouple **Extension Cable**

M8C and M12C Series Starts at

than actual size.

- Available in M8 and **M12 Constructions**
- Female Connectors Attach to Male (Pin) Sensor Connectors
- ✓ M12 Cables Have Thermocouple Compensated Wires and Sockets
- ✓ Wires Have Silicone Insulation and Jacket

MOST POPULAR MODELS LISTED!

For Complete Details Visit omega.com/

m12tccables



io diadi (opecity model Manibel)								
Model Number	Price	Thermocouple Type	Cable Length	Connector Orientation				
M12C-SIL-K-S-F-1.5	\$11	K	1.5 m	Straight				
M12C-SIL-K-S-F-3	14	K	3 m	Straight				
M8C-SIL-J-S-F-1.5	11	J	1.5 m	Straight				
M8C-SIL-J-S-F-3	13	J	3 m	Straight				
M8C-SIL-K-S-F-3	14	K	3 m	Straight				

Order (Specify Model Number)

Ordering Example: M12C-SIL-J-S-F-3, thermocouple extension cable, Type J silicone insulated and jacketed cable, 3 m long with straight M12 female connector one end, \$13. For IEC color codes, insert "I" after "J" or "K" in model number.



Dual DIN Rail Temperature Transmitter

TXDIN70 Starts at

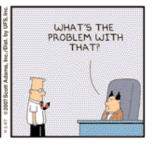
Visit omega.com/ txdin70

External plug-in display, sold separately







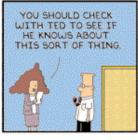














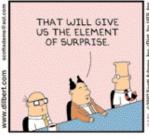


Lab Calibrator

CL3001

















Dilbert © United Feature Syndicate

Thermocouple and RTD Probes With M8 and M12 Molded Connectors For Communications

Standard and Metric Sizes

M8M and M12M Series Starts at

Standard

M12MKIN-14-U-12, \$33. shown smaller than actual size.

MOST POPULAR MODELS LISTED!

Details Visit omega.com/m12molded and

omega.com/m8molded

To Order (Specify Model Number)								
Price Thermocouple Sheath Model Number 1/4" Probe Length Calibration Material								
M12MJSS-(*)-U-12	\$23	\$29	12"	J	304 SST			
M12MKIN-(*)-U-12	25	33	12"	K	Inconel 600			
M8MJSS-18-U-6	21	_	6"	J	304 SST			

^(*) Insert "18" for 1/8" or "14" for 1/4" diameter.

For dual element, add "-DUAL" to the model number and add multiply price by \$1.75.
For longer probe lengths enter the required length in inches to model number and add \$0.50 per inch to the price for 304 SST, or \$0.65 per inch for Incone 600 sheaths.

Ordering Example: M12MJSS-18-U-6, Type J Thermocouple, 1/6" diameter by 6" long with 304 stainless steel sheath and molded M12 connector, \$21.

	Price			Thermocouple	Sheath
Model Number	3 mm	6 mm	Probe Length	Calibration	Material
M12MJSS-M3-U-250	\$22	\$26	250 mm	J	304 SST
M12MKIN-M3-U-250	23	30	250 mm	K	Inconel 600
M8MJSS-(*)-U-150	21	21	150 mm	J	304 SST
M8MKIN-(*)-U-150	21	21	150 mm	K	Inconel 600

^(*) Insert "M3" for 3 mm or "M6" for 6 mm probe diameters.

For dual element, add "-DUAL" to model number and multiply price by \$1.75.

For longer lengths, enter the required length in millimeters to the model number and add \$0.50 per 25 mm to the price for 304 SST sheathed Type J or \$0.65 per 25 mm for Inconel 600 sheathed Type K thermocouples.

Ordering Example: M12MJSS-M3-U-250, Type J thermocouple with 3 mm diameter 304 stainless steel sheath 250 mm long with molded M12 connector, \$22.

PR-22 and PR-23 Series Starts at



PR-22-3-100-A-1/8-0600-M12, \$39, shown smaller than actual size.

For Complete Details Visit omega.com/pr-22 and omega.com/pr-23

MOST POPULAR MODELS LISTED!

To Order (Specify Model Number)

10 Oldor (Opcorry model Namber)							
	Price						
Model Number	½" Dia	1/4" Dia	Probe Length	Element Specification			
PR-22-3-100-A-(*)-1200-M12	\$45	\$50	12"	Pt100, Class A			
PR-23-1-100-A-1/8-0600-M8	33		6"	Pt100, Class A			
PR-23-1-1000-B-1/8-1200-M8	41	_	12"	Pt1000, Class B			

^{(*) =} Insert probe diameter of 1/4 of 1/4 inches.

For Class B, change "-A" in model number to "-B" and subtract \$4 from the price. For ½ DIN, change "-A" in model number to "-1/3" and add \$9 to the price.

Ordering Example: PR-22-3-100-1/3-1/4-1200-M12, ¼" diameter by 12" long Pt100 Class ½ DIN RTD sensor with molded M12 connector, \$50 + 9 = **\$59.**

Metric

Standard

	Price			
Model Number	3 mm Dia	6 mm Dia	Probe Length	Element Specification
PR-22-3-100-A-(*)-250-M12	\$42	\$48	250 mm	Pt100, Class A
PR-23-1-100-A-M3-250-M8	37	_	250 mm	Pt100, Class A
PR-23-1-1000-B-M3-350-M8	41	_	350 mm	Pt1000, Class B

(*) = Insert probe diameter of "M2", "M3" or "M6" for 2 mm, 3 mm or 6 mm probe diameters shown in table.

For Class B, change "-A" in model number to "-B" and subtract \$4 from the price. For \(\frac{1}{2} \) DIN, change "-A" in model number to "-1/3" and add \$9 to the price.

Ordering Example: PR-22-3-100-A-M3-250-M12, 3 mm diameter by 250 mm long Pt100 Class A RTD sensor with molded M12 connector, \$42.

Transition Joint Thermocouple Probe

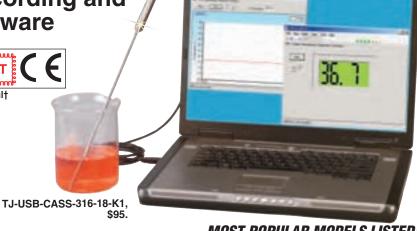
Features USB Interface and Free Recording and **Logging Software**

TJ-USB Series Starts at



Connects Directly to a **USB Port on Your Computer**

✓ Free Software Converts Your PC into a Temperature Meter, Data Logger or Chart Recorder



MOST POPULAR MODELS LISTED!

To Order (Specify Model Number)					
Model No.	Price	Description			
TJ-USB-CASS-(*)-(**)-K1	\$95	304 SS transition joint probe -73 to 315°C (-100 to 600°F)			
TJ-USB-CASS-(*)-(**)-K2	95	304 SS transition joint probe -200 to 850°C (-328 to 1562°F	-)		
RH-USB	145	Humidity/temperature probe with USB	Relative Humiau		
HX70-MKIT	15	Wall/duct mounting kit for RH-USB	Relative Humidity Probe with USB Connection 1		
CAL-3 [†]	125	NIST traceable calibration with 3 data points	Connection Available See Page 47		

^{*}Insert "316" for 4.5 mm (0.187" diameter sheath) or "14" for 6 mm (0.250" diameter sheath).

Ordering Example: TJ-USB-CASS-14-24-K1, heavy-duty USB TJ probe, 304 SS sheath, 6 mm (¼") OD, 610 mm (24") long with integral USB cable and Type A connector, -73 to 315°C (-100 to 600°F) temperature range, \$95.

Quick Disconnect High-Temperature **Platinum Thermocouple Assemblies** and Ceramic Protection Tube

For Complete Details Visit omega.com/xta

For Complete

Details Visit omega.com/tj-usb

RAT Series Starts at





- HSTW Standard Connector **Liquid Crystal Polymer** Rated to 260°C (500°F)
- ✓ Up to 1650°C (3000°F) Rating
- Oxidizing or Reducing **Atmospheres**
- ✓ ¼" Diameter High-Purity **Aluminum Protection Tube**
- ✓ Tube Clamp Included for Extra Strength
- ✓ Includes Free Mating Connector



RAT-QD-30-12-NHX-M, \$379.

RAT-QD-ST4-30-12-HSTW-M, \$390.

Both models shown smaller than actual size.

Available Options

- ✓ NIST Traceable Calibration
- Custom Probe Lengths
- Dual Element
- Custom Support Tube Lengths

Type R, S, or B Platinum Thermocouple enclosed in a high-purity alumina protection tube. Elements are insulated by a double bore high purity hardfired alumina insulator.

MOST POPULAR MODELS LISTED!

To Order (Specify Model Number)							
Model No. AWG Price 300 mm 150 mm 150 mm (12") (6")							
RAT-QD-30-12-HSTW-M	Pt vs Pt 13% Rh	30	\$370	\$125			
SAT-QD-24-12-HSTW-M	Pt vs Pt 10% Rh	24	950	425			

Wire batch certificate reports available at no charge upon request; add suffix "-CERT" to model number. For standard ceramic connector, replace "HSTW-M" in model number with "NHX-M", add \$9.

Ordering Example: RAT-QD-30-18-HSTW-M, quick disconnect standard ceramic connector high temperature probe, Type R, 30 AWG (0.010"), 18" long high-purity aluminum protection tube,

^{**}Insert "18" for 457 mm (18" probe length) or "24" for 610 mm (24" probe length).

High Temperature Thermistors Glass Encapsulated, Up to 200°C (392°F)

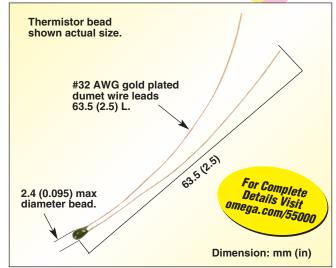


55000 Series **\$22**



- ✓ Maximum Continuous Use, 200°C (392°F) [Short Term Use to 250°C (482°F)]
- Excellent Long Term Stability
- Hermetically Sealed Glass Bead
- Available in 2252, 3000, 5000 and 10,000 Ω Resistances at 25°C (77°F)
- ✓ Tolerance: ±0.2°C From 0 to 70°C (32 to 158°F)
- #32 AWG, Gold Plated Dumet Leads 63.5 mm L (2.5")

The OMEGA® 55000 Series glass encapsulated thermistors provide a higher temperature alternative to the OMEGA 44000 Series epoxy coated thermistors where needed. With a maximum continuous temperature rating of -80 to 200°C (-112 to 392°F), and intermittent operation to 250°C (482°F), the 55000 can be used in those applications previously out of reach.



With the same small size as our 44000 thermistor Series, and solderable #32 AWG gold plated Dumet leads, the 55000 thermistor can be used interchangeably wherever our 44000 Series thermistors are used.

MOST POPULAR MODELS LISTED!

To Urder (Specify Model Number)										
Model Number	Resistance at 25°C	Tolerance (0 to 70°C)	Beta 0 to 50°C (K)	Ratio Ohm 25/125°C	Best Working Temperature	Short Term Temperature	Price (Each)			
55007	5000	0.2°C	3891	29.26	-80 to 200°C (-112 to 392)	250°C (482°F)	\$22			
55016	10000	0.2°C	3891	29.26	-80 to 200°C (-112 to 392)	250°C (482°F)	22			

Ordering Example: 55007, thermistor, 5000 Ω at 25°C (77°F), 2.4 mm (0.095") max bead diameter with two 63.5 mm L (2.5") gold plated dumet lead wires, \$22.

Non-Reversible Profile Style OMEGALABEL® Continuous Temperature Labels

For Complete Details Visit omega.com/tl-p

TL-P Series
Starts at
\$60

5 m (25') Bol

7.5 m (25') Roll* 150 Labels







Permanent, Non-Reversible Indicating Labels

Accurate to ±1°C (1.8°F)

✓ For Temperatures from 43 to 54°C (110 to 130°F)

✓ Continuous Profile Lengths from 50 mm (2") Up to 7.5 m (25') and Longer

PATENT PENDING

Determine your own profile length—as small as 50.8 mm (2") or as long as 7.5 m (25').

AVAILABLE FOR FAST DELIVERY!

To Order (Specify Model Number)					
Model No. Price Range					
TL-P-3-110-25	\$60	43 to 54°C (110 to 130°F)			

^{* 15} and 30 m (50 and 100') roll lengths also available for special order, consult sales. **Ordering Example: TL-P-3-110-25,** 7.5 m (25') continuous length of 43 to 54°C (110 to 130°F) non-reversible temperature labels (150 labels), **\$60.**



Thermocouple Terminal Blocks **DIN Rail Mounting and Audit Capable**

For Complete Details Visit omega.com/drtb

DRTB Series



PATENT PENDING

- Screw Type Terminal for Secure and Maintenance Free Connections
- **✓** Type K, J, T, E, N, R/S and U Calibrations
- Built in Miniature Female Thermocouple Connector for Auditing and Troubleshooting
- ✓ Fully Enclosed—No End Plates Required
- DIN Rail Mountable—Narrow 10.7 mm Width
- Male SMPW Connector Included



To Order (Specify Model Number)				
Model No.	Price	Description		
DRTB-(*)	\$8 Thermocouple terminal blo			

Specify thermocouple calibration: K, J, T, E, R/S, N or U. For IEC color coded product insert an "I" after the calibration letter. Ordering Example: DRTB-K, Type K thermocouple terminal block for DIN rail mounting with RECK1-10 Type K, 0.3 m L (1') retractable extension cable, \$8 + 18.50 = \$26.50.

Surface Temperature Connector/Sensor For Use with Most Handheld Thermometers

STC-100 Series



All Models

- Connector Plugs Directly into Most Handheld Thermometers
- ✓ Available in K or E Thermocouple Types
- ✓ For Measurements Up to 218°C (425°F)
- ✓ Fast 250 msec Response Time
- ✓ Removable, Replaceable Sensor **Element For Easy Maintenance**

OMEGA's new surface temperature Connector offers a fast, easy way to measure surface temperatures. Just plug the STC100 into your handheld thermometer and you're ready to take readings. The small, compact connector body features an integral thermocouple sensor specifically designed for low temperature surface measurements and can be easily removed for cleaning or replacement if damaged. Models feature miniature male connection pins and are available in K or E calibrations.

AVAILABLE FOR FAST DELIVERY!

To Order (Specify Model Number)					
Model No. Price Description					
STC-100-(*)-SMP-M \$59		Surface temperature connector, miniature male connector			

Comes complete with operator's manual.

* For Type K calibration insert "K", For Type E calibration insert "E". Ordering Example: STC-100-K-SMP-M, Type K surface temperature connector with miniature male connection and HH26K. Type K, °C or °F switchable thermometer, \$59 + 125 = \$184.





STC-100-K-SMP-M, connector \$59, shown actual size.

PATENT PENDING



Temperature/Relative Humidity/Infrared Bench Top Handheld Meter

With Laser Dot/Circle Sighting, Data Logging

and Wireless Sensor Probe Option

RH511 Series Starts at



PATENTED

For Complete Details Visit omega.com/rh511

The RH511 is a high performance, handheld temperature/relative humidity/infrared meter. This meter has many features including two temperature inputs (Type K thermocouple), triple LCD display of humidity/temperature or infrared temperature and thermocouple temperature, MIN/ MAX/HOLD functions, data logging, USB interface with Windows based PC software, and wireless temperature/ humidity sensor probe option.

AVAILABLE FOR FAST DELIVERY!

To Order (Specify Model Number)			
Model No. Price		Description	
RH511	\$355	Portable temperature/relative humidity/infrared meter with wired sensor probe	
RH511-* 39		Portable temperature/humidity/infrared meter with wireless sensor probe	

^{*} Add "W9" for USA and Canada (915 MHz), or "W8" for Europe (868 MHz) Comes complete with a wired or wireless temperature/humidity sensor probe, Type K thermocouple, 6 "AA" size lithium batteries, USB cable, DC adaptor, software CD, mini-tripod, 1.8 m (6') sensor extension cable, operator's manual, and soft carrying case.

Ordering Example: RH511-W9, portable temperature/humidity meter with wireless sensor probe for US and Canada (915 MHz), \$399. OCW-2, OMEGACARE™ extends standard 1-year warranty to a total of 3 years (\$63), \$399 + 63 = \$462.

For Complete Details Visit omega.com/rh-usb

75 3:

Economical Humidity/Temperature Sensor

Features USB Interface and Free Recording and Logging Software

RH-USB



Connects Directly to a USB **Port on Your Computer**

- ✓ Free Software Converts Your PC into a Humidity and **Temperature Meter, Data** Logger or Chart Recorder
- ✓ Accurate to ±3% RH, ±1°C (±1.8°F)
- ✓ 316 SS Housing and Removable Stainless Steel Sensor Filter
- Suited for Wall or **Duct Mounting**

The RH-USB relative humidity/ temperature sensor provides a reliable and economical method for most relative humidity and temperature monitoring applications. The compact design is ideal for wall or duct mounting.

AVAILABLE FOR FAST DELIVERY!

RH511, \$355.

To Urder (Specif	y Model Number)
Model No.	Price	Description
RH-USB	\$145	Humidity temperature sensor with USB connection

Thermocouple Probe with USB Connection

Available, ee Page 44

Comes complete with an integral shielded 2 m (6') USB cable with Type-A connector, free software, removable protective sensor filter and operator's manual.

Ordering Example: RH-USB RH/temp sensor and HX70-MKIT wall/duct mounting kit,





SPRTX-SS Series

All Models

Visit omega.com/ sprtx-ss



Visit









Built-In Transmitter Housing!









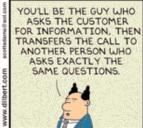














Benchtop Oscilloscope

BOS Series Starts at \$499













Dilbert © United Feature Syndicate

Thermal Imager

OSXL-101

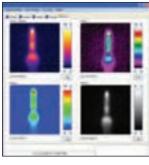


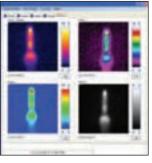
- ✓ Thermal Imager with **Ethernet Connection**
- Easy to Use and Implement
- ✓ 2256 Pixel Resolution
- Built-In Alarms
- ✓ NEMA 4 (IP65)

The OSXL-101 is a compact infrared thermal imaging sensor utilizing a thermopile array detector. The OSXL-101 sensor measures realtime temperature and a thermal

image up to 300°C (572°F). Ethernet connectivity allows the sensor to communicate with the PC running the application software or customers LAN.

> Thermal imaging software included.







CE OMEGA

OSXL-101, \$1990, shown with mounting stand (includeď).



AVAILABLE FOR FAST DELIVERY!

To Order (Specify Model Number)			
Model No.	PriceDescription\$1990Fixed mount thermal imager		
OSXL-101			
OSXL-100-PE	395	395 NEMA 4X (IP65) stainless steel protective enclosure	
OSXL-100-LAN	80	80 Replacement LAN cable, 2.5 m (8.2')	
OSXL-100-PAC	120 Replacement power/alarm cable, 2.5 m (8.2')		
OSXL-100-MOUNT	40	40 Replacement mounting stand	
OSXL-100-PS 100 Replacement power supply with 2.5 m (8.2') cable			
Company and the with an authoric manual politicate CD, manualism about manual account I ANI			

Comes complete with operator's manual, software CD, mounting stand, power supply, LAN cable, power/alarm cable, mounting screws and plugs, lens and connector caps. Ordering Example: OSXL-101, thermal imager, \$1990. OCW-3, OMEGACARE™ extends standard 1-year warranty to a total of 4 years (\$350), \$1990 + 350 = \$2340.

Rugged, Weatherproof, Wall Mounted **Temperature Sensor** Pt100 Class A Sensor in NEMA 4X (IP65)

Enclosure

EWSE Series Starts at



- Designed for Indoor and Outdoor Use
- Screw Terminal Block for 4-Wire Pt100 Connection
- Optional Built in 4 to 20 mA **Transmitter**
- Rugged Sensor and Protection Tube Design



To Order (Specify Model Number)			
Model No.	Price Description		
EWSE-PT100	\$140	External air temperature assembly, 4-wire RTD	
EWSE-PT100-TX	208	External air temperature assembly with 2-wire 4 to 20 mA transmitter	
TX-SCALED	45	Factory scaling charge for non-standard temperature range on 4 to 20 mA output models	
TX4-100	35	35 Multi-conductor hook-up wire, 100' spool	

Other probe lengths available on request. Contact sales to discuss your specific requirements. Ordering Example: EWSE-PT100, air temperature sensor, \$140.



Shown with customer installed wiring.

For Complete Details Visit omega.com/ewse EWSE-PT100. \$140. shown smaller than actual size.

Non-Contact Infrared Temperature Sensor

With Wireless Transmitter

UWIR-2-NEMA



- -18 to 538°C (0 to 1000°F) Measurement Range
- Adjustable Emissivity from 0.10 to 1.0
- ✓ Free Software Converts Your PC Into a Multi-**Channel Chart Recorder** or Data Logger

OMEGA's new infrared sensor with wireless transmitter features a remote IR sensor and radio wireless transmitter in a NEMA enclosure. The miniature sensor head is ideal for measuring temperatures from -18 to 538°C (0 to 1000°F) in confined, hard-to-reach places and harsh environments.





IR sensor head.

Shown smaller than actual size.

IR sensor

AVAILABLE FOR

For Complete

Details Visit omega.com/ir-usb

For Complete Details Visit omega.com/uwir-2





To Order (Specify Model Number) Price Description **UWIR-2-NEMA** \$285 Non-contact wireless infrared transmitter with remote sensor, 1.8 m (6') cable Replacement 3.6V lithium "C" battery **UWTC-BATT-C** 25 assembly (one included) **UWTC-CABLE** 5 Spare programing cable (one included with receivers)

Note: USB programming cable and FREE measurement and data logging software are both included with compatible UW Series wireless receivers and transceivers. Comes complete with transmitter, infrared sensor head, sensor head mounting nut, 3.6V lithium battery assembly and operator's manual. UWTC-REC6 models only available with V1 or V2 output types.

Ordering Example: UWIR-2-NEMA, wireless infrared transmitter, UWTC-REC1, 48-channel USB receiver, UWTC-BATT-C, spare battery, and OS100-MB, sensor head bracket, \$285 + 225 + 25 + 20 = \$555.

Economical Infrared Temperature Sensor Features USB Interface and Free Charting

and Logging Software

IR-USB







- Connects Directly to a USB **Port on Your Computer**
- ✓ Free Software **Converts Your PC** into a Temperature Meter, Data Logger or Chart Recorder
- ✓ -18 to 538°C (0 to 1000°F) Measurement Range
- Adjustable Emissivity from 0.10 to 1.0

The IR-USB infrared temperature sensor provides a reliable and economical method for most noncontact temperature monitoring applications. Each unit is factory calibrated to provide excellent sensitivity, fast response, and stability. The unit features a IR sensor/signal conditioner installation with a direct USB connection.

connection.		FAST DELIVERY
To Order (Specif	y Model Number)
Model No.	Price	Description
IR-USB	\$175	Infrared temperature sensor with USB connection

Comes complete with an integral shielded 1.8 m (6') USB cable with Type A connector, software, mounting nut and operator's manual.

Add "-HT" for high temperature sensor head and add \$100 to price.

Ordering Example: IR-USB Infrared temperature sensor and OS100-MB mounting bracket, \$175 + 20 = **\$195.**

Wireless Infrared Thermometers

Built-In Dot/Circle Switchable Laser Sighting, Thermocouple Input and Close Focus Models



WIRELESS
OMEGASCOPE®
OS530E
Starts at



- Built-In Wireless Measurement
- Built-In Patented Laser Sighting is Switchable Between Laser Dot and Circle Patterns
- New Series Includes Built-In Distance Measurement, Close-Focus, and High-Resolution Models
- ✓ Models Available with Temperature Ranges from -23 to 871°C (-10 to 1600°F)

With a combination of powerful features, the portable and rugged OS530E Series infrared thermometers offer solutions for many non-contact temperature measurement applications. Emissivity adjustable from 0.100 to 1.00, the OS530E series provides versatility when measuring a variety of surfaces.

MOST POPULAR MODELS LISTED!

To Order (Specify Model Number)					
Model No. OS530LE-(†) OS532E-(†) OS534E-(†)					
Price	\$295	\$450	\$650		

† Insert "W9" for 915 MHz (USA/Canada) or "W8" for 868 MHz (CE models). All units come complete with mini-tripod, software, carrying case, output cable, 4 "AA" batteries (2 sets included) and operator's manual.

Ordering Example: OS530LE-W9, wireless handheld infrared thermometer (USA/Canada) with built-in Laser Circle to Dot Switchable feature, \$295.



High-Performance Infrared Thermometer With Patented Circle/Dot Laser Sighting and Wireless USB Interface

OS-DT8855W

\$279



Data Logger with Built-In Memory Storing up to 20 Readings ✓ Wireless USB Interface (RF 915 MHz for USA, Canada and Mexico)

✓ Wireless Transmission Distance 15 m (49.2')

The high performance, handheld infrared thermometer is a non-contact temperature measurement instrument that features a laser circle/dot sight.

AVAILABLE FOR FAST DELIVERY!

To Order (Sp	ecify I	Model Number)
Model No	Price	Description
OS-DT8855W	\$279	Handheld infrared thermometer 30:1 field of view

Comes complete with hard carrying case, mini-tripod, AC power supply, 9V battery, one Type K thermocouple, USB wireless data receiver, PC software, probe lead adaptors, and operator's manual.

Ordering Example: OS-DT8855W, handheld infrared thermometer with patented laser circle sighting, backlit LCD, 30:1 field of view, **\$279. OCW-3**, OMEGACARESM extends standard 1-year warranty to a total of 4 years **(\$69)**, \$279 + 69 = **\$348.**





Long Range Handheld **High-Performance Infrared Thermometer**

OS534E-LR/ OS523E-LR Series

PATENTED

Starts at











- ✓ Long Range 110: 1 **Optical Field of View**
- ✓ Temperature Ranges to 1370°C (2500°F)
- Built-In Laser Sighting Dot/Circle Switchable

RS232 Output with Free **Data Logging Software**

✓ Real Time Data Storage and Data Logging

Analog Output Standard

Distance-Measuring Option

Sighting Scope Standard

AVAILABLE FOR FAST DELIVERY!



To Order (Specify Model Number)				
Model No.		Description		
OS523E-LR \$1295		High temperature, long range high-performance infrared thermometer 0 to 2500°F		
OS534E-LR 995 Long range high-performance infrared thermometer -10 to 1600°F				
Comes complete with large, hard carrying case OS520-SC-RCC, mini-tripod, 4 "AA" size lithium batteries, software				

CD, analog cable, RS232 cable, sighting scope, and operator's manual.

Add "-DM" for built-in distance measurement and add \$75 to price.

Sighting scope is factory installed and aligned, not field installable.

Ordering Example: OS523E-LR, OMEGASCOPE® infrared thermometer with factory-installed sighting scope \$1295. OCW-3, OMEGACARE™ extends standard 2-year warranty to a total of 5 years (\$298), \$1295 + 298 = \$1593.

Industrial Infrared Thermometer **Non-Contact Temperature Measurement** with Integral Display and Analog Output

OS550A Series Starts at









For Complete Details Visit omega.com/ os550a

OS551A-V1-2, \$495, shown smaller than actual size.

Temperature Ranges up to 1370°C (2500°F)

- ✓ Voltage or Current Analog Outputs
- Available with NEMA 4 Plastic or Aluminum **Enclosure or OEM Bare Bones Version**
- ✓ RS232 with Free Data Logging Software
- 6 Optical Fields of View to Choose From

Industrial, high performance, economical transmitter package with a wide choice of temperature ranges, optical fields of view and analog outputs to feed directly to panel meters, recorders, temperature/process controllers, data loggers, data acquisition systems or other process instrumentation.

MOST POPULAR MODELS LISTED!

To Order (Specify Model Number)							
NEMA 4 Rated I	NEMA 4 Rated Plastic Enclosure						
Model No. Price Range Analog Output Softwar							
OS551A-MA-(*)	\$495	-23 to 400°C (-10 to 750°F)	4 to 20 mA	_			
OS551A-V1-(*)	495	-23 to 400°C (-10 to 750°F)	0 to 5 Vdc	_			
OS552A-MA-(*)	550	-23 to 538°C (-10 to 1000°F)	4 to 20 mA	Std			
OS552A-V1-(*)	550	-23 to 538°C (-10 to 1000°F)	0 to 5 Vdc	Std			
OS553A-MA-(*)	650	-23 to 871°C (-10 to 1600°F)	4 to 20 mA	Std			
OS553A-V1-(*)	650	-23 to 871°C (-10 to 1600°F)	0 to 5 Vdc	Std			
*Circumstant record and a considering anti-							

*Six optical range codes available online.

To order with longer sensor head cable, up to 15 m (50'), add suffix "-(†)FT" to model number, and add \$1/ft for each additional foot over 4.5 m (15). † Specify length in feet.

Ordering Example: OS551A-MA-2-35FT, OS551 with current output, 0.5 at 76 mm (3") FOV, 11 m (36') sensor head cable, \$495 + 20 = \$515. OCW-3, OMEGACARESM extends standard 2-year warranty to a total of 5 years (\$128), \$515 + 128 = \$643.

High Temperature Industrial Infrared Thermometer

Non-Contact Temperature Measurement with Integral Display and Analog Output

> **OS555A Series** Starts at













- ✓ Measure from 538 to 2482°C (1000 to 4500°F)
- ✓ See Thru Glass Window **Applications**
- ✓ 1% Rdg Accuracy
- ✓ 110:1 Field of View
- ✓ Voltage/Current Analog Output
- ✓ Fast 100 ms **Response Time**
- Data Storage and Logging
- ✓ RS232 Communications-Free PC Data Logging Software Included



OS555A-V1, \$850, shown smaller than actual size.



MOST POPULAR MODEL HIGHLIGHTED!

To Order (Specify Model Number)				
Model No. Price Electronics Enclosure				
OS555A-(*)	\$850 Plastic, NEMA 4 (IP65)			
OS555AM-(*)	M-(*) 890 Aluminum, NEMA 4 (IP65)			
OS555A-(*)-BB 800 No enclosure, for OEM applications				

Comes complete with operator's manual.

* Specify analog output signal: "MA" for 4 to 20 mA, "V1" for 0 to 5 Vdc or "MV" for

To order with longer sensor head cable, up to 15 m (50"), add suffix "-(†)FT" to model number, and add \$1/ft for each additional foot over 15". † Specify length in feet.

Ordering Example: OS555A-V1, infrared thermometer with 538 to 2482°C (1000 to 4500°F) range, 110 to 1 field of view, 0 to 5 Vdc output, \$850. OCW-3, OMEGACARESM extends standard 2-year warranty to a total of 5 years (\$153), \$850 + 153 = \$1003.

High Speed Industrial Fiber Optic Infrared Transmitter

OS4000 Series Starts at







- ✓ Temperature Ranges From 100 to 1600°C (212 to 2912°F)
- ✓ Very Fast Response Time of 1 msec
- ✓ 3 Standard Optical Field of Views
- ✓ 4 Standard Analog Inputs
- ✓ RS232 with Free Data Logging Software

The OS4000 Series offers many standard features such as adjustable emissivity, linear analog output, high and low alarm voltage output, RS232 PC interface, built-in laser sighting, and more.



Price Description Model No. OS4001-V1-(*) 1495 Infrared fiber optic transmitter, 0 to 5 Vdc output OS4001-MA-(*) **1495** Infrared fiber optic transmitter, 4 to 20 mA output

Comes complete with operator's manual, PC interface software CD, and power output cable.

* Relay option available. To order with two built-in relays with contact closure output, add suffix "AL" to model number and \$100 to price.

Ordering Example: OS4001-MA-AL, infrared fiber optic transmitter with 4 to 20 mA analog output and two built-in relays, \$1495 + 100 = **\$1595.**

Hot/Cold Benchtop Dry Block Calibrator omega.com/cl1500

CL1500 Series

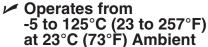












- Standard and Metric Well Designs Available
- 230 Vac Models CE Marked
- ✓ RS232 Communications and FREE Software (Requires Windows PC)



KTSS-14U-12-SMPW-M probe, \$25, shown smaller than actual size.

AVAILABLE FOR FAST DELIVERY!

SUPERMETER®

For Complete Details Visit

To Order (Specify Model Number)			
Model No.	Model No. Price Description		
CL1500	\$1995	Hot/cold dry block calibrator, 1/16, 1/8, 5/32, 3/16, 1/4, and 3/8" dia wells	
CL1500M	1995	Hot/cold dry block calibrator, 1.5, 2, 3, 4.5, 6 and 8 mm dia wells	

To order with 230 Vac power, add suffix "-230" to model number, no additional cost.

CE OMEGI

CL1200IB-E, \$375, test well insert.

Comes complete with power cord, RS232 cable, software, NIST-traceable calibration certificate at 0, 38, 100°C (32,100, 212°F), and operator's

Ordering Example: CL1500, hot/cold dry block calibrator, \$1995. OCW-2, OMEGACARE™ extends standard 1 year warranty to a total of 3 years **(\$178)**, \$1995 + 178 = **\$2173**.

High Temperature Dry Block Calibrator

FREE Software Included! Wide Temperature Range 400 to 1200°C (752 to 2192°F)

✓ Highly Accurate ±3°C (±6°F) **Entire Range and Excellent** Stabilties to Within ±0.1°C (±0.2°F)

Calibrates Thermocouples and RTD's

✓ Interchangeable Test Wells

For Complete Details Visit omega.com/cl1201

CL1201, \$5995, shown smaller than actual size.



CL1201



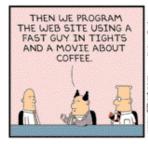
AVAILABLE FOR FAST DELIVERY!

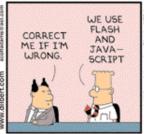
To Order (Specify Model Number)			
Model No	Price	Description	
CL1201	\$5995	High temperature block calibrator, 120 Vac, no insert	
CL1201-230V	5995	High temperature block calibrator, 230 Vac, no insert	
CL1200-HC	495	Hard carrying case	

Comes complete with software and operator's manual.

Ordering Example: CL1201 high temperature block calibrator, 120 Vac, CL1200IB-C insert, $\frac{1}{8}$, $\frac{1}{4}$, $\frac{3}{16}$, $\frac{5}{16}$, $\frac{3}{8}$ " and **CL1200CB-C** ceramic block insulator \$5995 + 375 + 83 = \$6453. **OCW-2**, OMEGACARESM extends standard 3-year warranty to a total of 5 years (\$250) \$5995 + 250 = **\$6245**.

for your daily dose of DILBERT!





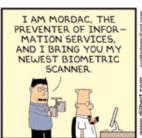








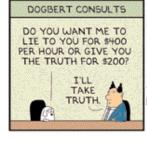
















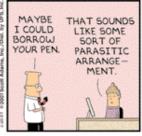


Thermometer









85.5-

U.S.A. and Canada

SUPERMETER® with Patented Laser Sighting **Non-Contact Temperature Measurement**

HHM290 \$175



Built-In Infrared **Pyrometer with** Switchable Laser **Dot/Circle Sighting**

Adjustable Emissivity with 10:1 Field of View ✓ Full-Function Auto-Ranging Digital Multimeter

Measures Capacitance, Inductance, and Frequency

Dual Thermocouple Input

AVAILABLE FOR FAST DELIVERY!

To Order (Specify Model Number)			
Model No.			
HHM290	\$175 Digital multimeter/infrared thermo with laser sighting dot/circle switch		

Comes complete with portable mini-tripod, rubber boot, 2 Type K beaded wire thermocouples, 6 "AA" alkaline batteries, test leads and operator's manual.

Ordering Example: HHM290, digital multimeter/infrared thermometer with laser sighting, HHM290-SC, soft carrying case, KTSS-HH, general purpose immersion probe, **CAL-3-IR**, NIST-traceable calibration, \$175 + 15 + 29 + 125 = **\$344**. **OCW-3**, OMEGACARE™ extends standard 1-year warranty to a total of 4 years (\$61), \$344 + 43 = \$387.

PATENTED

OA **©**

3 Meters In

For Complete Details Visit

omega.com/hhm290



Surface Probe Tester

CL1600 Series All Models





Standard



- ✓ Temperature Range From 35 to 450°C (95 to 842°F)
- Highly Stable
- ✓ Fast Heat Up
- ✓ Built-In Digital PID **Auto-Tune Temperature** Controller with Temperature Readout
- RS232 Output Standard
- ✓ NIST Traceable Calibration Certificate Included

Large Usable **Hot Surface Area** [120.45 cm² (18.6 in²)]

> The OMEGA® CL1600 surface probe tester is a system designed to check and verify surface probe readings across a

wide range of temperatures, from 35 to 450°C (95 to 842°F). The CL1600 allows periodic in-house testing and provides preventive maintenance for all your surface sensors.

CL1600-120VAC, \$2995, shown smaller than actual size.

AVAILABLE FOR FAST DELIVERY!

To Order (Specify Model Number)			
Model No. Price Description			
CL1600-120VAC \$2995		Surface probe tester, 120 Vac	
CL1600-240VAC 2995 Surface probe tester, 240 Vac			

Comes complete with 2 power cords; one for each 120 Vac operation and one with stripped leads for 240 Vac operation, NIST calibration certificate, and operator's manual.

Ordering Example: CL1600-120VAC, surface probe tester, HH-22A, handheld meter, and 88106K, right angle surface probe, \$2995 + 225 + 190 = \$3410. OCW-1, OMEGACARE™ extends standard 1-year warranty for total of 2 years (\$250), \$2995 + 250 = \$3245.

Universal Verbalizer Available in English or Spanish Versions

OMEGASAYS®

UV1000 All Models



✓ Verbalizes Voltage, Current, and Type K Thermocouple Inputs in Engineering Units

- ✓ Portable, Handheld High **Performance Design**
- ✓ Built-In Speaker and **Earphone Jack**
- ✓ Over 100 Built-In **Engineering Units**
- ✓ RS232 Interface Allows User to Configure the Unit



The UV1000 is a perfect solution for verbalizing any type of control signal. This device can verbalize 0 to 10 Vdc, 0 to 20 mA, and Type K thermocouple inputs. Configure the verbalizer using the RS232 PC interface to specify the input range, engineering scale, engineering unit, and high and low alarm set-points.



UV1000, \$239, shown smaller than actual size.

For Complete Details Visit omega.com/uv1000 **PATENTS** PENDING It Talks! AVAILABLE FOR FAST DELIVERY!

To Order (Specify Model Number)			
Model No.	Model No. Price Description		
UV1000	\$239	Universal verbalizer, English	
UV1000-S	239 Universal verbalizer, Spanish		
OM-NOMAD-CP9	M-NOMAD-CP9 10 RS232 cable for PC, 9-pin female connector		
OM-CONV-USB 15 RS232 (9-pin male connector) to USB converter cable			

Comes complete with operator's manual, Type K beaded thermocouple, test leads, earphone cable, RS232 cable, CD program, 2 "AA" size batteries, AC adaptor, and table top stand. Ordering Example: UV1000, universal verbalizer, English, \$239. OCW-3, OMEGACARE™ extends standard 1-year warranty to a total of 4 years (\$59), and OM-CONV-USB cable \$15, \$239 + 59 + 15 = **\$313**.

High Accuracy Thermocouple and RTD Thermometers

HH100 Series Starts at



- Dual K/J/T/E/R/S/N Input (HH127)
- ✓ Dual 2-, 3- and 4-Wire RTD Input (HH126)
- One RTD and One Thermocouple Input (HH176)
- Large Easy to Read LCD Display T1, T2, T1-T2

For Complete Details Visit omega.com/hh100

HH127, \$250.

AVAILABLE FOR FAST DELIVERY!

To Order (Specify Model Number)			
Model No.	Price Description		
HH126	\$300 Handheld thermometer dual input RTD with data logging		
HH127	250	250 Handheld thermometer dual input thermocouple with data logging	
HH176	360 Handheld thermometer thermocouple and RTD input with data logging		

Comes complete with 4 "AAA" alkaline batteries, software CD, 1.8 m (6') infrared to USB data cable, rubber boot, and Type K thermocouple or RTD cable (one per channel dependent on model), and operator's manual.

Ordering Example: HH126, handheld thermometer, **\$300. OCW-3**, OMEGACARESM extends standard 1-year warranty to a total of 4 years (\$90), \$300 + 90 = **\$390**.





Programmable Universal Verbalizer % DIN Panel Meter OMEGASEZ®



UV1000-PM



Verbalizes/Displays **Analog Inputs-**0 to 10 Vdc, 0 to 20 mA or 4 to 20 mA, and Types K, J, T, and R Thermocouple Input in Engineering Units

- Scaling Analog Inputs
- User-Friendly, Simple to Configure
- 2 Alarm Outputs with Adjustable Deadband

The new UV1000-PM universal verbalizer is an innovative panel meter and creative solution for process monitoring almost any type of measurement with speech/ display/alarming features.



CAUTION! - This product is not intended for medical use or use on humans PATENT PENDING

AVAILABLE FOR FAST DELIVERY!

To Order (Specify Model Number)				
Model No.	Model No. Price Description			
UV1000-PM	\$285	Universal verbalizer, English, with 2 relays: form "C" SPDT 3 A @ 30 Vdc, 3 A @ 250 Vac, external loudspeaker		

Comes complete with operator's manual, external speaker, and CD with configuration program. * No CE compliance above 60 Hz

Ordering Example: UV1000-PM, universal verbalizer, English, \$285. OCW-3, OMEGACARE™ extends standard 1-year warranty to a total of 4 years (\$71) \$285 + 71 = \$356.

Series

1/4 DIN Temperature, **Process, Strain Meters MONOGRAM®** and PID Controllers

For Complete Details Visit omega.com/ cni8 series and omega.com/ dpi8 series

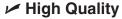
DPi8 Meter Starts at

CNi8 Controller Starts at









- ✓ High Accuracy ±0.5°C (0.9°F), 0.03% Reading
- User-Friendly, Simple to Configure
- ✓ Free Software
- ✓ Full Autotune PID Control
- Universal Inputs: Thermocouple, RTD, **Process Voltage/** Current, Strain
- ✓ Totally Programmable Color Displays, Standard
- ✓ Built-In Excitation, Standard change color between GREEN,



2 Control or Alarm Outputs, Choice of dc Pulse. Mechanical Relays, Analog **Voltage and Current**

The DPi8/CNi8 is a 1/8 DIN size (96 x 48 mm) Digital Panel Meter featuring the big iSeries color-changing display. The digits are twice the size of typical ½ DIN panel meters. The iSeries meters feature the only LED displays that can be programmed to

CNi833, \$310, shown smaller than actual size.

AMBER, and RED at any set point or alarm point.

The "DPi8/CNi8" model is available as an extremely accurate programmable digital panel meter with no outputs or with dual outputs for controlling or alarming functions. Other options include isolated programmable analog output, serial communications, MODBUS® and Ethernet.

For Complete Details Visit

omega.com/ cni32_series

and omega.com/

dpi32 series

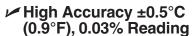
OE MONOGRAM

Series ½ DIN Temperature, Process and Strain Meters and PID Controllers

DPi32 Meters Starts at

CNi32 Controllers Starts at





- ✓ Totally Programmable Color Displays (Standard)
- ✓ User-Friendly, Simple to Configure
- ✓ Free Software, Active X Controls
- ✓ Full Autotune PID Control
- Universal Inputs: Thermocouple, RTD, **Process Voltage/Current,** Strain



CNi32, \$195, shown actual size.

- ✓ RS232 and RS485 Serial Communications in One Instrument (Optional)
- ✓ Built-in Excitation, 24 Vdc, Standard
- Temperature Stability ±0.04°C/°C RTD and ±0.05°C/°C TC @ 25°C (77°F)
- ✓ NEMA-4 (IP65) Front Bezel

The DPi32/CNi32 is the iSeries meter (DPi32) and controller (CNi32) in the extremely compact and increasingly popular ½ DIN size. The DPi32/CNi32 is the most sophisticated and accurate instrument available in the small $\frac{1}{2}$ DIN package, yet is still easy to configure. The DPi32/CNi32 and DPiS32/CNiS32 introduce a number of unique features not yet found on any other 1/22 DIN instrument.

Series

1/16 DIN Temperature, **Process and Strain Meters MONOGRAM** and PID Controllers

Starts at

DPi16 Meters CNi16 Controllers Starts at



- ✓ High Accuracy ±0.5°C (0.9°F), 0.03% Reading
- ✓ Totally Programmable Color Displays (Standard)
- User-Friendly, Simple to Configure
- ✓ Free Software
- ✓ Full Autotune PID Control
- Universal Inputs: Thermocouple, RTD, Process Voltage/Current, Strain
- ✓ Embedded Ethernet Connectivity
- RS232 and RS485 Serial **Communications in One** Instrument (Optional)





Analog Output Selectable as a Control Output or as a Calibrated Retransmission of Process Variable

The DPi16/CNi16 is the popular 1/16 DIN size (48 mm square) meter or controller. The meter (model "DPi16") directly to an ethernet network and displays the process value and has no features an embedded web server. control outputs.





CNi16, \$225, shown actual size.

The CNi16 is the first 1/16 DIN controller with the option of both RS232 and RS485 in one instrument with both MODBUS® serial protocol and the straightforward ASCII protocol. And of course the CNi16 is the first 1/16 DIN Controller that can connect

Miniature Benchtop Controllers

For Complete Details Visit omega.com/ csi32_series

CSi32 Series Starts at

Series



- Rugged Metal **Benchtop Enclosure**
- ✓ 4-Digit Display, 1 or 0.1° Resolution
- Built Around OMEGA's Award-Winning Patented Series Controllers
- ✓ 5-Year Warranty
- Simple to Configure and Use
- ✓ Full Autotune PID **Heat-Cool Control**
- Single Ramp and Soak Capability



The CSi32 Series is our newest line of benchtop controllers. They feature a 1/2 DIN size (96 x 48 mm) digital panel controller in a rugged benchtop metal enclosure. The controller used is Newport's award winning and patented iSeries with color-changing

display. The iSeries meters feature the only LED displays that can be programmed to change color between GREEN, AMBER, and **RED** at any setpoint or alarm point.

AVAILABLE FOR FAST DELIVERY!

To Order (Specify Model Number)					
Model No.	del No. Add'l Price Description				
CSi32(*)	\$345	Benchtop controller			

* Insert Input Code: J. K. T. E. R. S. N. RTD. V. or MA from Input and Range Table, available online. Comes complete with operator's manual, configuration software, 120 Vac power cord and input connector.

Ordering Example: CSi32K-C24, benchtop controller, Type K input and RS232/485 communications option, \$345 + 95 = \$440.

1/8 DIN Graphic Display Meter for Process and Temperature Measurement with Optional Alarm Relays, Analog Output, and Built-In Wireless Receiver For Complete Details Visit

XY1700 Series Starts at





- Monochrome, High Resolution Graphic Display with High-Intensity Backlighting
- Display Can Be Configured for Bar Graph, **Charting or Standard Segment Format**
- ✓ ½ DIN Enclosure

XY™ SERIES



XY1701, graphic panel meter shown in charting mode, \$255.

PATENT PENDING AVAILABLE FOR FAST DELIVERY!

To Order (Specify Model Number) Model No. **Price Description** XY1701 \$255 Graphic panel meter XY1701-AR Graphic panel meter with alarm relays and analog output 295 XY1701-230VAC 255 Graphic panel meter (230 Vac) XY1701-AR-230VAC 295 Graphic panel meter with alarm relays and analog output (230 Vac)

Comes complete with operator's manual.

For models with built-in wireless receiver, add "-W" to model number and \$45 to price. Ordering Example: XY1701, 1/8 DIN graphic panel meter, \$255.

RTD Temperature Transmitter
316 Stainless Steel Construction Ideal for Wash-Down,
Outdoor, Sanitary, or Marine Environments

*195





- ✓ Splash-Proof 316 SS Housing with NEMA 4 (IP67) Rating
- Compact Design Attaches Directly to Pt100 Sensors with M12 Connecting Cable
- ✓ 2-Wire, 4 to 20 mA Output

The TX94A-SS temperature transmitters are high performance stainless steel industrial transmitters designed for direct connection to most CIP (clean-in-place) sanitary Pt100 probes that incorporate an M12 style connection. Available in four temperature ranges, the TX94A-SS has a standard 4 to 20 mA output signal.



To Order (Specify Model Number)					
Model No.	Model No. Price Input Range				
TX94A-SS-M12(*)-1	\$195	-40 to 49°C	-40 to 120°F		
TX94A-SS-M12(*)-2	195	-18 to 93°C	0 to 200°F		
TX94A-SS-M12(*)-3	195	-18 to 149°C	0 to 300°F		
TX94A-SS-M12(*)-4	195	-18 to 260°C	0 to 500°F		

(*) Specify probe/sensor connection; "M" for male, or "F" for female (compatible with OMEGA® sanitary Pt100 probes).

Comes complete with mating connector, mounting bracket and operator's manual. **Ordering Example: TX94A-SS-M12F-3**, temperature transmitter with Pt100 input, -18 to 149°C (0 to 300°F) range, 4 to 20 mA output, M12 female connector for probes (input) and M12 male connector for cable (output), with **PSR-24S** screw terminal power supply, and **M12C-PVC-4-S-F-5**, PVC jacketed connecting cable with M12 female connector, \$195 + 60 + 15.50 = \$270.50.

Splash-Proof Body and Integral Cable The Smart Connector™

Connector/Transmitter

SPRTX-SS Series

495 All Models









For Sanitary Pt100 Probes with M12 Connector

Optional

Miniature Design Attaches Directly to Pt100 Sensors with M12 Connector

- ✓ 2-Wire, 4 to 20 mA Output
- Upscale Break Protection
- Encapsulated Signal Conditioner with Water Tight Connector Housing
- ✓ Integral 4 m (12') Cable



The SPRTX-SS temperature transmitters are high performance low cost industrial transmitters designed for direct connection to most CIP (clean-in-place) sanitary Pt100 probes with an M12 style

connection. The SPRTX-SS transmitter attaches directly to a Pt100 probe with an M12 connection, such as the OMEGA® PRS-S-M12C Series, and provides a standard 4 to 20 mA output signal.

Built-In Transmitter For Complete Details Visit

omega.com/sprtx-ss

PATENTED

SPRTX-SS1-M12, \$95, shown actual size.

AVAILABLE FOR FAST DELIVERY!

To Order (Specify Model Number)					
Model No.	Price Input Range				
SPRTX-SS1-M12	\$95	-99 to 208°C	-146 to 406°F		
SPRTX-SS2-M12	95	2 to 569°C	36 to 1056°F		

Comes complete with operator's manual.

Ordering Example: SPRTX-SS1-M12, temperature transmitter with Pt100 input, -99 to 208° C (-146 to 406° F) range, 4 to 20 mA output, M12 female connector for probes (input) and 4 m (12') cable with **PSR-24S**, screw terminal power supply, \$95 + 60 = \$155.



for your daily dose of DILBERT!







































Dilbert © United Feature Syndicate

Digital RTD Thermometer

316 SS Enclosure for Sanitary, Wash-Down, and Marine Applications

DTG-RTD100 Series Starts at



Thermocouple Models Available. For Complete Product Information Visit omega.com/ dtg-tc100



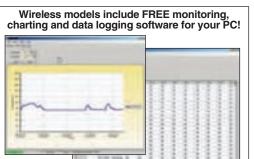
✓ Large Multicolor Backlit Display with 25 mm (1") Digits Readable From Over 10.7 m (35')

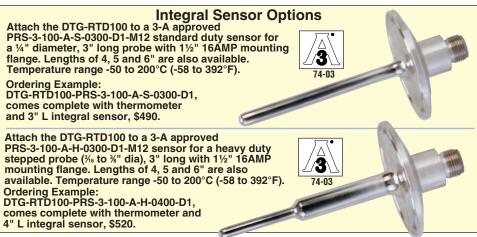
- \checkmark Up to ±0.2°C (±0.3°F) or ±0.1% Rdg Accuracy
- ✓ Connects Directly to 3-Wire Pt100 RTD Sensors
- ✓ User Scaleable 4 to 20 mA, 0 to 5 or 0 to 10 Vdc Analog Output Standard
- ✓ Powered by Internal Battery or External DC **Power Supply**
- ✓ Included Setup and Service Software Allows for Fast Maintenance and Calibration via **USB Connection**
- Wireless Transmitter Option Sends Readings to Remote Locations and Allows for PC-Based **Chart Recording and Data Logging**
- ✓ Low Power Operation and Sleep Mode for **Long Battery Life**
- ✓ Display Backlight Changes from Green to Blue for Low Alarm and from Green to Red for **High Alarm**

New security feature uses magnetic stylus (included) for keypad activation. No accidental button presses. Perfect for dirty hands or if wearing gloves

DTG-RTD100-PRS-3-100-AS-300-D1-W,

\$590, smaller than actual size.







Large 25 mm

(1") Digits

Integral sensor.



Circular Chart Recorders

Wireless Temperature/ CTXL-TRH-W-W9, 8895.

SUPERECORDERTM

CTXL-TRH-W All Models







Record Temperature/ **Humidity with Remote** Wireless Probe

- ✓ RF Range 90 m (295′) Line of Sight and 33 m (108') Indoors
- ✓ 1, 7 or 32 Day Recording
- Easy to Read Dual Channel **Backlit LCD Readout**
- Convenient Front Panel **Programming/Operation**
- Data Logging PC Software Included

PATENTS PENDING

AVAILABLE FOR FAST DELIVERY!

To Order (Specify Model Number)			
Model No. Price Description Color			
CTXL-TRH-W-(*)	FXL-TRH-W-(*) \$895 Wireless temperature/RH recorder		
CTXL-TRH-G-(*) 895 Wireless temperature/RH recorder			

^{*} Specify wireless type: "W9" for USA/Canada (915 MHz) or "W8" for Europe (868 MHz). To retrofit a CTXL-TRH recorder with wireless capability, one transmitter (CTXL-PT) and one receiver (CTXL-PR) are required.

Each unit comes complete with wireless transmitter, receiver, 120 assorted double-sided charts, 2 pen sets, wall mount kit, 4 "D" cell batteries, RS232 cable and adaptor, software CD, universal ac adaptor, and operator's manual.

Ordering Example: CTXL-TRH-W-W9, white temperature/relative humidity recorder with remote/wireless probe, CT485-CWF chart paper (100 double sided sheets, 7 day, °F), and OCW-3, OMEGACARE™ extends standard 2-year warranty to a total of 5 years, \$895 + 19 + 232 = **\$1137**.

Dual Input Thermocouple Universal Recorder

For Complete Details Visit omega.com/ctxl

CTXL-DTC All Models



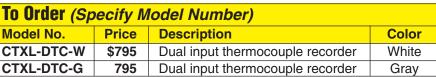
SUPERECORDER™ PATENTS PENDING



- Thermocouple Input Universal Thermocouple **Connector Compatible** with Standard and **Miniature Connectors**
- ✓ Up to ±1.5°C (2.7°F) **Display Accuracy**
- Data Logging PC Software Included

The CTXL-DTC is a dual input thermocouple recorder, both input channels are set to the same calibration: the user can select either J, K or T type thermocouple calibration. Input connections are via UST type universal thermocouple connector that is compatible with both standard (type OST) and miniature (type SMP) thermocouple connectors.





Each unit comes complete with two J, K, T thermocouples, 120 assorted double-sided charts, 2 pen sets, wall mount kit, 4 "D" cell batteries, RS232 cable and adaptor, software CD, universal ac adaptor, and operator's manual.

Ordering Example: CTXL-DTC-G, gray dual thermocouple input recorder with CTXL-DTC-R1-CW chart paper [100 double-sided sheets, 7 day, -40 to 560°F (-40 to 1040°F) range], \$795 + 19 = \$814.



CTXL-DTC, \$795.

Dual Input Process Circular Chart Recorder

SUPERECORDERTM

CTXL-DPR





- ✓ Voltage Models Selectable for 1, 5 or 10V Inputs
- Current Models Selectable for 0 to 20 or 4 to 20 mA Inputs
- ✓ Windows® Based PC **Data Logging** Software Included
- ✓ Benchtop or Wall Mount with Built-In Chart Lights
- Built-In Excitation to Power **External Transmitters**

The CTXL-DPR is a dual input process recorder, available with either voltage or current inputs. Both input channels are set to the same input range; the voltage input model has selectable ranges of 0 to 1, 0 to 5 and 0 to 10V, while the current model is selectable between 0 to 20 and 4 to 20 mA ranges. Standard charts are scaled for 0 to 100%; the user can also scale the chart paper to show a portion of the full range.



PATENTS PENDING

AVAILABLE FOR FAST DELIVERY!

CTXL-DPR recorder, \$795.

To Order (Specify Model Number)				
Model No.	Price	Description	Color	Input
CTXL-DPR-W-V	\$795	Dual input process recorder	White	Voltage
CTXL-DPR-G-V	795	Dual input process recorder	Gray	Voltage
CTXL-DPR-W-I	795	Dual input process recorder	White	Current
CTXL-DPR-G-I	795	Dual input process recorder	Gray	Current

Each unit comes complete with 120 assorted double-sided charts, 2 pen sets, 1.8 m (6') input cable, wall mount kit, 4 "D" cell batteries, RS232 cable and adaptor, software CD, universal ac adaptor, and operator's manual.

Ordering Example: CTXL-DPR-W-V, white dual voltage input recorder with CTXL-DPR-CW chart paper (100 double-sided sheets, 7 day, 0 to 100%), \$795 + 19 = \$814.

pH/Temperature Circular Chart Recorder **SUPERECORDER**TM

CTXL-PH. \$795.

CTXL-PH All Models



PATENTS PENDING

MADE IN 2 YEAR WARRANTY







Optional

- ✓ Record pH with **Automatic Temperature** Compensation
- Standard BNC pH **Electrode Connector**
- ✓ Pt100 RTD Temperature **Sensor ATC**
- ✓ Benchtop or Wall Mount with Built-In Chart Lights
- Data Logging PC Software Included

The CTXL-PH is a high accuracy pH and temperature recorder, compatible with any standard pH electrode. The CTXL-PH also measures temperature from a pH electrode with built-in PT100 RTD sensor for automatic temperature compensation for pH measurement.



AVAILABLE FOR FAST DELIVERY!

separately.

To Order (Specify Model Number)				
Model No.	Price	Description	Color	
CTXL-PH-W	\$795	pH/temperature recorder	White	
CTXL-PH-G	795	pH/temperature recorder	Gray	

Each unit comes complete with 120 assorted double-sided charts, 2 pen sets, wall mount kit, 4 "D" cell batteries, RS232 cable and adaptor, software CD, universal ac adaptor, temperature compensation resistor and operator's manual.

Ordering Example: CTXL-PH-W, white pH/temperature recorder with PHE-6510, submissible flat surface pH electrode, \$795 + 134 = \$929.



Compact Portable Data Logger

RDXL120 Series Starts at

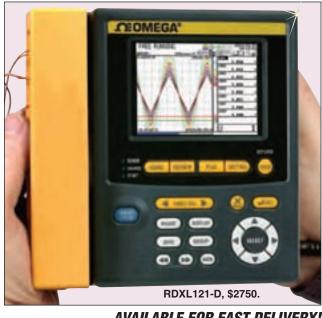
\$2750



- ✓ All Channel Adopt **Universal Insulated Input**
- Easy-to-Read Screen Display
- ✓ Data Can Be Saved at Max Speed of 100 ms
- Acquire Large Amounts of Data
- Set Temperature and Voltage independently for Each Channel
- ✓ Easy-to-Read Wide View TFT LCD (Even Outdoors)
- Measures Temperature Changes Reliably







AVAILABLE FOR FAST DELIVERY!

To Order (Specify Model Number)		
Model No.	Price	Description
RDXL121-D	\$2750	8-channel plug in terminals
RDXL122-D	3250	16-channel plug in terminals

Comes complete with operator's manual, lithium battery, rubber boot, AC adaptor and CD-ROM standard software.

Ordering Example: RDXL121-D, 8-channel data logger, and RDXL900, data logging software, \$2750 + 412 = \$3162. OCW-3, OMEGACARE™ extends standard 1-year warranty to a total of 4 years (\$350), \$3162 + 350 = **\$3512**.

Networkable Paperless Data Acquisition System

rd8300 ✓ 6 or 12 Universal Inputs

For Complete Details Visit

omega.com/

✓ Up to 4 Pulse/ **Frequency Inputs** ✓ 6 or 12 Relay Outputs

RD8312, \$2695, shown





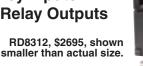




RD8300 Series









AVAILABLE FOR FAST DELIVERY!

To Order (Specify Model Number)		
Model No.	Price	Description
RD8306	\$2395	6 universal inputs, 6 math channels, 100/240 Vac, 512 MB internal memory
RD8306-ST	2420	6 universal inputs, 6 math channels, 100/240 Vac with screw terminals, 512 MB internal memory
RD8306-R6	2595	6 universal inputs, 6 math channels, 100/240 Vac, 512 MB internal memory, 6 form A relay, 0.5 A @ 200 Vdc, 2 control inputs
RD8312	2695	12 universal inputs, 6 math channels, 100/240 Vac, 512 MB internal memory
RD8312-DC	2850	6 universal inputs, 6 math channels, 12 to 24 Vdc, 512 MB internal memory
RD8312-ST	2720	512 MB internal memory
RD8312-R12	2995	12 universal inputs, 6 math channels, 100/240 Vac, 512 MB internal memory, 12 form A relay, 0.5 A @ 200 Vdc, 2 control inputs

Comes complete with operator's manual.

Ordering Example: RD8306-ST, 6 universal inputs, 6 math channels, 100/240 Vac with screw terminals, 512 MB internal memory, \$2420. OCW-3, OMEGACARESM extends standard 2-year warranty to a total of 5 years (\$350), \$2420 + 350 = \$2770.

Portable Paperless Recorders and Data Acquisition Stations

RD-MV1000 and RD-MV2000 Series Starts at

\$3040



For Complete
Details Visit
omega.com/
rd-mv1000_2000

- Multi-Channel Universal Inputs, Up to 48 Input Channels
- Advanced Network Connectivity with Email, File Transfer, and Web Server Functions
- Isolated Channel Inputs for DC Voltage and Thermocouple Inputs
- Recorders Can Save Data Files in a Text File Format



AVAILABLE FOR FAST DELIVERY!!

To Order (Specify Model Number)		
Model No.	Price	Description
RD-MV1006	\$3040	6 input clamp terminal, 400 MB internal memory, CF card plus USB, 100 to 240 Vac, UL/CSA power cord
RD-MV1012	4400	12 input clamp terminal, 400 MB internal memory, CF card plus USB, 100 to 240 Vac, UL/CSA power cord
RD-MV2008	5040	8 input clamp terminal, 400 MB internal memory, CF card plus USB, 100 to 240 Vac, UL/CSA power cord
RD-MV2030	6510	30 input clamp terminal, 400 MB internal memory, CF card plus USB, 100 to 240 Vac, UL/CSA power cord

Comes complete with operator's manual on CD, power cable, quick reference guide, terminal screws and the DAQ STANDARD software (CD), CF card (128 MB). Software is compatible with Windows 2000/XP/Vista.

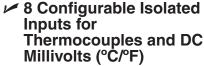
Ordering Example: RD-MV1012, 12 input recorder with 400 MB internal memory, CF card, USB port, UL/CSA power cord, \$4400. OCW-3, OMEGACARESM extends standard 2-year warranty to a total of 5 years (\$350), \$4400 + 350 = \$4750.

Multi-Input Portable Thermometer/Data Logger

For Complete Details Visit omega.com/ rdx/8

RDXL8 Series Starts at \$1900





✓ Stores Over 1.4 x 10⁷ Data Points Per Input Channel Graphic Display of Each Input

Programmable Hi or Lo Alarm for 8 Inputs

The RDXL8 has the ability to show measured values and to analyze them on it's graphical display, eliminating the need to download collected data to a computer for further analysis.

AVAILABLE FOR FAST DELIVERY!

To Order (Specify Model Number)		
Price	Description	
\$1900	Multi-input thermometer/data logger, monochrome display	
2500	Multi-input thermometer/data logger, color display	
440	Thermal printer for RDXL8 only	
18	Thermal paper (2 rolls)	
	Price \$1900 2500 440	

Comes complete with mini connector for analog input, optical RS232 to USB bridge, (8) 1.5V "AA" alkaline batteries, AC adaptor, USB cable, software CD, SD card (2 GB), (8) Type K beaded wire thermocouples, carrying case, and operator's manual on CD.

Ordering Example: RDXL8, multi-input thermometer/data logger, \$1900. OCW-3, OMEGACARESM extends standard 1-year warranty to a total of 4 years (\$350), \$1900 + 350 = \$2250.



Economical Video Inspection Systems

HHB200/HHB300 Starts at \$200

- ✓ HHB200: 61 mm (2.4")
 Color LCD Screen for
 Crystal Clear Image
- HHB300: 88.9 mm (3.5") Color LCD Screen for Superb Clarity and Viewing Effect
- ✓ 12 mm (0.47") Dia Flexible Camera-Tipped
- ✓ View Findings Instantaneously
- Mirror, Magnet and Pick-Up Hook Included

The borescope inspection systems have been designed as a user friendly and economical way of solving hidden problems and increasing productivity. The product has a high clarity color LCD to show clear images. It is widely used in applications such as HVAC/R building, aviation and vehicles maintenance.



To Order (Specify Model Number)			
Model No.	Price	Description	
HHB200	\$200	61 mm (2.4") color LCD screen borescope	
HHB300	249	88.9 mm (3.5") color LCD screen borescope	

Comes complete with 1 m (3.3') flexible probe, extension tools: (mirror, magnet, pick-up hook), 9V battery, blow mold case, and operator's manual.

Ordering Example: HHB200, 61 mm (2.4") color LCD screen borescope, \$200.



\$330



- ✓ 88.9 mm (3.5")
 Color LCD Screen
- Detachable Screen for Wireless Viewing
- ✓ 17 mm (0.67") Diameter Camera-Tipped Probe
- Probe Features a Built-In Adjustable LED Lighting
- Records in Still Photo (JPEG) and Video (AVI), or View it Live
- **✓ NTSC or PAL Compatible**
- ✓ 10 Language: English, Japanese, German, Spanish, French, Italian, Chinese, Dutch, Portuguese, Russian



AVAILABLE FOR FAST DELIVERY!

To Order (Specify Model Number)

Model No. Price Description

HHB400 \$330 88.9 mm (3.5") color LCD screen borescope

Comes complete with MicroSD memory card, extension tools: (mirror, magnet, pick-up hook), video interconnect cable, USB cable, magnetic base stand, AC adaptor, 4 "AA" batteries, blow mold case, and operator's manual.

Ordering Example: HHB400, 88.9 mm (3.5") color LCD screen borescope, \$330.

The 88.9 mm (3.5") TFT-LCD

Two type K

included.

thermocouples

HH1304P,

Printing Handheld Thermometer

HH1304P



- Accepts J, K, T and E Thermocouple Inputs
- **✓** Built-In Thermal Printer for Text and Printout
- High Accuracy
- Dual Input Features Min/Max and Differential Measurements
- ✓ 0.1 Resolution in °F/°C Over Full Range
- Programmable Time **Interval Setting**
- ✓ Hi/Lo Alarm Settings
- **∠** Externally Powered **Alarm Driver Outputs**
- ✓ Real-Time Clock
- ✓ Low Battery Indicator
- Optional Power Supply

OMEGA's compact and affordable HH1304P is ideal for applications requiring display and printing of temperature measurements. Dual input features min/max, hi/lo audible alarms (with externally powered alarm driver signals) and differential measurements. This 2-channel unit accepts Type J, K, T or E thermocouple inputs, thermometers has a high accuracy and 0.1° resolution. A built-in thermal printer makes hard copies of the temperature measurements, which can be taken at selected intervals. Parameters printed are time, date, temperature, and channel number. Battery powered or optional AC adaptor.

Specifications

Environment Conditions: Altitude up to 2000 m (6562') indoor use only Relatively Humidity: 90% max Operation Temperature: 0 to 50°C (32 to 122°F)

Display: 41/2 digit LCD

Sampling Rate: 1 reading per second Power Requirement: Six 1.5V "AAA" alkaline batteries (included) or optional 9 AC adaptor, (9 Vdc, 500 mA minimum)

Battery Life (Typical):

Approx 30 hrs (interval printing = 60 minutes, excluding beeper) 70 hours (without printing and beeper)

Input Protection: 60 Vdc/24Vrtns

Operating Temperature

and Humidity: 0 to 50°C (32 to 122°F)

below 90% RH

Storage Temperature and Humidity:

-10 to 60°C (14 to 140°F) below 70% RH

Dimensions: 193 L x 74 W x 37 mm H

(7.60 x 2.91 x 1.46")

Weight: Approx 365 g (13 oz) with batteries and thermo-paper

Printer: Thermo-printing type with 16 characters per line using 38 mm width plain thermal paper

Accuracy at 23°C, Below 80% RH:

±(0.01% rdg + 0.5°C) 0~982°C ±(0.05% rdg + 0.5°C) 982~1333°C $\pm (0.01\% \text{ rdg} + 0.9^{\circ}\text{F}) 32 \sim 1800^{\circ}\text{F}$ ±(0.05% rdg + 0.9°F) 1800~2431°F

 $\pm (0.01\% \text{ rdg} + 0.5^{\circ}\text{C}) 0 \sim 760^{\circ}\text{C}$ $\pm (0.01\% \text{ rdg} + 0.9^{\circ}\text{F}) 32 \sim 1400^{\circ}\text{F}$

Type E:

 \pm (0.01% rdg + 0.5°C) 0~703°C $\pm (0.01\% \text{ rdg} + 0.9^{\circ}\text{F}) 32 \sim 1297^{\circ}\text{F}$

 $\pm (0.01\% \text{ rdg} + 0.5^{\circ}\text{C}) 0 \sim 400^{\circ}\text{C}$ ±(0.01% rdg + 0.9°F) 32~752°F

Type K/J/E/T:

 $\pm (0.5\% \text{ rdg} + 0.7^{\circ}\text{C}) -200 \sim 0^{\circ}\text{C}$ $\pm (0.5\% \text{ rdg} + 1.4^{\circ}\text{F}) -328 \sim 32^{\circ}\text{F}$

Type K/J/E/T:

 $\pm (0.5\% \text{ rdg} + 1.0^{\circ}\text{C})-200 \sim 0^{\circ}\text{C}/$ -328~32°C

Resolution: 0.1°C/0.1°F

Measurement Range:

Type K: -200~1333°C (-328~2431°F) **Type J: -200~760°C (-328~1400°F) Type E: -200~703°C (-328~1297°F) Type T:** -200~400°C (-328~752°F)

Program

OMEGACARESM extended warranty program is available for models shown on this page. Ask your sales representative for full details when placing an order. OMEGACARE™ covers parts, labor and equivalent loaners.

Available for fast delivery!

To Order (Specify Model Number)			
Model No.	Price	Description	
HH1304P	\$599	Printing handheld thermometer	

Accessories (Field Installable)

Model Number	Price	Description
HH1300-RP	\$10	Thermal paper, package of 2
HH1304P-ADAPTOR	29	AC adaptor

Comes complete with 2 beaded wire Type K thermocouples (1 per input), alarm output cable, carry case, 6 "AAA" alkaline batteries, two rolls of thermal paper and operator's manual.

Ordering Examples: HH1304P, printing handheld thermometer, \$599.

OCW-2, OMEGACARE extends standard 1-year warranty to a total of 3 years (\$107), \$599 + 107 = **\$706.**

NEW Heat Guns with Digital LCD

HG Series Starts at

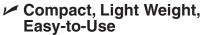
\$219











- Six Programmable Settings With Digital Display of Temperature and Air Flow
- Programmable Heat and Air Flow
- Adjustable Temperature in 10° Increments From 50 to 540°C (130 to 1000°F) in °F or °C
- Adjustable Air Flow From 4 to 16 CFM (113 to 453 L/Min)
- Ergonomic Handle Provides Balanced Grip
- ✓ Temperature and Air Flow Lock-In-Feature Provides Added Management Control
- Power-Interrupt Reset Safety Feature Prevents an Unattended Heat Gun From Resuming Heat After a Power Failure

Rugged, ergonomic heat guns with digital display of temperature and air flow. Adjustable heat in 10° increments from 50 to 540°C (130 to 1000°F), and adjustable air flow from 4 to 16 CFM provides fast, reliable, repeatable flameless heat.

Value added features include lockable temperature and air flow controls, power interrupt safety reset, temperatures shown in degrees Fahrenheit or Celsius and balanced ergonomic design.

For Complete Details Visit

omega.com/hg_series

Programmable or dial-in settings. Powerful, accurate, controllable heat and air flow to get the job done right. Electronic temperature control system maintains constant temperature when varying air flow or using attachments.

A broad range of optional attachments make the LCD Heat Guns ideal for a wide variety of applications including heating, shrinking, drying, soldering, desoldering, plastic welding and more.



HG1400 digital display.



HG-1400,

OE OMEGA®

MOST POPULAR MODEL HIGHLIGHTED!

To Order (S	To Order (Specify Model Number)				
Model No.	Price	Description			
HG-1400	\$219	LCD dial-in heat gun, 120V			
HG-1400-B	229	LCD dial-in heat gun with bench stand and specialty attachment			
HG-1400-KIT	269	LCD dial-in heat gun kit includes: $3\frac{1}{2}$ " spreader attachment, $1\frac{1}{2}$ " heat shrink attachment, $\frac{1}{2}$ " specialty connector attachment, $\frac{1}{2}$ " and $\frac{1}{2}$ " reducer attachments and durable storage/carrying case			
HG-1500	249	LCD programmable heat gun, 120V			
HG-1500-KIT	299	LCD heat gun kit includes: $3\frac{1}{2}$ " spreader attachment, $1\frac{1}{2}$ " heat shrink attachment, $\frac{1}{2}$ " specialty connector attachment, $\frac{1}{2}$ " and $\frac{1}{2}$ " reducer attachments and durable storage/carrying case			

Comes complete with operator's manual.

Ordering Example: HG-1500-KIT, LCD programmable heat gun, $3\frac{1}{2}$ " spreader attachment, $1\frac{9}{6}$ " heat shrink attachment, $1\frac{1}{2}$ " specialty connector attachment, $9\frac{9}{6}$ " and $9\frac{9}{6}$ " reducer attachments, durable storage/carrying case, complete operators manual, \$299. HG-1400, LCD dial-in heat gun, 120V, \$219.

for your daily dose of DILBERT!







Automated Thermocouple Calibrator

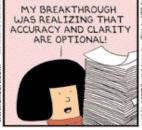
\$1240

Visit omega.com/ cl541-plus

MADE IN
USA

















I CAN

SEE YOU THROUGH

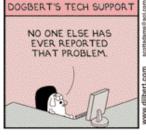
YOUR COMPUTER



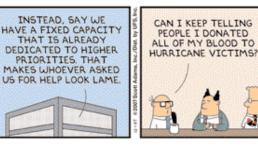
RDXL8 Series Starts at \$1900











IT'S A

LITTLE

OF BOTH,

BUT HOW

KNOW?





Kapton® Insulated Flexible Heaters

KHR, KHLV, and KH Series Starts at



- ✓ Rated up to 200°C (392°F)
- ✓ Etched Foil Design
- ✓ 0.010" Maximum Thickness
- ∠ 2.5, 5, or 10 Watts/In²
- ✓ 115, 230[†] and 28 Volts
- ✓ Optional Pressure-Sensitive Adhesive (PSA)

Kapton® insulated heaters are available in a variety of shapes, sizes, and wattages. Wattage ratings are 2.5, 5, or 10 W/in² at 115, 230[†] or 28V. Kapton® offers a high degree of resistance to chemicals, and has excellent outgasing properties in high vacuum environments.

Typical construction consists of an etched foil element of 0.0005" or 0.0001" thickness which is encapsulated between two layers of 0.002" Kapton® and 0.001" FEP adhesive.

CAUTION AND WARNING!

Fire and elctrical shock may result if products are used improperly or installed or used by non-qualified personnel.

KHR Series, Round, 115 Volts



For Complete Details Visit omega.com/

khr_khlv_kh

AVAILABLE FOR FAST DELIVERY!

To Or	To Order (Specify Model Number)						
Dia.	Total Wattage for Watt Density		Without PSA		With PSA		
	2.5W/in ²	5W/in ²	10W/in²	Model No.	Price	Model No.	Price
5 (2)	_	_	31.4	KHR-2/(*)	\$33	KHR-2/(*)-P	\$36

Comes complete with operator's manual.

Note: Heaters are available in only the watt densities where total wattage is indicated.

* Insert watt density: "2" for 2.5 W/in2, "5" for 5 W/in2 or "10" for 10 W/in2.

† Most sizes available in 230V. Consult heater sales and engineering.

Ordering Example: KHR-2/2-P, 5 cm (2" diameter), 115V, 2.5 W/in² heater with PSA, \$36.

Flexible Silicone Rubber Fiberglass Insulated Heaters

SRF Series Starts at



- ✓ Lightweight, Thin, Flexible
- ✓ Available in 2.5, 5 and 10 W/in²
- ✓ -56°C (-70°F) to 232°C (450°F) **Operating Temperature**
- Etched Foil and Wire Wound Design
- Round or Rectangular Shapes
- ✓ Available in 115 Vac
- ✓ Optional Pressure Sensitive Adhesive (PSA)†

OMEGALUX® silicone rubber fiberglass insulated flexible heaters can improve heat transfer and speed warm-ups where controlled heating is required in confined areas. Two circuit designs are available: etched foil or wire wound. Heaters with etched foil designed elements are available where the length or width dimension is less than 305 mm (12"). All other heaters where both the length and the width dimensions exceed 305 mm (12") use the wire-wound element design.

CAUTION AND WARNING!

Fire and elctrical shock may result if products are used improperly or installed or used by non-qualified personnel.

For Complete Details Visit omega.com/ srfr_srfq

> SRFR-3/10, \$26, shown smaller than actual size.

Available for fast delivery!

Round Silicone Rubber Heaters

To the (Specify Model Number)								
Diameter	Total Watta	ge for Watt D	ensity	Without PSA		With PSA		
cm (")	2.5W/in ²	5W/in ²	10W/in ²	Model No.	Price	Model No.	Price	
7.6 (3)	17.5	35	70	SRFR-3/*	\$26	SRFR-3/*-P	\$28	

Comes complete with operator's manual.

* Insert watt density: "2" for 2.5 W/in², "5" for 5 W/in² or "10" for 10 W/in².

† Heaters with pressure sensitive adhesive: max operating temperature is 120°C (250°F).

Ordering Example: SRFR-3/10, 7.6 cm (3") diameter heater with a watt density of 10 W/in² and 70 watts of total power, \$26.

Wrap-Around Tote Tank Heaters

TOTE Series Starts at



- Fits Any Tote Tank from 1m (40") to 1.2 m (48") Square
- Comes in Heights of 0.9 m (36"), 1.1 m (42"), or 1.2 m (48")
- ✓ Two Heating Zones
- ✓ Two Built-In Adjustable **Thermostats**

The OMEGA TOTE™ Series tote tank heaters are flexible wraparound surface heaters offered in different sizes based on height. These heaters provide a quick, easy, non-invasive way to warm your product. They fit nearly every standard tote tank owing to adjustable nylon straps with buckles. There are 3 straps for placing around the tank and 2 for across the top. Units include an adjustable thermostat and a manual reset high-limit thermostat for each of the two zones.



TOTE421-ADJ/120V, \$1659.



MOST POPULAR MODELS HIGHLIGHTED!

To Order (Specify Model Number)				
Model No.	Price	Description		
TOTE361-ADJ/120V	\$1469	Tote heater with thermostat, 120V, 1440 W, 0.9 m (36") height		
TOTE362-ADJ/240V	1469	Tote heater with thermostat, 240V, 2880 W, 0.9 m (36") height		
TOTE421-ADJ/120V	1659	Tote heater with thermostat, 120V, 1440 W, 1.1 m (42") height		
TOTE422-ADJ/240V	1659	Tote heater with thermostat, 240V, 2880 W, 1.1 m (42") height		
TOTE481-ADJ/120V	1694	Tote heater with thermostat, 120V, 1440 W, 1.2 m (48") height		
TOTE482-ADJ/240V	1694	Tote heater with thermostat, 240V, 2880 W, 1.2 m (48") height		
TOTE-COVER	441	Tote insulated top cover		

Tote Heaters come with both adjustable and high-limit thermostats for each of two heat zones. Ordering Example: TOTE361-ADJ/120V, tote heater with thermostat, 120 V, 1440 W, 0.9 m (36") height, **TOTE-COVER**, tote insulated top cover, \$1469 + 441 = **\$1910**.

Gas Cylinder Warmers

GCW Series Starts at





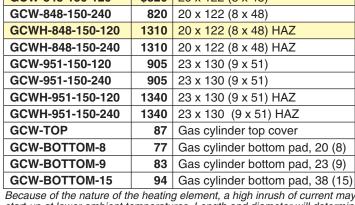
GCW-848-150-120, \$820



✓ Approved for Hazardous	To Order (Specify Model Number)			
Locations (Class I,	Model No.	Price	Description: cm (in)	
Division I, Groups C & D)	GCW-848-150-120	\$820	20 x 122 (8 x 48)	
✓ Built-In Insulation:	GCW-848-150-240	820	20 x 122 (8 x 48)	
Sides: 51 mm (2.0") Thick Top: 13 mm (0.5") Thick	GCWH-848-150-120	1310	20 x 122 (8 x 48) HAZ	
	GCWH-848-150-240	1310	20 x 122 (8 x 48) HAZ	
✓ Self-Regulating Grounded	GCW-951-150-120	905	23 x 130 (9 x 51)	
Heating Element	GCW-951-150-240	905	23 x 130 (9 x 51)	
	GCWH-951-150-120	1340	23 x 130 (9 x 51) HAZ	
OMEGA's GCW Series gas	GCWH-951-150-240	1340	23 x 130 (9 x 51) HAZ	
cylinder warmers create a convection current and increase	GCW-TOP	87	Gas cylinder top cover	
pressure inside the cylinder. This	GCW-BOTTOM-8	77	Gas cylinder bottom pad, 20 (8)	
cost-effective process reduces	GCW-BOTTOM-9	83	Gas cylinder bottom pad, 23 (9)	

Because of the nature of the heating element, a high inrush of current may occur during start-up at lower ambient temperatures. Length and diameter will determine wattage needed. Ordering Example: GCW-848-150-120, gas cylinder warmer, 20 x 122 cm (8 x 48"), \$820.





pressure inside cost-effective pr condensation, allowing more gas to fill the cylinder. Use with gases such as SF₆, propane, nitrogen, oxygen, BCl₃, WF₆, and HF.

Explosion-Resistant Drum Heater

SEPDH Series Starts at



- ✓ Factory Mutual **Hazardous Area Approval**
- Class I, Div 2, Groups B, C, and D; Class 2, Div 2, Groups F and G
- ✓ Inherently Safe
- ✓ Integral Built-In **High-Limit Thermal Cutout** Prevents Temperature Runaway**
- ✓ Up to 2½ Watts Per Square Inch

High-Limit Thermostat Temperature				
T4A	70°C (158°F)			
T3	145°C (293°F)			



MOST POPULAR MODELS HIGHLIGHTED!

To Order (Specify Model Number)			
Model No.	Volts	Price	
55 Gallon			
SEPDH-C-1300-120-*	120	\$1920	
SEPDH-C-1300-240-*	240	1920	
30 Gallon			
SEPDH-C-1000-120-*	120	\$1884	
SEPDH-C-1000-240-*	240	1884	

* Insert "High-Limit Thermostat Temperature" rating from table. The maximum allowable sheath temperature ("T" rating) must be specified if drum heater is to be used in a Division 2 area. "C" specifies heaters with adjustable temperature control assembly and temperature ranges from -4 to 163°C (25 to 325°F).

** Article 501 of the NEC requires that the maximum sheath temperature of the heater shall

not exceed 80 percent of the auto-ignition temperature of the surrounding atmosphere when

heater is continuously energized.

Auto-Ignition Temperature: The minimum temperature required to initiate or cause selfsustained combustion of a solid, liquid or gas independently of the heating or heated element (see NFPA 325M, Fire Hazard Properties of Flammable Liquids, Gases, and Volatile Solids). Ordering Example: SEPDH-C-1300-120-T3, 55 gallon, 120V drum heater with a T3 rating of 156°C (312°F), **\$1920.**

Drum Heaters

FCDH Series

All Models



- ✓ 55 Gallon Wraparound
- ✓ Easy-to-Use Digital **Temperature** Controller with Audible/Visual Alarm
- Low Watt Density
- Silicone-Coated Fiberglass Facing
- ✓ 25 mm (1") Fiberglass Insulation
- ✓ Metal and Poly **Drum Models**

The FCDH Series consists of full-coverage insulated drum heaters that provide a safe and efficient method of temperature and viscosity control. An easy-touse digital temperature controller prevents temperature runaway. These heaters use a patented grounded heating element and are designed for indoor use when it is desirable to insulate the entire surface of the drum.

> FCDH-1600-120, \$1024.



To Order (Specify Model Number)						
Model No.	Price	Description	Туре	Wattage	Voltage	
FCDH-1600-120	\$1024	Drum heater	Metal	1600	120	
FCDH-750-120	1024	Drum heater	Plastic	750	120	
FCDH-1600-240	1024	Drum heater	Metal	1600	240	
FCDH-750-240	1024	Drum heater	Plastic	750	240	
FCDH-TOP	89	Drum top cover	_		_	

All drum heaters are for 55 gallon size and comes with a digital temperature controller. The 120 Vac models include a 3-prong plug, and the 240 Vac models have stripped leads. **FCDH-TOP** is an insulation cover that fits on the top of a drum to help prevent heat loss. Ordering Example: FCDH-1600-120, drum heater for 55 gallon size, 120V, 1600 W, with a digital temperature controller, FCDH-TOP, insulation cover that fits on the top of a drum to help prevent heat loss, \$1024 + 89 = \$1113.

OMEGALUX® Rope Heaters

FGR Series Starts at \$12



- For Complete Details Visit omega.com/fgr
- ✓ Operating Temperature Rating to 482°C (900°F)
- Wraps Around Small Diameter Pipes and Tubes

OMEGALUX® rope heaters apply heat to tubing with diameters as small as 3.2 mm (½"). Featuring a maximum allowable operating temperature of 482°C (900°F), the FGR Series rope heaters can be wrapped around either conductive or non-conductive surfaces. Each end terminates with 610 mm (24") long fiberglass-insulated lead wire.

Specifications

Maximum Allowable Temperature: 482°C (900°F) Suitable for Use on Conductive Surface: Yes Resists Moisture Vapor or Chemicals: No

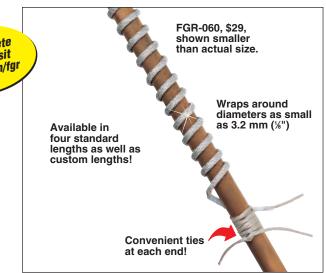
Standard Diameter: 5 mm (%6")

Voltage: 120 Volt AC or DC, 240 V optional

Linear Wattage: 4 Watts/in.

Heater Length: 0.9, 1.8, 2.4 or 3.0 m (3, 6, 8 or 10')

Lead Length: 609 mm (24") **Termination:** Stripped leads



MOST POPULAR MODELS HIGHLIGHTED!

To Order (Specify Model Number)					
Model Number	Description Length	Wattage	Voltage	Price	
FGR-030	0.9 m (3')	125	120	\$12	
FGR-060	1.8 m (6')	250	120	29	
FGR-080	2.4 m (8')	400	120	31	
FGR-100	3.0 m (10')	500	120	43	

240 Vac models and other wattages also available.

Ordering Example: FGR-060, 1.8 m (6') 120 Vac rope heater, \$29.

Heating Cords

HTC Series Starts at

\$26



- Maximum Exposure Temperature 482°C (900°F)
- Wraparound Diameters as Small as 3.2 mm (½")
- Knitted and Braided Fiberglass Construction
- ✓ Power Density: 0.003 W/mm² (1.8 W/in²)
- ✓ Double-Braided Fiberglass Outer Sheath
- Suitable for Electrically Conductive Surfaces
- ✓ 120 Vac
- ✓ Includes High-Temperature Tie-Downs

OMEGA heating cords are designed for use on small-diameter tubes, vessels, or wherever space is limited. They can be wrapped around tubing as small as 3.2 mm (½") diameter. The double-braided fiberglass outer sheath ensures durability for laboratory, production, or maintenance applications.

CAUTION AND WARNING!

Fire and elctrical shock may result if products are used improperly or installed or used by non-qualified personnel.



MOST POPULAR MODEL HIGHLIGHTED!

To Order (Specify Model Number)				
Model No.	Price	Description		
HTC-030	\$26	Heating cord 0.9 m (3'), 64 W, 120V		
HTC-060	30	Heating cord 1.8 m (6'), 125 W, 120V		
HTC-120	38	Heating cord 3.6 m (12'), 260 W, 120V		

Ordering Example: HTC-030, heating cord 0.9 m (3'), 64 W, 120V, \$26.

Medium Temperature Heating Tapes

For Complete Details Visit omega.com/ srt_heaters



SRT Series Starts at



Maximum Exposure Temperature up to 230°C (450°F)

MOST POPULAR MODELS LISTED!

To Order (Specify Model Number)								
Watts	W/in²	Volts	Size cm/m ("/')	Model No.	Price			
52	4.3	120	1/0.6 (½ x 2)	SRT051-020	\$49			
104	4.3	120	1/1.2 (½ x 4)	SRT051-040	55			
156	4.3	120	1/1.8 (½ x 6)	SRT051-060	66			

Comes complete with instruction sheet.

To order heaters with power leads exiting the same end of the tape, add suffix "-LSE" to model number. Call Sales for pricing. To order 240V version change "-1" in model number to "-2". All 240V versions are supplied without plugs. Call for sales prices.

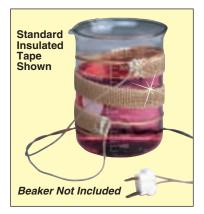
Ordering Example: SRT051-060, 120V, 156 W, heating tape, \$66.

High Temperature Heating Tapes

FGS, FGH, FWH Series Starts at



Maximum **Exposure Temperature** up to 480°C (900°F)



MOST POPULAR MODELS LISTED!

For Complete Details Visit

omega.com/fgs

To Order (Specify Model Number)								
Watts	W/in²	Volts	Size	Model No.	Price			
46	8.6	120	% x 12"	FGS0031-010	\$22			
836	8.6	120	1" x 8'	FGS101-080	66			
104	8.6	120	½" x 2'	FGH051-020	27			
313	8.6	120	½" x 6'	FGH051-060	38			
522	8.6	120	½" x 10'	FGH051-100	55			
627	8.6	120	1" x 6'	FGH101-060	88			
836	8.6	120	1" x 8'	FGH101-080	104			

Ordering Example: FGH101-060, heavy insulated, 120V, 627 W, heating tape, \$88.

Ultra-High Temperature Heating Tapes

STH, SST, SWH Series Starts at



Maximum **Exposure Temperature** up to 760°C (1400°F)



MOST POPULAR MODELS LISTED!

To Order (Specify Model Number)									
				Heavy Insulated	Гареѕ	Standard Insulated	Standard Insulated Tapes		
Watt	W/in²	Volts	Size	Model Number	Price	Model Number	Price		
156	13	120	½" x 2'	STH051-020	\$38	SST051-020	\$27		
313	13	120	½" x 4'	STH051-040	44	SST051-040	33		
470	13	120	½" x 6'	STH051-060	60	SST051-060	44		
627	13	120	½" x 8'	STH051-080	71	SST051-080	55		
940	13	240	½ x 12'	STH052-120*	104	SST052-120*	77		
940	13	240	1" x 6'	STH102-060*	82	SST102-060*	49		
1256	13	240	1" x 8'	STH102-080*	88	SST102-080*	66		

For Complete Details Visit omega.com/sth

Comes complete with instruction sheet.
* Does not come with plug.

Ordering Example: STH051-020, heavy insulated, 120V, 156 W, heating tape, \$38.

High Watt Density Cartridge Heaters With Incoloy® Sheathing ¼" (1cm) Diameter

CIR Series Starts at

- Reliable Premium Quality
- Rugged, Shock and Vibration Resistant
- ✓ U.L. Component Recognized
- CSA Certified
- ✓ Lengths from 1¼ to 6" (3 to 15 cm)
- ✓ 120 and 240 Vac Models

1/4" Nominal Diameter CIR Series

(Actual Dia. and Tolerance: 0.248" ± 0.055") 0.000"

OMEGALUX® CIR series high watt density cartridge heaters are manufactured to the highest industry standards using only premium materials. They have been designed to last longer and outperform any other brand cartridge heater in both laboratory and industrial applications. Their heavy duty construction provides high dielectric strength as well as shock and vibration resistance.



MOST POPULAR MODELS HIGHLIGHTED!

To Order	(Specif	y Model	Number)

Shth. .gth.	Watts	W/in²	Model No.	Price		Shth. Lgth.	Watts	W/in²	Model No.	Price		Shth. Lgth.	Watts		Model No.	Price	Wt.
1/4	75	128	CIR-1013/120	\$51	0.02	2	250	214	CIR-1024/*	\$56	0.03	4	150	53	CIR-1044/240	\$69	0.04
11/4	100	171	CIR-1012/120	51	0.02	2	300	256	CIR-10201/240	54	0.03	4	200	73	CIR-1042/*	69	0.04
1¼	150	256	CIR-1014/120	51	0.02	2½	175	112	CIR-1025/*	59	0.03	4	250	92	CIR-1043/240	69	0.04
1½	50	64	CIR-1016/120	53	0.02	2½	250	160	CIR-1029/*	59	0.03	4½	200	61	CIR-1046/120	70	0.05
1½	100	128	CIR-1017/120	53	0.02	3	100	51	CIR-1031/*	63	0.04	4½	300	93	CIR-1045/240	70	0.05
1½	175	220	CIR-1019/120	53	0.02	3	250	129	CIR-10301/240	63	0.04	5	200	57	CIR-1052/*	73	0.05
1½	200	256	CIR-10151/*	53	0.02	3	300	153	CIR-1032/*	63	0.04	5	300	85	CIR-1053/*	73	0.05

Designate voltage, insert 120 for 120 Vac or 240 for 240 Vac. Those catalog numbers containing 120 or 240 are only available in that voltage. t Consult Sales.

Note: 1/4" diameter CIR series cartridge heaters use 22 AWG stranded lead wire.

Ordering Example: CIR-1014/120, 1/4" diameter, high watt density cartridge heater, \$51.

Ceramic-Insulated Strip Heaters

HCS Series Starts at



Applications

- Dies
- Molds
- ✓ Plastic Forming and Sealing
- Tank and Kettle Heating

(For specific applications, correctly rated elements should be used to prevent overheating and to ensure long life)

The HCS Series stainless steel strip heaters provide clean, dependable heat with sheath temperatures up to 649°C (1200°F) and watt densities up to 40 W per square inch. Because of the seamless stainless steel sheath, these ceramic-insulated strip heaters are dimensionally stable in milled slots.



MOST POPULAR MODELS LISTED!

CAUTION AND WARNING!

Fire and electrical shock may result if products are used improperly or

installed or used by non-qualified personnel. See inside back cover for

To Order (Specify Model Number)							
				Dimensions: cm (in)			
Model No.	Price	Description	Watts	Α	В	C	
HCS-055-120V	\$38	Strip heater	150	13 (5)	10 (4)	3 (1)	
HCS-080-120V	40	Strip heater	250	20 (8)	18 (7)	5 (2)	
HCS-120-120V	44	Strip heater	500	30 (12)	28 (11)	18 (7)	
HCS-180-120V	50	Strip heater	750	46 (18)	43 (17)	30 (12)	
HCS-181-120V	50	Strip heater	1250	46 (18)	43 (17)	30 (12)	
HCS-357-240V	74	Strip heater	2500	35 (89)	86 (34)	76 (30)	

Comes complete with operator's manual.

Ordering Example: HCS-055-120V, strip heater, 150 W, \$38.



for your daily dose of DILBERT.







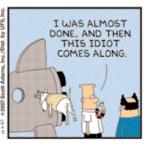


































Dilbert © United Feature Syndicate

U.S.A. and Canada

Screw Plug Immersion Heaters





✓ ½, ¾, and 1¼ NPT Screw Plugs

316 SS Sheath

✓ 400 to 1000 W

120 and 240 V, 1-Phase

✓ Single Thread Pipe Construction

Specifications

Power: 120 and 240 V, 1-phase

Watt Density:

%" Diameter: 37 W/in² %" Diameter: 38 W/in² 1¼" Diameter: 24 W/in²

Termination:

%, %" **Diameter:** 12" fiberglass leads rated to 250°C (482°F), epoxy potting rated to 130°C (266°F)

rated to 130°C (266°F)
1¼" **Diameter:** 8-32 screw and nut terminals

Sheath: 316 SS

Screw Plug and Threads: 316 SS



EMH-061-120V, \$70, shown smaller than actual size.

All mo 1½" di come with b EMH-\$141.

All models over 1½" diameter come standard with box. EMH-110-240V, \$141.

MOST POPULAR MODELS HIGHLIGHTED!

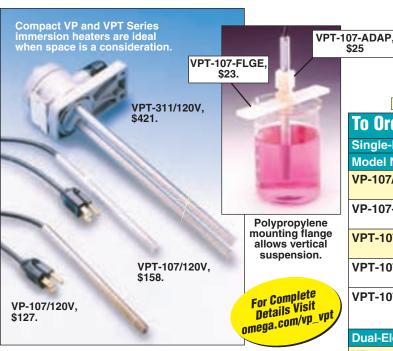
To Order (Specify Model Number)								
Model No.	Price	Description	Watts*	Dimensions (in)**				
EMH-060-120V	\$56	%" diameter, ½ NPT	400	6				
EMH-060-240V	56	%" diameter , ½ NPT	400	6				
EMH-061-120V	70	¾" diameter, ¾ NPT	500	6				
EMH-061-240V	70	¾" diameter, ¾ NPT	500	6				
EMH-110-120V	141	11/4" diameter, 11/4 NPT	1000	11				
EMH-110-240V	141	11/4" diameter, 11/4 NPT	1000	11				

^{*} Wattages are based on a unit operating immersed in water.

Comes complete with operator's manual.

Ordering Example: EMH-060-120V, 5/8" diameter, 1/2 NPT, \$56.

Self-Regulating Immersion Heaters



- Self-Regulating, Fully Grounded
- Stainless Steel or PFA-Covered Stainless Steel Sheaths
- Solid State Heating Element, Temperatures Up to 260°C (500°F)

VP and VPT Series
Starts at



MOST POPULAR MODELS HIGHLIGHTED!

To Order (Specify Model Number)							
Single-Element Heater							
Model No.	Description	Price					
VP-107/*	100 W stainless steel sheath immersion heater	\$127					
VP-107-ADAP 1/2 NPT PVDF screw plug adaptor for VP-107/* immersion heater							
VPT-107/*	VPT-107/* 100 W stainless steel sheath immersion heater with PFA covering 158						
VPT-107-ADAP	½ NPT PVDF screw plug adaptor for VPT-107/* immersion heater	25					
VPT-107-FLGE	Polypropylene mounting flange (used with VP-107-ADAP or VPT-107-ADAP)	23					
Dual-Element C	ver-the-Side Small Tank Heater						
VP-311/*	300 W stainless steel sheath immersion heater	\$397					
VPT-311/*	300 W stainless steel sheath immersion heater with PFA covering	421					

* Designate voltage (i.e., insert "120V" for 120 Vac or "240V" for 240 Vac). Ordering Example: VPT-107/120V, 120 Vac, 100 W, PFA-covered immersion heater. \$158.

^{**} Dimensions from bottom of hex nut.

Maximum Flow Air Heaters

AHF Series Starts at \$102



- ✓ 4" OD Mounting Flange
- ✓ Air Flows Up To 200 CFM*
- Exit Air Temperatures up to 315°C (600°F)
- Post Terminals Junction Box

Calculate the flow rate, temperature rise, or power requirement as follows:

Watts = $SCFM \times \Delta T / 3$

SCFM = Standard Cubic Feet

Per Minute

 ΔT = Temperature Rise in

Degrees F from the Inlet to the Outlet

Specifications

Maximum Amperage: 15 Cross Sectional Flow Area:

3.5 square inches

Threaded Terminals: 6-32



Nickel-Chrome Heating Element Insulated with Ceramic Beads



MOST POPULAR MODELS HIGHLIGHTED!

To Orde	To Order (Specify Model Number)								
Model Number	Volts	Watts	Heated Length mm (in)	Watts/ Inch**	Maximum CFM	Length mm (in)		Weight kg (lb)	
120 Vac Mo	120 Vac Models								
AHF-06120	120	600	102 (4)	150	200	152 (6)	\$102	0.23 (0.5)	
AHF-10120	120	1000	203 (8)	125	200	254 (10)	133	0.57 (1.25)	
120/240 Vad	Mode	ls*							
AHF-12240	120 240	375 1500	254 (10) 254 (10)	38 150	200 200	305 (12)	\$150	0.68 (1.5)	
AHF-14240	120 240	500 2000	305 (12) 305 (12)	42 166	200 200	356 (14)	166	0.79 (1.75)	

^{*} These air heaters can be operated on either 120 or 240V. Specifications are given for operation to both 120 and 240V.

Low Flow Air Process and Liquid Circulation Heaters

Starts at \$250





AHPF-061, \$250, shown smaller than actual size.

To Ordor (Coosific



316	Stain	less	Steel
Con	struc	tion	

- Air/Gas Flow up to 15 CFM
- ✓ Air/Gas Outlet Temperatures up to 430°C (800°F)
- ✓ Pressures up to 100 psi*
- ✓ 50 Watts/Square Inch**

Specifications

Cross Sectional Area: 0.152 sq. inches Pressure Rating: Up to 100 psig

Wattage Tolerance: +5, -10% or better at the voltage specified

Outside Diameter: 32 mm (1½")

Inlet: Male % NPT Outlet: ½ NPT

IU UIUG	iu uluei (Specily Model Number)								
Model Number	Volts	Watts	Heated Length mm (in)	Watts/ Inch*	Max CFM	Length mm (in)	Price	Weight kg (lb)	
120 Vac Mo	dels								
AHPF-061	120	400	102 (4)	91	15	152 (6)	\$250	0.45 (1.0)	
AHPF-081	120	600	152 (6)	94	15	203 (8)	288	0.54 (1.18)	
AHPF-101	120	1000	203 (8)	120	15	254 (10)	303	0.62 (1.37)	
AHPF-121	120	1200	254 (10)	115	15	305 (12)	324	0.70 (1.55)	
120/240 Vo	It Models	S**							
AHPF-062	120 240	100 400	102 (4) 102 (4)	23 91	15 15	152 (6)	\$250	0.45 (1.0)	
AHPF-082	120 240	150 600	152 (6) 152 (6)	23 94	15 15	203 (8)	288	0.54 (1.18)	
AHPF-102	120 240	250 1000	203 (8) 203 (8)	30 120	15 15	254 (10)	303	0.62 (1.37)	
ΔHPF-122	120	300	254 (10)	29	15	305 (12)	324	0.70 (1.55)	

* Indicates watts per inch of heated length. Use the table above to determine minimum required flow rates. ** These air heaters can be operated on either 120 or 240V. Specifications are shown for either 120 or 240V operation.

Ordering Example: AHPF-061, 120V, 400 W low flow air process and liquid circulation heater, \$250.

254 (10)

Model No. Price Description

AHPF-NPT12 \$88 Thermocouple T fitting

1200

240

^{**} Indicates Watts per inch of heated length. Use the table above to determine minimum required flow rates. The watts per inch of heated length can be changed by reducing the operating voltage or by ordering a custom made heater. Stainless steel construction also available. Consult Engineering. Ordering Example: AHF-06120, air heater, 120 Vac, 600 W, \$102.

Fan Heater

CR27 Series Starts at



- Compact Fan Heater in PTC Technology
- Heating Power Adjusts to Ambient Temperature
- Integrated Adjustable Thermostat and Control Light
- **✓** DIN Rail Mountable

An easy DIN rail mountable design makes the CR27 Series fan heater an ideal accessory for any enclosure. The CR27 maintains minimum operating temperatures in enclosures and helps to prevent failure of electronic components caused by condensation and corrosion.



To Order (Specify Model Number)						
Model No.	Price	Description				
CR2700900	\$155	Fan heater, 550 W, 120 Vac, with adjustable thermostat 32 to 140°F				
CR2701900	174	Fan heater, 650 W, 120 Vac, with adjustable thermostat 32 to 140°F				

Comes complete with operator's manual.

Ordering Examples: CR2700900, fan heater, 550 W, 120 Vac, with adjustable thermostat

CR2701901, fan heater, 650 W, 120V, with adjustable thermostat, 0 to 60°C, \$174.

Compact Fan Heater

HVL Series Starts at





- **Fan Heater** Built-In Overheat Protection
- ✓ DIN Rail Mountable
- Maintains Minimum **Operating Temperatures** in Enclosures
- ✓ Helps to Prevent Failure of Electronic Components Caused by Condensation and Corrosion

This compact heater is designed for many different applications including electrical and electronic enclosures, display panels, access and parking control systems and personnel booths.



MOST POPULAR MODELS HIGHLIGHTED!

To Order (Specify Model Number)			
Model No. Price Description			
\$123	Fan heater, 100 W, 120 Vac		
127	Fan heater, 150 W, 120 Vac		
136	Fan heater, 200 W, 120 Vac		
139	Fan heater, 300 W, 120 Vac		
HVL15900 145 Fan heater, 400 W, 120 Vac			
	Price \$123 127 136 139		

Comes complete with operator's manual, mounting kit and axial fan. Ordering Example: HVL02900, fan heater, 100 W, 120 Vac, \$123.

OMEGA.COM®

New Horizons® in Wireless Communications





#25 TRUCK#3



For Complete Details Visit omega.com/rfid

NAME ADDRESS OF OWNER, WHEN THE PARTY OF THE

Model: OM-84-TMP

13.55 MHz

OM-84 Matchbook™ Series Starts at

5-Pack













- ✓ Each Package of Tags **Comes with a Certificate** Stating NIST-Traceability (No Points)
- ✓ Ideal Solution for Cold **Chain Monitoring**
- ✓ Factory Replaceable Batteries
- Accurate Up to ±0.5°C (1°F)
- ✓ Wireless RFID Technology
- ✓ Store Up to 10,000 Individual Readings
- ✓ Save Stored Data From Each Logger Into Your Computer with **Included Software**
- ✓ Low Power Operation and Sleep Mode
- ✓ Pre-Packaged for **Moderate High Volume Discounts**



OMEGA's miniature RFID data loggers feature a unique write-on-window built into every unit. This provides an easy way to

add your own tracking or shipment number to each unit for easy identification after retrieval from deployment! Shown actual size.



For a video of this product visit omega.com/video.

MOST POPULAR MODELS HIGHLIGHTED!

To Order (Specify Model Number)			
Model No.	Price	Description	
OM-84-TMP-5	\$90	Water resistant temperature logger, package of 5	
OM-84-TMP-20	342	Water resistant temperature logger, package of 20	
OM-84-TMP-50	810	Water resistant temperature logger, package of 50	
OM-84-TMP-100	1530	Water resistant temperature logger, package of 100	
OM-84-TMP-KIT*	297	Water resistant temperature logging kit: 5 loggers, benchtop reader, software, cable, case, marker	
OM-80-RD1	195	Benchtop reader with software and USB cable	
SC-HH500	12	Reader carrying case	

^{*} Comes complete with data loggers, benchtop reader unit, USB cable, software program on CD-ROM, permanent marker, easy operating instructions and batteries.

Ordering Examples: OM-84-TMP-5, temperature data logger (5-pack), OM-80-RD1, benchtop USB reader with cable and software, and **SC-HH500** reader carrying case, \$90 + 195 + 12 = \$297. OM-84-TMP-KIT, temperature logging kit, \$297.



Wireless Thermocouple Temperature Transmitter Part of the NOMAD® Family

OM-CP-RFTC4000A **\$249**









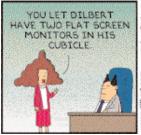




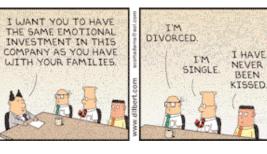
om-cp-rfph101a

OM-CP-RFPH101A Starts at \$449









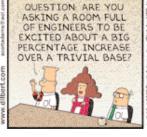


THE COMPANY

HAS DECIDED TO

EXPLORE STRATEGIC

ALTERNATIVES







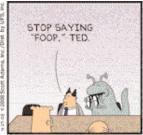












Dilbert © United Feature Syndicate

Wireless Relative Humidity/Temperature

Transmitters

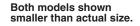
UWRH-2 Starts at 165



Measure Both Relative Humidity and Temperature

- ✓ Transmit up to 120 m (400')
- Available with NEMA 4X (IP65) Weather Resistant Enclosure
- Free Software Converts Your PC Into a Multi-Channel Chart Recorder or Data Logger
- Transmits Relative Humidity, Ambient Temperature, Signal Strength and Battery Status
- ✓ Works with All UWTC Series Wireless Receivers and Transceivers







AVAILABLE FOR FAST DELIVERY!

To Order (Specify Model Number)			
Model No. Price Description			
UWRH-2 \$165 RH/te		RH/temperature transmitter, compact enclosure	
UWRH-2-NEMA	235	RH/temperature transmitter, NEMA enclosure	

Note: USB programming cable and FREE measurement and data logging software are both included with compatible UW Series wireless receivers and transceivers.

Comes complete with 3.6V lithium battery assembly, mounting bracket and operator's manual.

Ordering Examples: UWRH-2-NEMA, wireless relative humidity/temperature transmitter,

UWTC-REC1, 48-channel receiver and UWTC-BATT-C, spare battery, \$235 + 225 + 25 = \$485.

UWRH-2, wireless RH/temperature transmitter, UWTC-REC1, 48-channel receiver and

UWTC-BATT, spare battery, \$165 + 225 + 15 = \$405.

Temperature-to-Wireless Connector/Converter System

Thermocouple input.

Thermocouple input.

Thermocouple input.

For a video of this product visit omega.com/video.

For a video of this product visit omega.com/video.

Transmit Temperature

\$125

WARRANTY C EMICS

Transmit Temperature Data Wirelessly to Your Computer or the Internet

✓ Transmit up to 60 m (200') Standard Distance (UWTC-1) or up to 120 m (400') Extended Distance (UWTC-2) Plug Your Probe Into a Smart Connector to Make a Smart Sensor!

- Thermocouple Models Have Built-In CJC and Linearzation, User Configurable for 9 Calibrations, Accept Both Standard and Miniature Connectors
- RTD Models are Configurable for 0.00385 and 0.00392 Curve Pt100 Sensors, Accepts TA4F Connector
- Each Wireless Connector Transmits Data in Real Time
- ✓ Low Power Operation, Sleep Mode for Long Battery Life
- ✓ Compatible with UWTC-REC Wireless Receivers-Create 32- or 48-Channel Wireless Systems
- Included Software Converts a PC into a Multi-Channel Chart Recorder or Data Logger



Temperature-to-Wireless Transmitters

For Thermocouples/RTDs

UWTC-2-NEMA Starts at



For Complete Details Visit omega.com/ uwtc-2-nema



- ✓ Transmit Temperature **Data Wirelessly to Your** Computer or the Internet
- ✓ Transmit up to 120 m (400')
- Weather Resistant NEMA 4X (IP65) Enclosure
- Software Selectable for 9 Thermocouple Calibrations or 385/392 Curve Pt100 RTDs
- ✓ Transmit Data in Real Time
- Compatible with UWTC-REC Wireless Receivers

Included Software Converts a PC into a **Multi-Channel Chart** Recorder or Data Logger

> Works with all OMEGA UWTC Series wireless receivers, visit omega.com/uwtc



AVAILABLE FOR FAST DELIVERY!

To Order (Specify Model Number)		
Model No. Price Description		
UWTC-2-NEMA	\$165	Weather resistant thermocouple-to-wireless transmitter
UWRTD-2-NEMA	175	Weather resistant RTD to wireless transmitter
UWTC-BATT-C	25	Replacement 3.6V battery assembly (one included)

Note: USB programming cable and FREE measurement and data logging software are both included with compatible UW Series wireless receivers and transceivers.

Comes complete with 3.6V lithium battery assembly, mounting bracket and operator's manual. Ordering Example: UWTC-2-NEMA, thermocouple-to-wireless transmitter, \$165.

.1 YEAR

USA WARRANTY

Wireless RTD Transmitter

UWRTD-S-2 Starts at

- ✓ Transmit Temperature Data Wirelessly to Your Computer or the Internet
- Water Tight White Polypropylene Housing with Industry Standard M12 Connector
- Compatible with 3 and 4-Wire Pt100 RTD Probes

✓ Transmit Up to 120 m (400')

MADE IN

Includes Software to Convert a PC into a Multichannel Chart Recorder or Data Logger

Each Unit Transmits Sensor and Ambient Temperatures, Signal Strength and Battery **Status in Real Time**

✓ Low Power Operation, Sleep Mode for Long Battery Life

Compatible with UWTC-REC Wireless Receivers

AVAILABLE FOR FAST DELIVERY!

To Order (Specify Model Number) Price Model No. **Description UWRTD-S-2** \$275.00 Wireless RTD transmitter, polypropylene housing, M12 connection and sensor cable MN1500-L 6.90 Two replacement "AA" 1.5V lithium batteries for UWRTD-S-2 (two included) **UWTC-CABLE** 5.00 Programming cable (included with UWTC-REC units)

Note: USB programming cable and FREE measurement and data logging software are both included with compatible UW Series wireless receivers and transceivers.

Comes complete with two 1.5V lithium batteries, mounting bracket, operator's manual and 2 m (6.5') M12 sensor cable.

Ordering Example: UWRTD-S-2, wireless RTD transmitter, with UWTC-REC1, 48 channel wireless receiver (page 93), \$275 + 225 = \$500.

For Complete Details Visit omega.com/ uwrtd-s-2 For Sanitary, Washdown, Marine **Applications FCC/Industry** Canada Approved UWRTD-S-2, \$275,

shown smaller than actual size.

Works with all OMEGA UWTC Series wireless receivers, visit omega.com/uwtc

Non-Contact Infrared Temperature Sensor With Wireless Transmitter **For Complete Details Visit** omega.com/ UWIR-2-NEMA, \$285, uwir-2 **UWIR-2-NEMA** shown smaller than FCC/Industry actual size. Canada **Approved** IR sensor MADE IN head. 1 YEAR Weather Proof/Wall **Mounted** ✓ -18 to 538°C (0 to 1000°F) Measurement Range Adjustable Emissivity from 0.10 to 1.0

✓ Free Software Converts

Your PC Into a Multi-**Channel Chart Recorder** or Data Logger

Low Power Operation and Sleep Mode For Long **Battery Life**

✓ Weather Resistant NEMA 4X (IP65) Enclosure

Wireless Process Transmitter For Sensors with Voltage or Current Output

UWPC-2-NEMA



- Convert Process Signal to Wireless—Up to 120 m (400')
- Accepts 0 to 1V, 0 to 5V, 0 to 10V and 4 to 20 mA Signals
- ✓ Industrial NEMA 4X (IP65) Enclosure



- ✓ Free Software for Monitoring, Recording, and Data Logging Included
- Low Power Operation/ Sleep Mode for Long **Battery Life**
- ✓ UWTC Receivers Work with Up to 48 Wireless **Transmitters**



6:1 spot size ratio

Monitoring

temperature of

heating coil on an induction welder.

AVAILABLE FOR FAST DELIVERY!

	PX409 pressure transducer, starts at \$475, sold	#
	separately. Visit	
	omega.com/pressure for details.	
-	PSU-93, \$40, power supply	
ø	sold separately, visit omega.com/power-supplies	(

To Order (Specify Model Number)			
Model No. Price Description			
UWPC-2-NEMA	JWPC-2-NEMA \$265 Wireless process input transmitter		
UWTC-BATT-C 25 Replacement 3.6V battery assembly (one included)			

Note: Because of transmission frequency regulations, these products may only be used in the United States, Canada and Europe (please note CE compliance of the specific model for use in Europe). Comes complete with 3.6V lithium battery assembly, mounting bracket and operator's manual. Ordering Example: UWPC-2-NEMA, wireless process input transmitter and UWTC-REC1, USB powered 48-channel transmitter receiver (page 93), \$265 + 225 = \$490.



Wireless pH/Temperature Transmitter

With Automatic Temperature

Compensation

UWPH-2-NEMA



- ✓ 0 to 14 pH and 0 to 100°C (32 to 212°F) Ranges
- ✓ Transmit Data in Real-Time, up to 120 m (400')

For Complete Details Visit omega.com/ uwph-2-nema

- Free Software Converts Your PC into a Multi-**Channel Chart Recorder** or Data Logger
- Low Power Operation and Sleep Mode
- ✓ Works with UWTC-REC Receivers for a Complete PHE-1311, Wireless System



gel-filled pH electrode, \$57.

AVAILABLE FOR FAST DELIVERY!

To Order (Specify Model Number) Model No. **Price Description**

UWPH-2-NEMA | \$265 | Wireless pH/temperature transmitter

Note: USB programming cable and FREE measurement and data logging software are both included with compatible UW Series wireless receivers and transceivers.

Comes complete with 3.6V lithium battery assembly, TA3F RTD mating connector, and operator's manual. Ordering Example: UWPH-2-NEMA, wireless pH/temperature transmitter, UWTC-REC1, USB powered 48-channel transmitter receiver, PHE-1311, gel-filled pH electrode and PRTF-10-2-100-1/8-6-E-TA3F, Pt100 RTD probe, \$265 + 225 + 57 + 58 = \$605.

PRTF-10-2-100-1/8-6-E-TA3F, RTD probe \$58.

High-Performance Infrared Thermometer With Patented Circle/Dot Laser Sighting

and Wireless USB Interface

OS-DT8855W

Data Logger with Built-In Memory Storing up to 20 Readings

- Wireless USB Interface (RF 915 MHz for USA, Canada and Mexico)
- Wireless Transmission Distance 15 m (49.2')

The high performance, handheld infrared thermometer is a non-contact temperature measurement instrument that features a laser circle/dot sight.



PATENTED

AVAILABLE FOR FAST DELIVERY!

To Order (Specify Model Number) **Model No Price Description** OS-DT8855W \$279 Handheld infrared thermometer 30:1 field of view

Comes complete with hard carrying case, mini-tripod, AC power supply, 9V battery, one Type K thermocouple, USB wireless data receiver, PC software, probe lead adaptors, and operator's manual.

Ordering Example: OS-DT8855W, handheld infrared thermometer with patented laser circle sighting, backlit LCD, 30:1 field of view, \$279. OCW-3, OMEGACARE™ extends standard 1-year warranty to a total of 4 years (\$69), \$279 + 69 = \$348.



Wireless Thermocouple Probe/ Transmitter Assemblies

UWTC-NB9 Series Starts at



- Transmit Temperature **Data Wirelessly to Your** Computer or the Internet
- Complete Industrial Assembly
- ✓ Transmit up to 120 m (400')
- ✓ Included Software Converts a PC into a **Multi-Channel Chart** Recorder or Data Logger
- **✓** Each Wireless Connector Transmits Sensor Temperature, Ambient Temperature, Signal Strength and Battery Status in Real Time

Low Power Operation, Sleep Mode for Long **Battery Life**

Compatible with **UWTC-REC Wireless** Receivers

The OMEGA® wireless thermocouple and RTD industrial probe assemblies feature a complete, ready to install, pre-wired sensor and wireless transmitter package. Built into the NB9 glass reinforced Nylon head is a wireless transmitter that can transmit temperature readings back to a host receiver up to 120 m (400') away. The probes transmit the measured temperature, along with the head ambient temperature, RF signal strength and battery condition to a remote host, such as the UWTC-REC Series. You can program the UWTC-NB9 to transmit your data at rates from every two seconds (30/min) to every 2 minutes.



Details Visit omega.com/ uwtc-nb9

WIRELESS/DAS

Wireless RTD Probe/ **Transmitter Assembly** For Use in Sanitary Applications

UWRTD-NB9W Series Starts at



- ✓ Transmit Temperature **Data Wirelessly to Your** Computer or the Internet
- Complete Industrial Assembly—Includes **Probe, Transmitter** Housing/Head, Integral Wireless Transmitter and Long Life Battery
- Stainless Steel **Construction with White** Polypropylene Transmitter Housing

Up To 48 Channels! For Complete **Details Visit**

omega.com/ uwrtd-nb9w

- Available with 3-A **Approved Thermowells** for Clean-in-Place (CIP) **Applications**
- ✓ Transmit up to 120 m (400')
- ✓ Included Software Converts a PC into a **Multi-Channel Chart** Recorder or Data Logger
- ✓ Each Wireless Connector **Transmits Sensor** Temperature, Ambient Temperature, Signal Strength and Battery Status in Real Time
- Low Power Operation, Sleep Mode for Long **Battery Life**



FCC/Industry Canada

Compatible with **UWTC-REC Wireless** Receivers, Wi Series Meter/Controller/Scanner and DIN Rail Receivers-Create 32- or 48-Channel Wireless Systems





Wireless Temperature and

OMWT-TEMPRH \$200

Humidity Transmitter







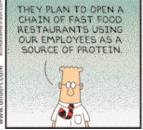






















Wireless Voltage Transmitter

OMWT-AIN10V \$156



















Dilbert © United Feature Syndicate

Long Range Wireless Repeater/Receiver System

For UW Series Transmitters

UWTC-RPT1 Starts at



PATENT PENDING



UWTC-1 wireless thermocouple connector. \$125, see page 85.

- ✓ Receive Data from Up to 48 Wireless Sensors and Re-transmits the Data to a USB Based Receiver Up to 5 Miles (8 km) Away
- Compatible with All **OMEGA UW Series** Wireless Connectors. Transmitters and Probe **Assemblies**
- ✓ Available in 915 MHz for **USA Canada or 868 MHz** for Europe

For Complete Details Visit omega.com/ uwtc-rpt1

Long Range Wireless up to 8 km (5 mi)



Available in Rugged, Splashproof, NEMA (IP65) Housing



UWTC-RPT1-915, \$325, wireless long range

> Standard Range Wireless up to 120 m (400

UWTC-REC1-915. \$245, wireless USB based receiver.

Wireless DIN Rail Receiver With 4 Analog Outputs and Alarms

Interfaces Directly with PLCs and Multi-Channel Data Loggers to Form a Complete Wireless Measurement and Control System!

UWTC-REC4



- ✓ Works with Up to 48 Wireless Transmitters
- ✓ Four 0 to 5 Vdc, 0 to 10 Vdc or 4 to 20 mA **Analog Outputs**
- ✓ Interface Directly to **PLCs, Chart Recorders** and Data Loggers
- Standard DIN Rail **Enclosure**
- Built-in Programmable Alarms for Each Channel

- Field Programmable via USB
- Included Software Turns a PC Into a Multi-Channel Meter, Chart Recorder or Data Logger

Works with:

- UWTC-Thermocouple
- UWRTD-RTD
- UWRH–Humidity
- UWIR-Infrared Temperature
- UWPH-pH
- UWPC-Process Voltage/ **Current Wireless Transmitters**



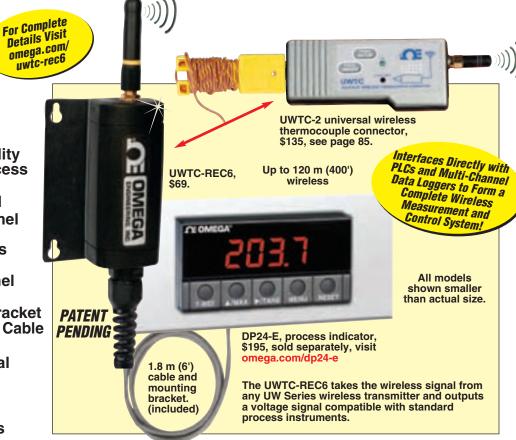
UWTC-REC4, \$275, shown smaller than actual size.

Universal Wireless Transceiver Module

Model UWTC-REC6



- Add Wireless Capability to Any Standard Process Input Instrument
- Analog Output Signal
- Easily Connect to Panel Meters, Controllers, PLCs, Chart Recorders and Data Loggers
- Simple, Single Channel Operation
- ✓ Includes Mounting Bracket and 1.8 m (6¹) Integral Cable
- Powered From Host Instrument or External Power Supply
- Compatible with All OMEGA UW Series Wireless Transmitters



Wireless Receiver For Web-Based Monitoring

\$235

- Connects Directly to Ethernet and Internet
- ✓ Web Server
- Works with UWTC, UWRTD, UWRH, UWIR, and UWXL Series Wireless Connectors or Probe Assemblies
- Alarms by E-mail or Text Message
- No Special Software Required



To Order (Specify Model Number)

Model No.	Price	Description
UWTC-REC3	\$235	32-channel receiver with ethernet
OPC-SERVER-SOFTWARE	295	License for OPC server software

Comes complete with AC adaptor, USB programming cable for transmitter, measurement/data logging software, and operator's manual.

Ordering Example: UWTC-REC3, 32-channel receiver with **UWTC-1**, thermocouple to wireless transmitter (page 85) \$235 + 125 = **\$360**.

UWTC-REC3, \$235, shown smaller than actual size.

For Complete

Details Visit omega.com/ uwtc-rec1_2

Wireless Connector/Transmitter Receivers Monitor up to 48 Temperature, pH, Process

UWTC-REC1-NEMA,

or Humidity Signals

UWTC-REC Series Starts at



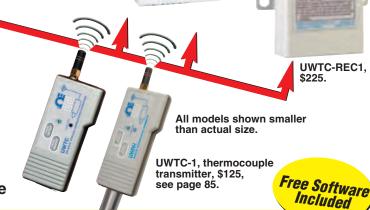
Receive Signals from UWTC, UWRTD, UWRH, **UWPH** and **UWPC** Transmitters

Analog Output Available

USB Interface for Fast Installation— Cable Included!

- Digital Display Available
- ✓ Weather Resistant NEMA **Enclosure Available**
- TC Central Software Included— **Converts Your PC into a Chart** Recorder or Data Logger

Display and Log Data, Ambient, Signal Strength and Battery Status in Real Time



UWTC-REC2-D,

\$265.

Combine One of These Wireless Receivers with Multiple Wireless Connectors or Wireless Probe Assemblies to Form a Complete Wireless Measurement System!

TC Central Software

Display, Log and Chart Data from up to 48 Wireless Instruments

Easy Setup and Operation

- ✓ High/Low Alarms
- ✓ Programmable **Engineering Units**
- ✓ Transmission, Signal Strength and Battery Power Indicators
- Data Export to CSV File, Chart Export to Clipboard
- Included with UW and MWTC Wireless Instruments

The new OMEGA® wireless connector/transmitter receivers are compact devices that receive the transmitted signals from UWTC Series transmitters, and display/log/graph the data on your PC. TC Central software, included with each unit, displays the measured and ambient temperatures, along with RF signal strength and battery condition. The TC central software can turn your PC into a recorder or data logger so readings can be saved and later printed UWTC-REC2 units are also available or exported to a spreadsheet file.



UWTC-REC2 models are available with 4 to 20 mA, 0 to 5 Vdc, 0 to 10 Vdc or Type K thermocouple output. Mating connector and cable included.

The UWTC-REC1 is a 48-channel receiver with USB connection; the UWTC-REC-2 adds an analog output that can be used to retransmit a 0 to 5 Vdc, 0 to 10 Vdc, type K thermocouple or 4 to 20 mA signal to a remote meter, controller, PLC or data acquisition instrument. Both are available with an optional NEMA rated enclosure; with an optional digital display.

Data Logging

Charting

UWTC-REC1 transmitter/receivers are compatible with all connector/ transmitters, including:

- UWTC thermocouple connectors/transmitters
- UWRTD RTD connectors/ transmitters
- UWRH relative humidity transmitter
- UWPH pH transmitters
- UWPC process transmitters



Long Distance Industrial Wireless Transmitters and Receivers

UWXL Series Starts at



✓ Thermocouple, RTD, Infrared Temperature, RH, pH, Process Voltage/Current and Flow/ **Pulsed Frequency Input Models**

✓ J, K, T, E, R, S, B, and N Thermocouples

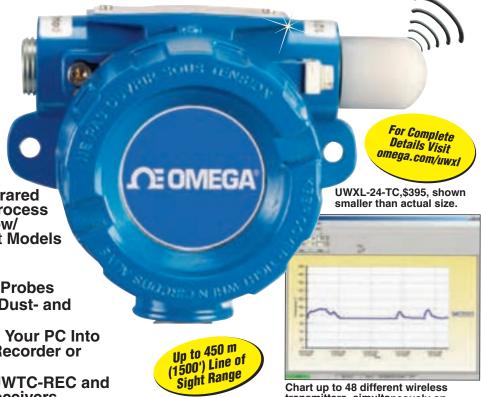
✓ 385 and 392 Pt100 RTD Probes

✓ IP68 Rated Enclosure— Dust- and Water-Tight

✓ Free Software Converts Your PC Into a Multi-Channel Chart Recorder or Data Logger

Compatible with Both UWTC-REC and **UWXL-REC** Wireless Receivers

Long Battery Life



transmitters, simultaneously on

For Complete

Details Visit omega.com/ fma1000

General Purpose Industrial Air Velocity/Temperature Transmitter/Indicator

FMA1000 Series Starts at



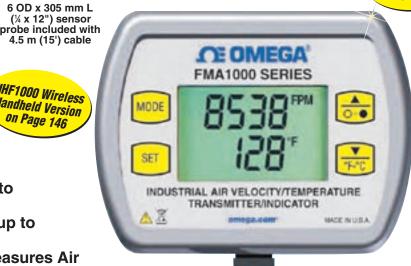
HHF1000 Wireless Handheld Version on Page 146



Measures Air Temperature up to 121°C (250°F)

✓ High Temperature Model Measures Air Temperature up to 171°C (340°F)

- ✓ 1.5% Full Scale Accuracy (Velocity)
- **✓** 0.5% Full Scale Accuracy (Temperature)
- Hot Wire Air Velocity Sensor Design
- **✓** 250 msec Response Time Programmable up to 2 Seconds
- ✓ Large Backlit LCD Displays Air Velocity and Air Temperature Simultaneously



smaller than actual size.

FMA1001R-V1, \$695, shown

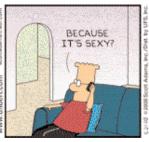
- Dual Linear Analog Outputs for Air **Velocity and Temperature**
- USB PC Interface with Windows® Based
- ✓ NEMA 4 (IP65) Industrial Enclosure For a video of this product visit omega.com/video.

PC Software

for your daily dose of DILBERT!











OM-CP-RFRHTEMP101A Starts at \$269



































CE OMEGA

Digital RTD Thermometer

316 SS Enclosure for Sanitary, Wash-Down, and Marine Applications
DTG-RTD100 Series

For Complete Details Visit omega.com/ dtg-rtd100

connector included.

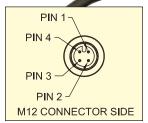
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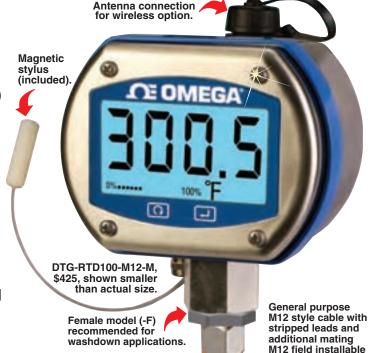


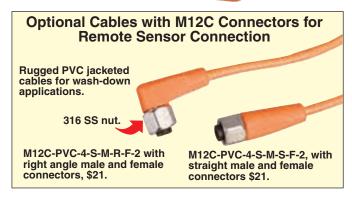
- ✓ Large Multicolor Backlit Display with 25 mm (1") Digits Readable From Over 10.7 m (35')
- ✓ Up to ± 0.2 °C (± 0.3 °F) or ± 0.1 % Rdg Accuracy
- ✓ Connects Directly to 3-Wire Pt100 RTD Sensors
- ✓ User Scaleable 4 to 20 mA.
 - 0 to 5 or 0 to 10 Vdc Analog Output Standard
- ✓ Powered by Internal Battery or External DC **Power Supply**
- ✓ Included Setup and Service Software Allows for Fast Maintenance and Calibration via USB Connection
- Wireless Transmitter Option Sends Readings to Remote Locations and Allows for PC-Based **Chart Recording and Data Logging**
- ✓ Low Power Operation and Sleep Mode for **Long Battery Life**
- ✓ Display Backlight Changes from Green to Blue for Low Alarm and from Green to Red for High Alarm





	Color	Codes	
Pin 1	Pin 2	Pin 3	Pin 4
Brown	White	Blue	Black





Thermometer without Sensor

AVAILABLE FOR FAST DELIVERY!

To Order (Specify Model Number)		
Model No. Price Description		
DTG-RTD100	\$395	Digital RTD thermometer with internal terminal block connection
DTG-RTD100-M12-F	425	Digital RTD thermometer with female M12 connection
DTG-RTD100-M12-M	425	Digital RTD thermometer with male M12 connection

Comes complete with operator's manual, USB cable, user software and two 3.6V lithium "C" cell batteries.

* Specify probe length; "300" for 3", "400" for 4", "500" for 5", or "600" for 6".

** Specify analog output signal: "V1" for 0 to 5 Vdc; "V2" for 0 to 10 Vdc, "TC" for Type K thermocouple, or "MA" for 4 to 20 mA signal. To order with angle bracket option, add suffix "-AB" to model number and \$45 to price.

To order with wireless transmitter option, add suffix "-W" to model number, and \$100 to price.

Note: Units with the wireless option require a UWTC series receiver or transceiver to operate.

Ordering Examples: DTG-RTD100-AB-100-1/4-600-E-W-AB, RTD meter with integral Pt100, 6" long, ½" dia industrial probe with angle bracket and wireless options, and UWTC-REC1, 48-channel USB receiver, \$465 + 45 + 100 + 225 = \$835.

DTG-RTD100-PRS-3-100-AS-300-D1. RTD meter with integral Pt100, 3" L, 1/4" dia sanitary probe, \$490. DTG-RTD100-M12-M, RTD meter with M12 connector, \$425.

1/8 DIN Graphic Display Meter for Process and **Temperature Measurement with Optional**

Alarm Relays, Analog Output, and Built-In omega.com/xy1701

Wireless Receiver

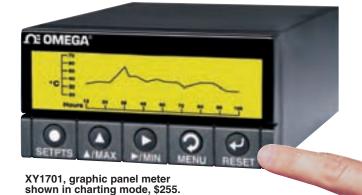
XY™ SERIES

XY1700 Series Starts at



- Universal Model for Thermocouples, RTD and Process (Vdc and Current)
- Monochrome, High Resolution Graphic Display with High-Intensity Backlighting
- ✓ Display Can Be Configured for Bar Graph, **Charting or Standard Segment Format**
- ✓ ½ DIN Enclosure

PATENT PENDING



For Complete

Details Visit

AVAILABLE FOR FAST DELIVERY!

RH511, \$355.

For Complete Details Visit

omega.com/rh511

To Order (Specify Model Number)			
Model No.	Price	Description	
XY1701	\$255	Graphic panel meter	
XY1701-AR	295	295 Graphic panel meter with alarm relays and analog output	
XY1701-230VAC	255	Graphic panel meter (230 Vac)	
XY1701-AR-230VAC	295	Graphic panel meter with alarm relays and analog output (230 Vac)	

Comes complete with operator's manual.

For models with built-in wireless receiver, add "-W" to model number and \$45 to price.

Ordering Example: XY1701, 1/8 DIN graphic panel meter, \$255.

Temperature/Relative Humidity/Infrared **Bench Top Handheld Meter**

With Laser Dot/Circle Sighting, Data Logging and Wireless Sensor Probe Option

> RH511 Series Starts at





Optional

- Measures Temperature and **Relative Humidity**
- ✓ Measures Non-Contact **Surface Temperature**
- Patented Built-In Laser Sighting
- ✓ Two Type K Thermocouple Inputs
- ✓ Triple Backlit LCD Display
- Min/Max/Hold Functions
- ✓ Data Logging up to 32,000 Points

PATENTED

AVAILABLE FOR FAST DELIVERY!

To Order	er (Specify Model Number)					
Model No.	Price Description					
RH511	\$355	Portable temperature/relative humidity/infrared meter with wired sensor probe				
RH511-W9	399	Portable temperature/humidity/infrared meter with wireless sensor probe for USA and Canada (915 MHz)				
RH511-W8	399	Portable temperature/humidity/infrared meter with wireless sensor probe for Europe (868 MHz)				

Comes complete with a wired or wireless temperature/humidity sensor probe, Type K thermocouple, 6 "AA" size lithium batteries, USB cable, DC adaptor, software CD, mini-tripod, 1.8 m (6') sensor extension cable, operator's manual, and soft carrying case.

Ordering Examples: RH511-W9, portable temperature/humidity meter with wireless sensor probe (915 MHz), \$399. OCW-2, OMEGACARE™ extends standard 1-year warranty to a total of 3 years (\$63), \$399 + 63 = \$462.

RH511, portable temperature/humidity meter with wired sensor probe, \$355.



NEW

Miniature Wireless Thermocouple Connectors For Short Range Laboratory and Light Industrial Uses

MWTC Series Starts at \$**79**



For Complete Details Visit omega.com/ mwtc_series

MWTC-A-K, \$79, shown actual size.



PATENT PENDING



- Built-In Cold Junction Compensation and Linearization
- MWTC-REC Receivers Work with Multiple Wireless Remote Connectors
- Low Power Operation and Sleep Mode for Extended Battery Life
- Each Wireless Connector Transmits Measured and Ambient Temperatures in Real Time
- Free Software Converts Your PC Into a Multi-Channel Chart Recorder or Data Logger





Miniature Data Logging Connectors Record and Store Over 65,000 Data Readings

868 or

915 MHz

The Smart Connector™

MWTC-D Series Starts at

\$89

PATENT PENDING







For Complete

Download
Stored Data via USB
Connection or
Optional Wireless
Receiver



- Built-In Cold Junction Compensation and Linearization
- Low Power Operation and Sleep Mode for Extended Battery Life
- Free Software Converts Your PC Into a Multi-Channel Chart Recorder or Data Logger
- Software Meets FDA CFR21 Part 11 Requirements



MWTC-D-K, \$89,

shown actual size.

Wireless Transmitter Enclosure Wash-Down, Sanitary and Marine Applications For MWTC Miniature Wireless Thermocouple Connectors

MWTC-NEMA Series

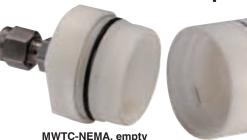
All Models





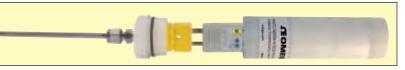
- ✓ NEMA 4X (IP65) Protection
- ✓ Rugged, Splash-Proof Design
- ✓ Available for ½ to ½" or 3 to

6 mm OD Thermocouple Probes









MOST POPULAR MODELS LISTED!

To Order (Specify Model Number)			
Model No.	Price	Description	
MWTC-NEMA-18	\$39	NEMA 4X (IP65) enclosure for MWTC wireless connector, for 1/8" dia. probes	
MWTC-NEMA-316	39	NEMA 4X (IP65) enclosure for MWTC wireless connector, for 3/16" dia. probes	
MWTC-NEMA-14	39	NEMA 4X (IP65) enclosure for MWTC wireless connector, for 1/4" dia. probes	

Ordering Example: MWTC-NEMA-18 enclosure, with MWTC-A-K-915 miniature wireless connector for Type K thermocouples (915 MHz RF frequency), with KQSS-18G-18, visit omega.com/jgin. Type K thermocouple, 1/8 " OD 304 SS sheath, grounded junction, 18" length (16.75" usable length), \$39 + 79 + 23.90 = \$141.90.

Universal Wireless RS232 to USB Transceiver

WRS232-USB

For Both RS232 and **USB Modules**



- ✓ Converts Any RS232 **Device For Wireless** Communication
- ✓ Wireless USB Interface Directly to PC
- ✓ One Wireless Receiver **Module Operates Multiple** Wireless Transmitter **Modules**



(ISM 2.4 GHz)

✓ RF Range: Up to 40 m (130') Indoor/Urban Up to 120 m (400') Outdoor/Line of Sight]



AVAILABLE FOR FAST DELIVERY!

To Order (Specify Model Number)				
Model No.	Price	Description		
WRS232-USB	\$159	Wireless transmitter and receiver modules, with USB cable and connectors/adaptors		
WRS232	69	Wireless RS232 transceiver module, with connectors/adaptors		
WUSB	100	Wireless USB transceiver module, with USB cable		

Comes complete with software and operator's manual.

Ordering Example: WRS232-USB, wireless transmitter and receiver modules, RS232 cable with RJ12 to DB9 connector, DB9 male/male connector, and USB cable, \$159.

NEW

wireless Meter/Scanner and Controller

wi8 Series \$395 All Models





A Complete Wireless
System Requires at Least
1 Receiver (wi8XX)
and 1 End Device
(UWTC or zED)

Wireless antenna with 0.3 m (1') cable included.



For Complete Details Visit omega.com/ wi8_series

Works with zED-TP1-P, \$195,

see page 103.

Works with UWTC-NB9-CASS-18-U-12 wireless thermocouple/ transmitter assembly, \$195, see page 89.

wii)Series

✓ User-Friendly, Simple to Configure

Wireless Inputs: Thermocouple, RTD, Temperature

✓ Embedded Ethernet (Standard)

2 Alarm Outputs: Solid State Relays (SSRs), DC Pulse, Mechanical Relays, Analog Voltage and Current

✓ Free Software

The Smart Connector™

wi833-U, \$395.



wiSeries Wireless Monitoring and Control System

The new wiSeries wireless monitoring and control system features meters and scanners compatible with a large and growing number of our wireless sensors:

UWTC "Universal Wireless Thermocouple" Type J, K, T, E, R, S, B, N, and C.

UWRTD "Universal Wireless RTD"

zSeries Wireless End Devices with sensors for temperature.

Works with UWTC wireless thermocouple connector, \$125, see page 85.

All models shown smaller than actual size.

MOST POPULAR MODELS LISTED!

To Order (Specify Model Number)			
Model No.	Price	Description	
wi833-U	\$395	Wireless meter/controller for UWTC units with 2 relays: form "C" SPDT 3 A @ 120 Vac, 3 A @ 240 Vac, embedded ethernet, 90 to 240 Vac/dc, 50 to 400 Hz	
wi853-ZT	395	For zSeries units with analog output 0 to 10 Vdc or 0 to 20 mA @ 500 Ω max and form "C" relay	

Other outputs options are available, please contact our Engineering Department.
For low power option (20 to 36 Vdc, 24 Vac) add "-DC" to model number and add \$25 to price, ex: wi833-ZT-DC, \$395 + 25 = \$420.
Ordering Example: wi833-U, wireless meter/controller for UWTC units with 2 relays, \$395.

Wireless Benchtop Meter, Scanner and Controller With Embedded Ethernet Connectivity





MDSwi8 Series \$545 All Models



- Read 8 Wireless Sensors Simultaneously
- Portable, Rugged Metal Benchtop Enclosure with Tilt Handle
- User-Friendly, Simple to Configure
- Wireless Inputs: Thermocouple, RTD, Temperature
- Embedded Ethernet Standard





SO I BUILT

A TINY

FORT OUT

OF COFFEE

STIRRERS

MAYBEI

SHOULDNT

TAKE YOU

ON SALES

CALLS.



Wireless Temperature Transmitter



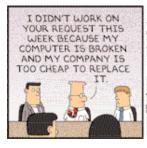
OMWT-TEMP15 \$137











CATBERT EVIL DIRECTOR

OF HUMAN RESOURCES

I LIKE TO USE

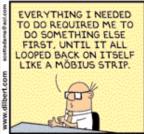
ROLE PLAY TO EVALUATE JOB APPLICANTS.









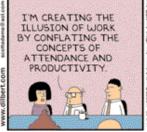






I'M NOT ALLOWED TO DISCUSS THE COMPANY POLITICS THAT FORM A CAREER MINEFIELD

AROUND YOUR PROJECT









Dilbert © United Feature Syndicate

U.S.A. and Canada



1 YEAR WARRANTY Optional

✓ Web Server

Email Alarms

✓ No Special Software Required

✓ NEMA 4 (IP65) Enclosure

zED-TP1-LCD, \$245, shown smaller than actual size.



Models Available for:

- Temperature
- Barometric Pressure
- Humidity
- Thermocouple
- Analog Voltage

Wireless Sensor System Ethernet or Internet Connection

zSeries Starts at





Humidity

✓ Barometric Pressure

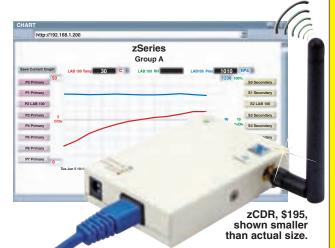
Email Alarms

✓ Web Server

✓ No Special Software Required

Internet **Enabled**!

> For Complete **Details Visit** omega.com/ zseries



MOST POPULAR MODELS LISTED!

To Order (Specify Model Number)				
Model No.	Description	Price		
zCDR	Coordinator, which can support up to 32 end devices	\$195		
zED-T	End device unit with internal temperature sensor	95		
zED-TH	End device unit with internal temperature and humidity sensor	150		
zED-THP	End device unit with external temperature and humidity sensor	190		

Other sensor combinations available, contact our Sales Department for more information.

Comes complete with software and operator's manual.

Ordering Example: Two zED-TH-THP end units with an internal temperature/RH sensor and an external temperature/RH sensor industrial probe with 3 m (10') cable and **zCDR** coordinator, \$245 x 2 + 195 = \$685.



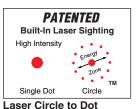
Wireless Infrared Thermometers **Dot/Circle Switchable Laser Sighting, Thermocouple** Input, Distance Measurement and Close Focus Models

OMEGASCOPE® **OS530E** Starts at



- Built-In Wireless Measurement
- ✓ High-Performance, Rugged Design
- ✓ Built-In Patented Laser Sighting is Switchable **Between Laser Dot and** Circle Patterns
- Distance Measuring Option Available
- Close-Focus, and **High-Resolution** Models Available
- ✓ Models Available with Temperature Ranges from -23 to 871°C (-10 to 1600°F)







The OS530E is a perfect toolbox companion! Check surface temperatures quickly and accurately.

™ MONOGRAM®



\$45 value SPHT-K-6, Type-K surface included probe, included with all thermocouple input models. FREE!

Handheld Infrared Thermometer With Optional Sighting Scope and Distance Measurement

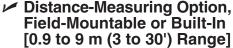
> **OMEGASCOPE®** OS523E/OS524E Starts at



- Built-In Wireless Measurement
- High-Performance, Rugged Design
- ✓ Models Available with **Temperature Ranges to** 2482°C (4500°F)
- Built-In Patented Laser **Dot/Circle Switch Sighting** / Audible and Visible Alarms
- 0.1 to 1.00 in 0.01 Steps

For Complete Details Visit omega.com/ os523e_os524e

High-Performance High-Temperature Wireless



- Custom LCD Indicates Current with Min, Max, Average, or **Differential Temperatures**
- ✓ 1 mV/Degree Analog Output Standard (0.5 mV/Degree on OS524E)
- ✓ RS232 Output with Free **Data Logging Software**
- Ambient Target Temperature Compensation
- ✓ Emissivity Adjustable from ✓ Data Storage for Up to 800 Temperature Points



OMEGASCOPE® OS523E-2-SC-W9 unit with sighting scope, precisely aligned with infrared field of view. Has 2:1 magnification, \$1195.

Wireless Portable Temperature/ For Complete

Humidity Circular Chart

SUPERECORDERTM

CTXL-TRH-W Starts at



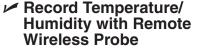








Optional



- ✓ RF Range: 90 m Line of Sight, 33 m Indoors
- ✓ Wall or DIN Rail Mount **Remote Probe**
- ✓ 1, 7 or 32 Day Recording
- ✓ Easy to Read Dual Channel **Backlit LCD Readout**
- Convenient Front Panel **Programming/Operation**
- ✓ Monitor Min/Max/Avq
- ✓ High/Low A/V Alarms
- Dual High Alarm Relays, **Dual Low Alarm Voltage** Outputs
- ✓ Large Double Sided Charts with Magnetic Mount Hub
- ✓ Benchtop or Wall Mount with Built-In Chart Lights
- ✓ Battery or AC Power

The CTXL-TRH recorder is designed for both local and remote monitoring of temperature and relative humidity. The CTXL-TRH-W features a wireless sensor probe that can be placed up to 90 m (300') line of sight or 33 m (110') indoors away from the recorder.

A circular chart recorder with a large, 203 mm (8") diameter chart, the CTXL has a custom LCD that displays the current

CTXL-PT Remote wireless transmitter. included, shown smaller than actual size.

> **PATENT** PENDING





CTXL-TRH-W temperature/ humidity recorder, \$895, includes CTXL-PT wireless transmitter and CTXL-PR receiver, shown smaller than actual size.



Large 200 mm (8") Chart

PATENTS PENDING

temperature and humidity, and can indicate the min, max or average input values as well.

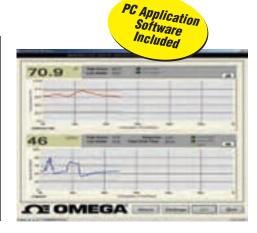
The CTXL-TRH comes with a Windows-based application program that allows the user to monitor the temperature and relative humidity using their PC. You can log the data to a file, as well as display the information on a custom on-screen chart: set the alarms on the recorder. and display their status on-screen.

Windows Software Included!

- Monitor Temperature and Humidity
- Line Graph and Store Readings in Real Time and **Download Recorded Data**
- Set the Line Graph Scales to Auto, Logarithmic, or Manual
- Re-Scale the Recorder **Chart Paper**
- Print Line Graphs to a Printer

You can also re-scale the recorder chart paper, setting temperature and %RH limits anywhere within the range of the unit. This allows you to use the 8" chart to display narrow temperature and humidity bands, for greater resolution.

Details Visit omega.com/ctxl



NEW®

Temperature and Humidity Virtual Chart Recorder

For Complete Details Visit omega.com/ ithx-sd

Starts at \$395



Server

- ✓ Web Server
- Alarms by Email or Text Message
- No Special Software Required
- Records Years of Data on Popular SD Cards

View Temperature + Humidity with a Web Browser



Monitor Temperature Over the Internet

For Complete Details Visit omega.com/isd-tc

\$495

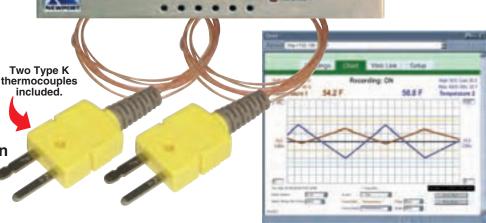






iSD-TC, \$495, shown smaller than actual size.

- ✓ Virtual Chart Recorder
- ✓ Web Server
- ✓ Dual Thermocouple (10 Types)
- Alarms by Email or Text Message
- Record Years of Data on Popular SD Cards
- No Special Software Required



Environmental Surveillance Over the Internet Web-Based Remote Surveillance

of Temperature + Humidity







- ✓ Virtual Chart Recorder
- ✓ Web Server
- Alarms by Email or Text Message
- ✓ No Special Software Required
- Record Years of Data on Popular SD Cards

iSD-TH, \$495, shown smaller than actual size.

Wall Mount or

Benchtop for Commercial

Applications





\$195



Put Any Serial Device On the Network in Minutes

✓ Bridge RS232/RS485 to TCP/IP

✓ Auto 10/100 Ethernet Half/Full Duplex

✓ Built-In Web Server

TCP, UDP, SNMP, SMTP, TFTP, ICMP, Telnet, DHCP, DNS, HTTP, and ARP

- MODBUS® RTU to MODBUS TCP/IP Bridging
- Email Notifications and SNMP Traps
- ✓ 1 to 6 Programmable I/Os
- ✓ Firmware Upgrade Over Ethernet
- Custom Firmware/Private Labeling for OEMs



Embedded PC board assembly for OEMs;

EIT-PCB, shown smaller than actual size.
Consult OMEGA OEM team for pricing.

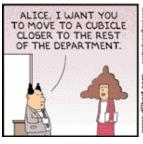
Analog and Digital Output Signal Conditioners/Transmitters

iDRN/iDRX Series Starts at











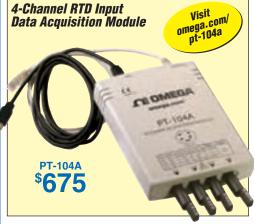




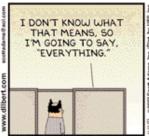












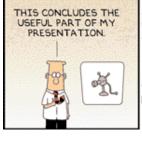


Ethernet-Based Data Acquisition System Components

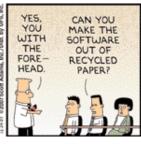
OMB-DAQSCAN-2000 Series Starts at



















Dilbert © United Feature Syndicate

Laptop not

included.

Transition Joint Thermocouple Probe Features USB Interface and Free

Relative Humidity Probe with USB Connection Available, See Page 110



Recording and Logging Software

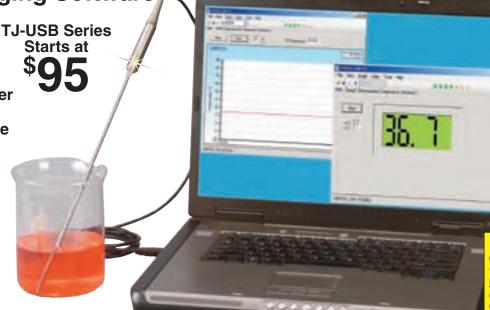


Connects Directly to a **USB Port on Your Computer**

✓ Free Software Converts Your PC into a Temperature Meter, Data Logger or **Chart Recorder**

- Available "Off-the-Shelf" in Two Different **Measurement Ranges**
- (18 and 24") Probe **Lengths Standard**
- ✓ Available in 4.5 or 6 mm (3/6 or 1/4") Diameter 304 SS, Inconel® and High **Performance Super** OMEGACLAD® XL Sheaths

OMEGA's TJ-USB Series of thermocouple probes with direct USB connection feature a rugged transition joint construction, 2 m (6') of shielded output cable and free user software that converts your PC into a temperature meter, chart recorder or data logger. Probes are available off-the-shelf in 18 or 24" lengths and with 0.187 or 0.250" 304 stainless steel, Inconel® or high performance Super OMEGACLAD® XL sheathing.



Specifications

Integral Thermocouple: Type K (ungrounded)

Measurement Range:

K1: -73 to 315°C (-100 to 600°F) **K2:** -200 to 1000°C (-328 to 1832°F)

Free

Software!

TJ-USB-CASS-316-18-K1,

Note: For 304 stainless steel max temperature is 850°C (1562°F)

Accuracy:

K1: ±1°C (1.8°F) **K2:** ±3°C (5.4°F)

Resolution:

USB-TC-K1: 0.1° USB-TC-K2: 1°

Stability:

USB-TC-K1: ±0.25°C, USB-TC-K2: ±0.5°

Cold Junction Compensation (Automatic): -10 to 70°C

Operating Environment (Cold End): -10 to 70°C, 0 to 95% relative humidity

(non-condensing) PC Interface: USB

USB Cable: Integral to probe, 2 m (6')

(shielded) Type A plug

Software (Included): Requires Windows® 2000, XP, VISTA (32-bit)

or Windows 7 (32-bit) Weight: 70 g (2.5 oz)

MOST POPULAR MODELS HIGHLIGHTED!

To Order (Specify Model Number) Model No. **Price** Description 304 SS transition joint probe -73 to 315°C (-100 to 600°F) TJ-USB-CASS-(*)-(**)-K1 \$95 304 SS transition joint probe -200 to 850°C (-328 to 1562°F) TJ-USB-CASS-(*)-(**)-K2 95 95 Inconel transition joint probe -73 to 315°C (-100 to 600°F) TJ-USB-CAIN-(*)-(**)-K1 TJ-USB-CAIN-(*)-(**)-K2 95 Inconel transition joint probe -200 to 1000°C (-328 to 1832°F) 105 Nickel-chrome transition joint probe -73 to 315°C (-100 to 600°F) TJ-USB-KQXL-(*)-(**)-K1 Nickel-chrome transition joint probe -200 to 1000°C (-328 to 1832°F) TJ-USB-KQXL-(*)-(**)-K2 105 **RH-USB** 145 Humidity/temperature probe with USB **HX70-MKIT** 15 Wall/duct mounting kit for RH-USB CAL-3[†] 125 NIST traceable calibration with 3 data points

Ordering Examples: TJ-USB-CASS-14-24-K1, heavy-duty USB TJ probe, 304 SS sheath, 6 mm (¼") OD, 610 mm (24") long with integral USB cable and Type A connector, -73 to 315°C (-100 to 600°F) temperature range, \$95.

TJ-USB-KQXL-316-18-K2, heavy duty USB TJ probe, Nickel-Chrome sheath, 4.5 mm (%=") OD, 457 mm (18") L with integral USB cable and Type A connector, -200 to 1000°C (-328 to 1832°F) temperature range, \$105.

^{*}Insert "316" for 4.5 mm (0.187" diameter sheath) or "14" for 6 mm (0.250" diameter sheath).

^{**}Insert "18" for 457 mm (18" probe length) or "24" for 610 mm (24" probe length).



Economical Humidity/Temperature Sensor

Features USB Interface and Free Recording and Logging Software

For Complete Details Visit omega.com/rh-usb



Thermocouple Probe with USB Connection Available, See Page 109



Connects Directly to a USB Port on Your Computer

Free Software Converts Your PC into a Humidity and Temperature Meter, Data Logger or Chart Recorder

✓ Accurate to ±3% RH, ±1°C (±1.8°F)

316 SS Housing and Removable Stainless Steel Sensor Filter

Suited for Wall or Duct Mounting

Free Software!

The RH-USB relative humidity/ temperature sensor provides a reliable and economical method for most relative humidity and temperature monitoring applications. The compact design is ideal for wall or duct mounting.

RH-USB, \$145, shown smaller than actual size.

Universal Thermocouple Connector Direct USB to PC Connection

Shown smaller

\$**59**





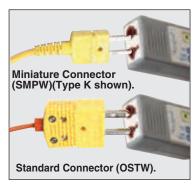
than actual size.

For Complete Details Visit omega.com/ utc-usb

Includes 1.8 m (6') USB cable.

- ✓ For J, K, T, E, R, S, B, C and N Thermocouples
- Built-In Cold Junction Compensation and Linearization
- Accepts Both Standard and Miniature Connectors
- Includes Free Software for Display, Data Logging and Chart Recording

The new UTC-USB universal thermocouple connector accepts the signal from any of 8 thermocouple types, and lets you display actual temperature readings on your PC, through a standard USB port.



The UTC-USB features OMEGA's universal input connection, so you can quickly attach both standard and miniature size thermocouple connectors. A standard USB cable is included.



Laptop not included.

High Performance Multi-Function I/O USB Data Acquisition Modules For Complete



OMB-DAQ-2416 Series Starts at



- ✓ 16 Differential or 32 Single-Ended Analog Inputs, Expandable to 32 Differential/64 Single-**Ended Channels**
- 24-Bit Resolution
- ✓ Thermocouple or **Voltage Input**
- ✓ Nine Software-Selectable Voltage Ranges: $\pm 20V$, $\pm 10V$, $\pm 5V$, $\pm 2.5 \text{ V}, \pm 1.25 \text{ V}, \pm 0.625 \text{ V},$ ±0.312V, ±0.156V, and ±0.078V



Details Visit omega.com/ omb-daq-2416

- Analog Inputs Can be Configured for Thermocouples (Up to 16 Differential Inputs)
- ✓ 1000 Samples/Sec **Aggregate Throughput**
- Built-In Cold Junction **Compensation and Open** Thermocouple Detection
- ✓ Eight Lines of High-Drive Digital I/O

TC-08, \$410, shown with 5SRTC-TT-K-24-36

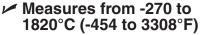
thermocouples. \$54/package of 5, visit omega.com/5lsc_5srtc

✓ Two 32-Bit Counters

8-Channel USB Thermocouple **Data Acquisition Module**

TC-08





- ✓ Accepts Thermocouple Types J, K, T, E, R, S, B and N
- Automatic Cold Junction Compensation
- High Accuracy and Resolution
- ✓ Multiple Units Can Be Run On a Single PC
- 10 Readings Per Second
- Windows Software Included: TC-08 Recorder and TC-08 Player
- USB Interface

For Complete Details Visit omega.com/tc-08



TC-08 Windows software displays data in graphical or tabular format

Available for fast delivery!

,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						
To Order (Specify Model Number)						
Model No.	Price	Description				
TC-08	\$410	8-channel thermocouple data acquisition module				

Comes complete with Windows software, USB cable and operator's manual on CD. Ordering Example: TC-08 8-channel thermocouple data acquisition module and OCW-1
OMEGACARE [™] 1 year warranty extends standard 2 year warranty to a total of 3 years 1 year warranty extends standard 2 year warranty to a total of 3 years, \$410 + 41 = **\$451**.

instruNET® Series Direct Sensor to Data Acquisition



iNET-100 Series Starts at

Complete System





- High-Accuracy Data Acquisition for Windows Computers
- ✓ 16 Single-Ended/8 Differential 14-Bit Analog Inputs, 8 Analog Outputs, and 8 Digital I/O
- ✓ iNET-240 USB 2.0 Controller
- Direct Connection to RTD, Thermocouple, Voltage, Current, Accelerometer, Potentiometer, Load Cell, Thermistor, Bridge, and Strain Gage Sensors
- Each Channel Has Independently **Programmable Analog** and Digital Filters, Integration Time, Voltage Range, and Sample Rate
- ✓ 166 KS/s Throughput to RAM or Disk
- ✓ Includes Strip Chart Software and Drivers for C, Visual Basic.Net, and TestPoint
- Optional LabVIEW **Drivers are Available**
- Optional DASYLab Software Includes iNET **Drivers for Easy-to-Use,** Icon-Based **Programming**

8-Channel Thermocouple/Voltage Input **USB Data Acquisition Modules**

OM-USB-TC/ OM-USB-TC-AI/ OM-USB-5201 Starts at

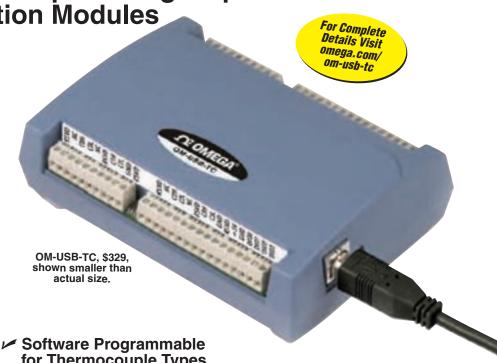


- ✓ OM-USB-TC and OM-USB-5201 Have 8 Thermocouples Inputs
- ✓ OM-USB-TC-AI Has 4 Thermocouple Inputs and 4 Analog Voltage Inputs
- ✓ OM-USB-5201 Has Data Logging Capability (Compact Flash)
- 24-Bit Resolution



J, K, T, E, R, S, B, N Built-In Cold junction **Compensation and Open** Thermocouple Detection

- Eight Digital I/O
- ✓ No External Power Supply Required (Except for OM-USB-5201)



8-Channel Temperature/Voltage Input USB Data Acquisition Modules

N

OM-USB-TEMP, OM-USB-TEMP-AI and OM-USB-5203 Starts at

\$499



- OM-USB-TEMP and OM-USB-5203 have 8 Temperature Inputs
- OM-USB-TEMP-AI has 4 Temperature Inputs and 4 Analog Voltage Inputs
- Temperature Inputs are Software Programmable for Thermocouple, RTD, Thermistor or Semiconductor Temperature Sensors

For Complete Details Visit omega.com/ om-usb-temp



- OM-USB-5203 has Data Logging Capability (Compact Flash)
- ✓ 24-Bit Resolution
- ✓ Built-In Cold Junction Compensation and Open Circuit Detection for Thermocouple Inputs
- Eight Digital I/O
- ✓ No External Power Supply Required (Except for OM-USB-5203)

8-Channel Voltage Input USB Data Acquisition Modules

OM-USB-1208FS/ OM-USB-1408FS/ OM-USB-1608FS Starts at

^{\$}189

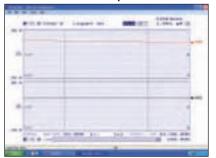


- ✓ 8 Analog Voltage Inputs
- ✓ 12-Bit (OM-USB-1208FS), 14-Bit (OM-USB-1408FS) or 16-Bit (OM-USB-1608FS) Resolution
- ✓ Two 12-Bit Analog Outputs (OM-USB-1208FS, OM-USB-1408FS)
- ✓ 8 Digital I/O (USB-1608FS) or 16 Digital I/O (USB-1208FS, USB-1408FS)
- One 32-Bit Counter
- No External Power Supply Required

For Complete Details Visit omega.com/ om-usb



TracerDAQ Strip Chart.



TracerDAQ Pro Strip Chart with Measurements.





8-Channel Temperature Data Loggers Part of the NOMAD® Family

For Complete Details Visit omega.com/ om-cp-octtemp-a

OM-CP-OCTTEMP-A Starts at







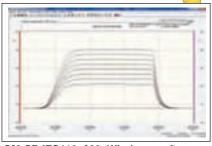




- Automatic Cold Junction Compensation
- Programmable Start Time
- ✓ 8 Thermocouple Channels and 1 Ambient
- User Calibration through Software
- Automatic Thermocouple Linearization
- External Power or User Replaceable Battery
- **✓** Real-Time Operation



\$999, shown smaller than actual size. KTSS-HH probe sold separately, \$29.



to 8 probes

OM-CP-IFC110, \$99, Windows software displays data in graphical or tabular format.

Marinan	- 64.4 Deg F
Astronic Mean	427.7 Deg 8
Standard Deviation	1363 Deg F
Mean Kinetic Temperature	501.9 Deg F
Antonia Temperature Discover	
Antone Temporara Donnel	70.7 Dea F
Antone Temperatur Drawel Myseum Massium	
Anthere Temperature Channel Minimum Maximum Authoritic Mean	707 Deg F 89.6 Deg F 80.6 Deg F
Minimum Maximum	89.6 Deg F

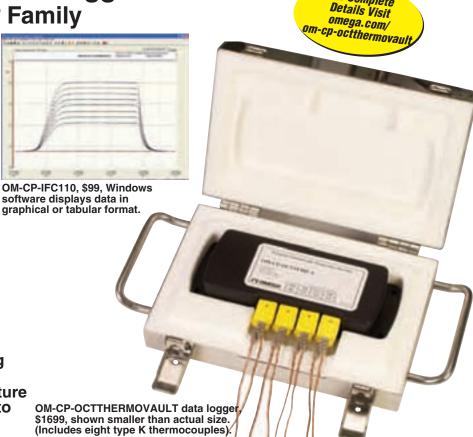
For Complete

8-Channel Oven Data Logger Part of the NOMAD® Family

OM-CP-OCTTHERMOVAULT

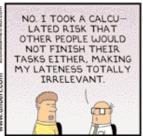


- ✓ 8 Thermocouple Input Channels
- ✓ Programmable Start Time
- ✓ Reusable
- Automatic Cold junction Compensation
- Programmable Engineering Units
- Withstands Oven Temperature up to 350°C (662°F) for up to 25 Minutes



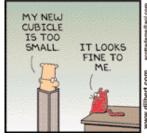


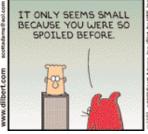






























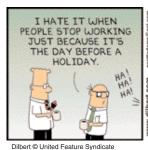




Visit













Portable Data Loggers with Display Part of the NOMAD® Family

For Complete Details Visit omega.com/ om-70 series

OM-71, temperature

data logger, \$119.

OM-70 Series Starts at



OM-73, temperature/relative humidity data logger, \$149.

✓ LCD Real Time Display of Temperature (°C or °F), Relative Humidity (% RH, OM-73 Only), Time, Date, Alarm Status, Recording **Status and Battery** Condition

- User Selectable Stop on **Memory Full or Memory Rollover for Continuous** Recording
- ✓ PC Delayed Start or **Pushbutton Recording** Control

Displays Alarm Icon for **High/Low Alarm Conditions**

USB Interface for Fast **Data Transfer**

OM-74, thermocouple

data logger, \$179.

OM-72, temperature data logger with remote sensor, \$129.

> All models shown smaller than actual size.

> > For Complete

Details Visit omega.com/

om-sq2010

Portable Data Logger

OM-SQ2010 Starts at



- ✓ 4 to 8 Universal Analog Inputs (Current, Voltage, Resistance, Temperature) **Plus 8 Digital Inputs**
- ✓ 16 Derived/Calculated Channels
- 2 Alarm Outputs and 2 Pulse Counter Inputs (1 at 64 KHz, 1 at 100 Hz)
- ✓ 0.1% Accuracy
- ✓ Up to 1.8 Million Readings
- ✓ Large Easy-to-Read **Graphical Display**
- ✓ Includes Windows® Software for Data Logger **Setup and Data Transfer** to PC



shown smaller than actual size. USB Connectivity

RS232 Output For Modem and Wireless Connection (Via Interface Modules)

OM-SQ-SOFT, Windows software (included with OM-SQ2010 data loggers) displays data in graphical or tabular format.

High Temperature Data Logger with USB Interface

OM-EL-USB-1-PRO



✓ -40 to 125°C (-40 to 257°F) Measurement Range

✓ 316 SS Case— NEMA 4X (IP67) Rated

✓ USB Interface for Easy Setup and Data Download

✓ Immediate or Delayed **Start Logging**

Battery and Windows Control Software, Included



For Complete





OM-EL-USB-1-PRO, \$150, shown larger than actual size

Thermocouple Data Logger with LCD Display

and USB Interface

OM-EL-USB-TC-LCD

1 YEAR

✓ Plug Directly Into USB Port for Easy Setup and Data Download—No **USB Cable Required**

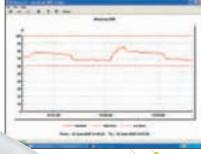
 ✓ High Contrast LCD with
 4-Digit Temperature Indication

Accepts Type J, K or T Thermocouples

✓ 2 User-Programmable Alarm Thresholds

For Complete Details Visit omega.com/ om-el-usb-tc-lcd

Windows Software shows data in graphical format



OM-EL-USB-TC-LCD. \$100, shown smaller than actual size.

Status Indication Via Red and Green LEDs

✓ Immediate, Delayed and **Push-to-Start Logging**

Thermocouple Included!

Includes a free 1 m (40") Type K insulated beaded wire thermocouple with subminiature connector and wire spool caddy. Order a Spare! Model No. SC-GG-K-30-36, \$15

AVAILABLE FOR FAST DELIVERY!

To Order (Specify Model Number)				
Model No. Price Description				
OM-EL-USB-TC-LCD \$100 Thermocouple data logger with LCD display and USB interface				
OM-EL-BATT 4 Replacement 3.6V lithium battery				

Comes complete with Windows software, operator's manual on CD-ROM, protective cap, 3.6V lithium battery and Type K thermocouple. Ordering Example: OM-EL-USB-TC-LCD, thermocouple data logger with LCD display and USB interface, OCW-3, OMEGACARE 3-year extended warranty adds 3-years to standard 1-year warranty, and OM-EL-BATT replacement battery, \$100 + 25 + 4 = \$129.

PRESSURE AND STRAIN MEASUREMENT

A SELECTION OF OUR MOST POPULAR PRODUCTS



mini DIN

Micro-Machined Silicon

With High Temp. Performance For Industry, Automotive, Test, And Aerospace Applications

Gage and Absolute Pressure 4 to 20 mA Outputs Low Pressure: 10 inH₂O and 5 to 5000 psi-Standard Models 25 mbar to 345 bar-Metric Models

> PX409 Series Starts at \$545



High Accuracy ±0.08% BSL Includes Linearity, Hysteresis, and Repeatability

✓ Broad Temperature Compensated Range -29 to 85°C (-20 to 185°F)

✓ Premium Temperature Performance Span: ±0.5% over Compensated Range

✓ 5-Point NIST Traceable Calibration Included

✓ Low Pressure Ranges from 10 inH₂O

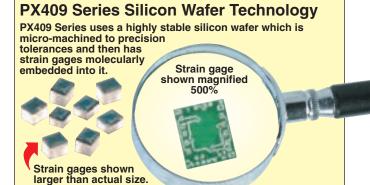
- ✓ All Stainless Steel Wetted Parts
- ✓ Fast Response Time
- Solid State Reliability and Stability
- ✓ Gage and Absolute Pressures
- **✓** 300% Proof Pressure Minimum

OMEGA® piezoresistive pressure transducers have a proven record in high performance commercial and aerospace applications for over 25 years. The piezoresistive process uses strain gages molecularly embedded into a highly stable silicon wafer. The silicon wafer is diced into individual die which each contain a full strain gage bridge. The die is mounted in a sealed chamber protected from the environment by glass to metal seals and a stainless steel diaphragm.

A small volume of silicone oil transfers the pressure from the diaphragm to the strain bridge. The construction provides a very rugged transducer with exceptional accuracy, stability and thermal effects. A unique design ruggedizes the transducers by providing secondary fluid containment in the event of a diaphragm rupture.

At our state-of-the-art facilities, automated test equipment performs pressure and temperature cycling on 100% of the PX409 transducers. The transducers are then calibrated using extremely high accuracy equipment and a 5-point NIST traceable calibration





certificate is included with each transducer. The inherent stability of the piezoresistive core provides excellent long term stability, repeatability and very low thermal effects at the price of much lower performance transducers. Standard features of the PX409 Series also include protective features built into the electronics and the pressure element. Reverse polarity, EMC, and power supply fluctuation protection are standard on all models. Intrinsically Safe and CSA ratings are optional.

The most popular ranges and configurations are stocked for immediate delivery. All others typically have very short lead-time.



High Accuracy Pressure Transducers

Piezoresistive Design with High

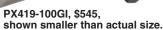
Temperature Performance



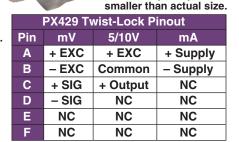
mA

NC

NC

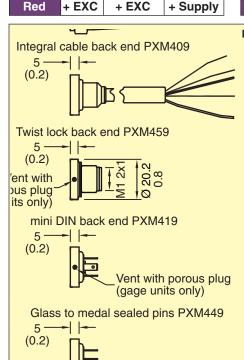


PX419/PX449 Pinout							
Pin	mV	5/10V	mA				
1	+ EXC	+ EXC	+ Supply				
2	– EXC	Common	- Supply				
3	+ SIG	+ Output	NC				
4	- SIG	NC	NC				



PX429-015GI, \$545, shown

Twist-lock stvle.



PX409 Cable Connection

5/10V

+ Output

NC

Common - Supply

m۷

- EXC

+ SIG

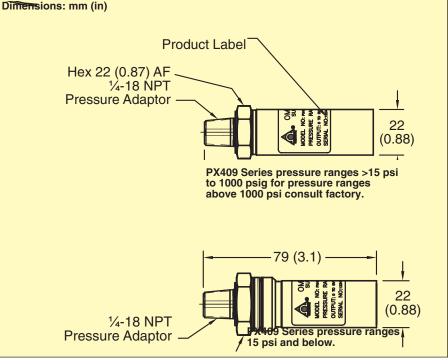
- SIG

Color

Black

White

Green



Common Specifications Gage and Absolute Pressure

Approvals: RoHS compliant **Minimum Isolation Between Case** and Output Terminations:

100M Ω @ 50 Vdc

Pressure Cycles: 1 million, minimum Long Term Stability (1-Year): ±0.1%

FS typical

Shock: 50g, 11 mS half sine shock

(under test)

Vibration: ±20g (under test) Bandwidth: DC to 1 kHz typical Response Time: <1 mS

CE Compliant

Emissions: EN550022 Class B **Electrostatic Discharge Immunity:**

EN61000-4-2

EM Field Immunity: EN61000-4-3

EFT Immunity: EN61000-4-4 Surge Immunity: EN61000-4-5 Conducted RF: EN610000-4-6 **Electrical Termination:**

PX409: Integral 2 m (6') cable PX409C: Integral 2 m (6') cable

with ½ NPT conduit fitting PX419: mini DIN

PX429: Twist lock **Environmental Protection:**

PX409: IP67 PX409C: IP67 PX419: IP65 PX429: IP65

Overpressure Gage Pressure:

10-in H₂O: 10 times span 1 psi: 6 times span

2.5 psi to 3500 psi: 4 times span 5000 psi: 15,000 psi max

Overpressure Absolute Pressure:

5 psia: 6 times span

2.5 psia to 3500 psia: 4 times span

5000 psia: 15000 psi max **Secondary Containment**

Gage/Diff/Vac/Compound: 10 in-H₂O to 5 psi: To 1000 psi 15 to 1000 psi: To 3000 psi 1500 to 5000 psi: To 15,000 psi

Absolute/Barometric:

5 to 1000 psi: To 6000 psia **1500 to 5000 psi:** To 15,000 psia

Wetted Parts: 316 SS

Pressure Port: 1/4-18 NPT male Weight: 115 to 200 gm (4 to 7 oz) depending upon configuration

Gage and Absolute Pressure
High Performance Pressure Transmitters
Micro-Machined Silicon

4 to 20 mA Output
0-10 inH₂O to 0-5000 psi
25 mb to 0-345 bar

PX409 Series
Starts at

Starts at

\$**545**



All models shown smaller than actual size.

PX409-100GI.

\$545.

\$545.

MOST POPIII AR MODELS HIGHLIGHTED

PX419-100GI,

\$545.

For Complete Details Visit

omega.com/

px409_series

4 to 20 mA Specifications Output: 4 to 20 mA

Supply Voltage: 9 to 30 Vdc max loop res Ω = (Vs-9)x50 [9 to 20 Vdc above 105°C (229°F)] Accuracy (Combined Linearity, Hysteresis and Repeatability):

±0.08% BSL max

Zero Balance: ±0.5% FS typical 1% max (1% typical, 2% max for 1 psi

and below)

Span Setting: ±0.5% FS typical 1% max (1% typical, 2% max for 1 psi and below). Calibrated in vertical direction with fitting down

Operating Temperature Range: -45 to 115°C (-49 to 240°F)

Compensated Temperature:

Ranges >5 psi: -29 to 85° C (-20 to 185° F) Ranges \leq 5 psi: -17 to 85° C (0 to 185° F)

Thermal Effects Zero

(Over Compensated Range): Ranges >5 psi: ±0.5% span Ranges ≤5 psi: ±1.0% span

Thermal Effects Span (Over Compensated Range):

Ranges >5 psi: ±0.5% span Ranges ≤5 psi: ±1.0% span

			MO:	ST POPULAR	MOD	ELS HIGHLIG	HTED!		
To Ord	To Order (Specify Model Number)								
Ran		2 m (6 [']) Cable		mini DIN		Twist-Lock			
psi	bar	Termination	Price	Termination	Price	Termination	Price		
4 to 20	4 to 20 mA Output, Gage Pressure Ranges								
10 in-H ₂ O	25 mb	PX409-10WGI	\$595	PX419-10WGI	\$595	PX429-10WGI	\$595		
1	69 mb	PX409-001GI	595	PX419-001GI	595	PX429-001GI	595		
2.5	172 mb	PX409-2.5GI	595	PX419-2.5GI	595	PX429-2.5GI	595		
5	345 mb	PX409-005GI	545	PX419-005GI	545	PX429-005GI	545		
15	1.0	PX409-015GI	545	PX419-015GI	545	PX429-015GI	545		
30	2.1	PX409-030GI	545	PX419-030GI	545	PX429-030GI	545		
50	3.4	PX409-050GI	545	PX419-050GI	545	PX429-050GI	545		
100	6.9	PX409-100GI	545	PX419-100GI	545	PX429-100GI	545		
150	10.3	PX409-150GI	545	PX419-150GI	545	PX429-150GI	545		
250	17.2	PX409-250GI	545	PX419-250GI	545	PX429-250GI	545		
500	34.5	PX409-500GI	545	PX419-500GI	545	PX429-500GI	545		
750	51.7	PX409-750GI	545	PX419-750GI	545	PX429-750GI	545		
1000	69	PX409-1.0KGI	545	PX419-1.0KGI	545	PX429-1.0KGI	545		
1500	103	PX409-1.5KGI	545	PX419-1.5KGI	545	PX429-1.5KGI	545		
2500	172	PX409-2.5KGI	545	PX419-2.5KGI	545	PX429-2.5KGI	545		
3500	241	PX409-3.5KGI	545	PX419-3.5KGI	545	PX429-3.5KGI	545		
5000	345	PX409-5.0KGI	545	PX419-5.0KGI	545	PX429-5.0KGI	545		
4 to 20	mA A	bsolute Press	sure R	anges					
5	345 mb	PX409-005AI	\$545	PX419-005AI	\$545	PX429-005AI	\$545		
15	1.0	PX409-015AI	545	PX419-015AI	545	PX429-015AI	545		
30	2.1	PX409-030AI	545	PX419-030AI	545	PX429-030AI	545		
50	3.4	PX409-050AI	545	PX419-050AI	545	PX429-050AI	545		
100	6.9	PX409-100AI	545	PX419-100AI	545	PX429-100AI	545		
150	10.3	PX409-150AI	545	PX419-150AI	545	PX429-150AI	545		
250	17.2	PX409-250AI	545	PX419-250AI	545	PX429-250AI	545		
500	34.5	PX409-500AI	545	PX419-500AI	545	PX429-500AI	545		
750	51.7	PX409-750AI	545	PX419-750AI	545	PX429-750AI	545		
1000	69	PX409-1.0KAI	545	PX419-1.0KAI	545	PX429-1.0KAI	545		
Comoc cor	moloto w	ith 5-point NIST tra	agachla	calibration cartific	aata				

Comes complete with 5-point NIST traceable calibration certificate.

Ordering Examples: PX409-1.0KGI, 4 to 20 mA output, 1000 psi gage pressure range, 2 m (6') cable termination, \$545.

PX429-015AI, 4 to 20 mA output, 15 psi absolute pressure, twist lock termination, **PT06F10-6S**, mating twist lock connector (sold separately), and **DP25B-E**, 4-digit meter, \$545 + 26.50 + 245 = **\$816.50** system with meter. Visit omega.com/dp25b for meter.



Hermetically Sealed Gage Ranges

Designed for the Harshest Environments

4 to 20 mA Output 0-100 to 0-5000 psi Sealed Gage 6.9 to 0-345 bar

PX429 Series











The hermetically sealed gage version of the PX409 Series features all welded Stainless Steel construction, 316L wetted parts and glass to metal seals (GMS) at the electrical outlets with either twist lock connector (PX429) or solder pins (PX449) terminations. This ensures that the unit is hermetically sealed from external environments and the media. Designed for use on automotive and aircraft test platforms and anywhere environmental concerns demand the most durable characteristics. The sealed gage models have the PX409 Series micro machined silicon core that provides high accuracy, low drift and excellent long term stability in the harshest environments.

4 to 20 mA **Specifications**

Output: 4 to 20 mA

Supply Voltage: 9 to 30 Vdc max loop res $\Omega = (Vs-9)x50$ [9 to 20 Vdc above 105°C (229°F)]

Accuracy (Combined Linearity, Hysteresis and Repeatability):

±0.08% BSL max

Zero Balance: ±0.5% FS typical 1% max (1% typical, 2% max for 1 psi and below) Span Setting: ±0.5% FS typical 1% max (1% typical, 2% max for 1 psi and below). Calibrated in vertical direction with fitting down

Operating Temperature Range: -45 to 115°C (-49 to 240°F) **Compensated Temperature:**

Ranges >5 psi: -29 to 85°C (-20 to 185°F)



Ranges ≤5 psi: ±1.0% span **Thermal Effects Span**

(Over Compensated Range):

Ranges >5 psi: ±0.5% span Ranges ≤5 psi: ±1.0% span

Metric thread adaptors available, visit omega.com/mta_brlk

MOST POPULAR MODELS HIGHLIGHTED!

	moor ror other models mailtained.								
To Order (Specify Model Number)									
Rar	nge	Twist-Lock Glass to Meta							
psi	bar	Termination	Price	Seal Pins	Price				
4 to 20 mA Output, Sealed Gage Pressure Ranges									
100	6.9	PX429-100SGI	\$545	PX449-100SGI	\$545				
150	10.3	PX429-150SGI	545	PX449-150SGI	545				
250	17.2	PX429-250SGI	545	PX449-250SGI	545				
500	34.5	PX429-500SGI	545	PX449-500SGI	545				
750	51.7	PX429-750SGI	545	PX449-750SGI	545				
1000	69	PX429-1.0KSGI	545	PX449-1.0KSGI	545				
1500	103	PX429-1.5KSGI	545	PX449-1.5KSGI	545				
2500	172	PX429-2.5KSGI	545	PX449-2.5KSGI	545				
3500	241	PX429-3.5KSGI	545	PX449-3.5KSGI	545				
5000	345	PX429-5.0KSGI	545	PX449-5.0KSGI	545				

Accessory

MODEL NO.	PRICE	DESCRIPTION
PT06F10-6S	\$26.50	Mating connector for PX429 (sold separately)

Comes complete with 5-point NIST traceable calibration.

Ordering Examples: PX449-250SGI, 4 to 20 mA output, 250 psi sealed gage pressure range, glass to metal sealed pin termination, \$545.

PX429-1.0KSGI, 4 to 20 mA output, 1000 psi sealed gage pressure range, hermetically sealed **Ranges** >5 **psi:** -29 to 85°C (-20 to 185°F) *twist-lock termination, PT06F10-6S, mating twist-lock connector (sold separately) and DP25B-S, Ranges ≤ 5 psi: -17 to 85°C (0 to 185°F) <i>4-digit meter, \$545 + 26.50 + 245 = \$816.50. Visit omega.com/dp25b for meter.* **Barometric Transducers**

PX409 Starts at \$625



- Precision Barometric Ranges
- ✓ inHg or hPa (mbar) Units
- ✓ 5-Point Calibration (Included)

OMEGA's PX409 series electronic barometers are high-accuracy barometers available in three ranges: 16 to 32 inhg, 26 to 32 inhg, or 0 to 32 inhg (absolute pressure) for laboratory or industrial test applications. Models with integral cables (PX409) are IP67 while connector styles (PX419 and PX429) are IP65 rated. They feature all stainless steel construction, which makes them ideal for harsh industrial environments. Their high operating temperature, broad compensated range, and excellent

temperature compensation allow stable readings in applications with fluctuating temperatures commonly found where barometric pressure must be monitored. Models are available with millivolt, voltage or current outputs.

Specifications

Output:

Millivolt: 10 mV/V (100 mV @ 10 Vdc)

Amplified Voltage: 0 to 5 Vdc Current Loop: 4 to 20 mA

Power Requirements:

Millivolt: 5 to 10 Vdc (5 mA @ 10 Vdc) Amplified Voltage: 10 to 30 Vdc

@ 10 mA

Current Loop: 9 to 30 Vdc [max loop res = (Vs-9) x 50]; [9 to 20 Vdc above 105°C (229°F)]

Accuracy (Combined Linearity, Hysteresis and Repeatability):

±0.08% BSL



MOST POPULAR MODELS HIGHLIGHTED!

To Order	To Order (Specify Model Number)							
Range		2 m (6') Cable Termination		mini DIN Termination		Twist-Lock Termination		
inHg	mbar*	Model No.	Price	Model No.	Price	Model No.	Price	
10 mV/V C	Output							
0 to 32	0 to 1084	PX409-32BV	\$625	PX419-32BV	\$625	PX429-32BV	\$625	
16 to 32	542 to 1084	PX409-16BV	625	PX419-16BV	625	PX429-16BV	625	
26 to 32	880 to 1084	PX409-26BV	625	PX419-26BV	625	PX429-26BV	625	
0 to 5 Vdc	Output**							
0 to 32	0 to 1084	PX409-32B5V	\$690	PX419-32B5V	\$690	PX429-32B5V	\$690	
16 to 32	542 to 1084	PX409-16B5V	690	PX419-16B5V	690	PX429-16B5V	690	
26 to 32	880 to 1084	PX409-26B5V	690	PX419-26B5V	690	PX429-26B5V	690	
4 to 20 m	4 to 20 mA Output							
0 to 32	0 to 1084	PX409-32BI	\$690	PX419-32BI	\$690	PX429-32BI	\$690	
16 to 32	542 to 1084	PX409-16BI	690	PX419-16BI	690	PX429-16BI	690	
26 to 32	880 to 1084	PX409-26BI	690	PX419-26BI	690	PX429-26BI	690	

Accessories

Model No.	Price	Description
PT06F10-6S	\$26.50	Mating connector for PX429 series, sold separately
CX5302	15.00	Spare mating connector for PX419 series; one included with each unit
PS-4G	12.75	Pressure snubber for gases
PS-4E	12.75	Pressure snubber for water and light oils
PS-4D	12.75	Pressure snubber for viscous liquids

Comes complete with 5-point calibration certificate.

Ordering Examples: PX409-16BV, 10 mV/V output, 16 to 32 inHg absolute pressure range, 2 m (6') cable termination, **\$625. PX429-26BV**, 10 mV/V output, 26 to 32 inHg absolute pressure, twist-lock termination, **PT06F10-6S**, mating twist lock connector (sold separately), \$625 + 26.50 = **\$651.50**.

^{*} For custom calibration in hPa, 0 to 1100, 550 to 1100 or 800 to 1100, add letter "H" after the range, no additional charge. Example: PX409-26HBI, 800 to 1100 hPA, \$690.

^{**} To order with 0 to 10 Vdc output, change "5V" to "10V", no additional charge.



Vacuum and Compound

Pressure Ranges

Custom Models Available!

✓ Use Our Convenient On-Line **Transducer Configurator to Choose the Features You Want** Visit omega.com/pxconfig for Details



MOST POPILI AR MODELS HIGHLIGHTEN!

Cable

				MOST	<i>POPULA</i>	R MODELS HIGHLIGH	GHTED!	
To Order (St	To Order (Specify Model Number)							
Vacuum Rang								
	inge	2 m (6') Cable		mini DIN		Twist-Lock		
psi	mbar	Termination	Price	Termination	Price	Termination	Price	
10 mV/V Outp	ut							
0 to -10 inH ₂ O	0 to -25	PX409-10WVV	\$600	PX419-10WVV	\$600	PX429-10WVV	\$600	
0 to -1	0 to -69	PX409-001VV	600	PX419-001VV	600	PX429-001VV	600	
0 to -2.5	0 to -172	PX409-2.5VV	600	PX419-2.5VV	600	PX429-2.5VV	600	
0 to -5	0 to -172	PX409-005VV	550	PX419-005VV	550	PX429-005VV	550	
0 to -15	0 to -1034	PX409-015VV	550	PX419-015VV	550	PX429-015VV	550	
0 to 5 Vdc Out	put							
0 to -10 inH ₂ O	0 to -25	PX409-10WV5V	\$665	PX419-10WV5V	\$665	PX429-10WV5V	\$665	
0 to -1	0 to -69	PX409-001V5V	665	PX419-001V5V	665	PX429-001V5V	665	
0 to -2.5	0 to -172	PX409-2.5V5V	665	PX419-2.5V5V	665	PX429-2.5V5V	665	
0 to -5	0 to -345	PX409-005V5V	615	PX419-005V5V	615	PX429-005V5V	615	
0 to -15	0 to -1034	PX409-015V5V	615	PX419-015V5V	615	PX429-015V5V	615	
4 to 20 mA Ou	tput							
0 to -10 inH ₂ O	0 to -25	PX409-10WVI	\$665	PX419-10WVI	\$665	PX429-10WVI	\$665	
0 to -1	0 to -69	PX409-001VI	665	PX419-001VI	665	PX429-001VI	665	
0 to -2.5	0 to -172	PX409-2.5VI	665	PX419-2.5VI	665	PX429-2.5VI	665	
0 to -5	0 to -172	PX409-005VI	615	PX419-005VI	615	PX429-005VI	615	
0 to -15	0 to -1034	PX409-015VI	615	PX419-015VI	615	PX429-015VI	615	
		ectional Outputs)						
±10 mV/V Out	put							
±10 inH ₂ O	±25	PX409-10WCGV	\$665	PX419-10WCGV	\$665	PX429-10WCGV	\$665	
±1	±69	PX409-001CGV	665	PX419-001CGV	665	PX429-001CGV	665	
±2.5	±172	PX409-2.5CGV	665	PX419-2.5CGV	665	PX429-2.5CGV	665	
±5	±345	PX409-005CGV	665	PX419-005CGV	665	PX429-005CGV	665	
±15	±1034	PX409-015CGV	615	PX419-015CGV	615	PX429-015CGV	615	
±5 Vdc Output ±10 inH ₂ O	1	DV400 40W005W	0005	DV440 403400534	0005	DV400 40W005W	0005	
	±25	PX409-10WCG5V PX409-001CG5V	\$665	PX419-10WCG5V PX419-001CG5V	\$665 665	PX429-10WCG5V PX429-001CG5V		
±1 ±2.5	±69 ±172	PX409-001CG5V PX409-2.5CG5V	665 665	PX419-001CG5V PX419-2.5CG5V	665 665	PX429-001CG5V PX429-2.5CG5V	665 665	
±2.5	±345	PX409-2.5CG5V	665	PX419-2.5CG5V	665	PX429-2.5CG5V PX429-005CG5V	665	
±15	±1034	PX409-015CG5V	615	PX419-015CG5V	615	PX429-015CG5V	615	
4 to 20 mA Ou								
±10 inH ₂ O	±25	PX409-10WCGI	\$665	PX419-10WCGI	\$665	PX429-10WCGI	\$665	
±1	±69	PX409-001CGI	665	PX419-001CGI	665	PX429-001CGI	665	
±2.5	±172	PX409-2.5CGI	665	PX419-2.5CGI	665	PX429-2.5CGI	665	
±5	±345	PX409-005CGI	665	PX419-005CGI	665	PX429-005CGI	665	
±15	±1034	PX409-015CGI	615	PX419-015CGI	615	PX429-015CGI	615	

Comes complete with NIST-traceable 5 point calibration certificate (positive readings only for compund ranges).

Note: To order with 10V output, change "5V" to "10V" in model number, no additional charge.

Ordering Examples: PX409-001VV, 10 mV/V output, 0 to -1 psi vacuum pressure range, 2 m (6') cable termination, \$600.

PX409-001CG5V, ±5V output, ±1 psi gage pressure range, 2 m (6') cable termination, \$665.

Wet/Wet Differential Pressure Models Uni-Directional Ranges with 0 to 5 Vdc Outputs

MADE IN

USA

Specifications

Output Voltage/Supply Voltage: 0 to 5 Vdc/ 10 to 30 Vdc; 0 to 10 Vdc/15 to 30 Vdc (change "5V" to "10V" in model number)

Current Draw: 10 mA max

Maximum Current Output: 2 mA (= 2500 Ω min

load resistance)

Output Impedance: 100Ω

Zero Balance:

Ranges > 1psi: $\pm 0.5\%$ typ (1% max) Ranges \leq 1psi: $\pm 1\%$ typ (2% max)

Span Setting:

Ranges > 1psi: ±0.5% typ (1% max) Ranges ≤ 1psi: ±1% typ (2% max)





mini DIN

style.

Cable Termination*

To Order <i>(</i> S			
0 to 5 Vdc O	PT Male Connectors		
Range	Metric	Model No.	Price
0 to 10 inH ₂ O	25 mbar	PX409-10WDWU5V	\$890
0 to 1 psi	70 mbar	PX409-001DWU5V	890
0 to 2.5 psi	170 mbar	PX409-2.5DWU5V	890
0 to 5 psi	350 mbar	PX409-005DWU5V	840
0 to 15 psi	1 bar	PX409-015DWU5V	840
0 to 30 psi	2 bar	PX409-030DWU5V	840
0 to 50 psi	3.5 bar	PX409-050DWU5V	840
0 to 100 psi	7 bar	PX409-100DWU5V	840
0 to 150 psi	10 bar	PX409-150DWU5V	840
0 to 250 psi	17.5 bar	PX409-250DWU5V	840
0 to 500 psi	35 bar	PX409-500DWU5V	840
0 to 750 psi	50 bar	PX409-750DWU5V	840
0 to 1000 psi	70 bar	PX409-1.0KDWU5V	840

* To order conduit fitting backend change model number from "PX409" to "PX409C", no additional charge.

mini DIN Termination

0 to 5 Vdc Ou	0 to 5 Vdc Output, ¼ NPT Male Connectors						
Range	Metric	Model No.	Price				
0 to 10 inH ₂ O	25 mbar	PX419-10WDWU5V	\$890				
0 to 1 psi	70 mbar	PX419-001DWU5V	890				
0 to 2.5 psi	170 mbar	PX419-2.5DWU5V	890				
0 to 5 psi	350 mbar	PX419-005DWU5V	840				
0 to 15 psi	1 bar	PX419-015DWU5V	840				
0 to 30 psi	2 bar	PX419-030DWU5V	840				
0 to 50 psi	3.5 bar	PX419-050DWU5V	840				
0 to 100 psi	7 bar	PX419-100DWU5V	840				
0 to 150 psi	10 bar	PX419-150DWU5V	840				
0 to 250 psi	17.5 bar	PX419-250DWU5V	840				
0 to 500 psi	35 bar	PX419-500DWU5V	840				
0 to 750 psi	50 bar	PX419-750DWU5V	840				
0 to 1000 psi	70 bar	PX419-1.0KDWU5V	840				

Twist-Lock Termination**

MOST POPULAR MODELS HIGHLIGHTED!



0 to 5 Vdc Οι	0 to 5 Vdc Output, ¼ NPT Male Connectors					
Range	Metric	Model No.	Price			
0 to 10 inH2O	25 mbar	PX429-10WDWU5V	\$890			
0 to 1 psi	70 mbar	PX429-001DWU5V	890			
0 to 2.5 psi	170 mbar	PX429-2.5DWU5V	890			
0 to 5 psi	350 mbar	PX429-005DWU5V	840			
0 to 15 psi	1 bar	PX429-015DWU5V	840			
0 to 30 psi	2 bar	PX429-030DWU5V	840			
0 to 50 psi	3.5 bar	PX429-050DWU5V	840			
0 to 100 psi	7 bar	PX429-100DWU5V	840			
0 to 150 psi	10 bar	PX429-150DWU5V	840			
0 to 250 psi	17.5 bar	PX429-250DWU5V	840			
0 to 500 psi	35 bar	PX429-500DWU5V	840			
0 to 750 psi	50 bar	PX429-750DWU5V	840			
0 to 1000 psi	70 bar	PX429-1.0KDWU5V	840			

** Mating connector sold separately, order **PT06F10-6S**, **\$26.50** each. Comes complete with 5-point NIST traceable calibration certificate.

Note: To order 0 to 10 Vdc output, change "5V" to "10V" in model number, no additional charge.

Ordering Examples: PX409-100DWU5V, 0 to 100 psi unidirectional wet/wet differential pressure range, 0 to 5 Vdc output, 0.08% accuracy, ¹/₄ NPT termination, 2 m (6') cable, **\$840**.

PX419-015DWU5V, 0 to 15 psi uni-directional wet/wet differential pressure range, 0 to 5 Vdc output, 0.08% accuracy, ¼ NPT termination, mini DIN connector, **\$840**.

PX429-10WDWU5V, 0 to 10 inH $_2$ O uni-directional wet/wet differential pressure range, 0 to 5 Vdc output, 0.08% accuracy, $_4^{1}$ NPT termination, twist-lock connector plus **PT06F10-6S**, mating connector, \$890 + 26.50 = \$916.50.

Connections—Voltage Output

PX429	Twist-Lock	PX419	mini DIN	PX40	9 Cable
Pin A	+EXC	Pin 1	+EXC	Red	+EXC
Pin B	-COM	Pin 2	-COM	Black	-EXC
Pin C	+SIG	Pin 3	+SIG	White	+SIG
Pin D	No Conn	Pin 4	No Conn	Green	No Conn
Pin E	No Conne	ction			
Pin F	No Conne	ction			



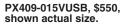
USB Output Pressure Transducer Connect Directly to Your Computer

Gage and Absolute Pressures 10 inH₂O to 5000 psi (25 mb to 345 bar) Vacuum and Compound Ranges 10 inH₂O to 15 psi

> PX409 USB Series Starts at

\$545







visit omega.com/mta_brlk

Cable style.

Micro-Machined Silicon Sensor

- ✓ 316L SS Wetted Parts
- ✓ High ±0.08% Accuracy Typ.
- Fast Delivery! Stock to 1-Week on Most Models
- Excellent Long Term Stability
- ✓ USB 2.0 and Below Compatible
- Standard USB Connector Termination
- Shock and Vibration Rated
- Ruggedized with Secondary Containment

The PX409 USB Series connects directly to your computer. Free software makes data logging and charting your readings a simple task. Also included are drivers for popular laboratory programs plus some web applications. The micro-machined silicon design are ideal for pressure or level applications in laboratory, test platforms, or bio/pharmaceutical applications as well as industrial applications that require a rugged, high accuracy transducer. The micro-machined silicon sensor provides a very stable transducer with exceptional high accuracy of ±0.08% Typ. and a broad compensated range of -29 to 85°C (-20 to 185°F). The modular construction allows for fast delivery of most configurations and fittings. Delivery is typically stock to 1 week!

Specifications

Accuracy: 0.14% Best Straight Line (linearity, hysteresis and repeatability combined)

Temperature Compensation Over Compensated Range:

Span: 0.5% **Zero:** 0.5%

Minimum Isolation Between Case and Output Terminations:

100 MΩ @ 50 Vdc

Pressure Cycles: 1 million, minimum

Long Term Stability (1-Year): ±0.1% FS typical

A to D Conversion: 14-Bit

Shock: 50 g, 11 mS half sine shock, (under test)

Vibration: ±20g (under test)



FREE SOFTWARE INCLUDED!

Each unit includes free software that converts your PC into a strip chart recorder or data logger so readings can be saved and later printed or exported to a spread sheet file. Also included are software drivers for some of the most popular Laboratory programs.

Bandwidth: DC to 3 Hz typical

CE Compliant: Meets industrial emissions and

immunity EN61326

Environmental Protection: IP65

Secondary Containment Vacuum and Pressure:

10 inH₂O to 5 psi: to 1000 psi **15 to 1000 psi:** to 3000 psi **1500 to 5000 psi:** to 15,000 psi

Secondary Containment Absolute Pressure:

5 to 1000 psi: to 6000 psi **1500 to 5000 psi:** to 15,000 psi

Wetted Parts: 316L SS Weight: 200 g (7 oz)

Overpressure Gage Pressure: 10 inH₂O: 10 times span

1 psi: 6 times span

2.5 psi to 3500 psi: 4 times span 5000 psi: 15,000 psi max Overpressure Absolute Pressure:

5 psia: 6 times span

15 psia to 3500 psia: 4 times span

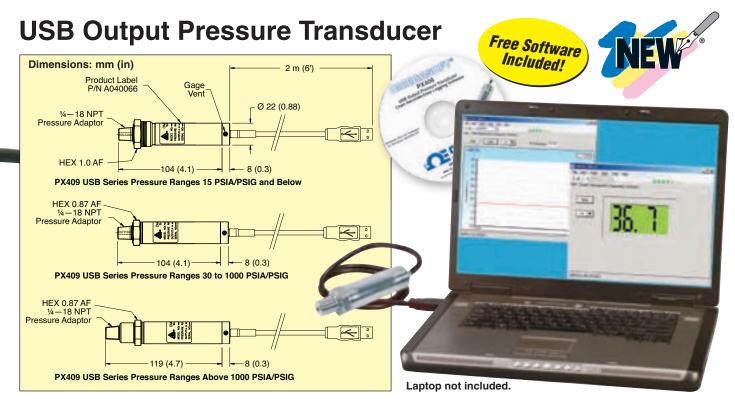
5000 psia: 15000 psi max

Operating Temperature Range: -40 to 85°C (-40 to 185°F)

Compensated Temperature:

Ranges >5 psi: -29 to 85°C (-20 to 185°F) Ranges ≤5 psi: -17 to 85°C (0 to 185°F)

126



MOST POPULAR MODELS HIGHLIGHTED!

Order (Specify Mo				
	nge	Gage Pressure	Absolute Pressure	
psi	bar	Model No.	Model No.	Pric
0 to 10 inH ₂ O	0 to 25 mb	PX409-10WGUSB	_	\$59
0 to 1	0 to 69 mb	PX409-001GUSB	_	59
0 to 2.5	0 to 172 mb	PX409-2.5GUSB	_	59
0 to 5	0 to 345 mb	PX409-005GUSB	PX409-005AUSB	54
0 to 15	0 to 1	PX409-015GUSB	PX409-015AUSB	54
0 to 30	0 to 2.1	PX409-030GUSB	PX409-030AUSB	54
0 to 50	0 to 3.4	PX409-050GUSB	PX409-050AUSB	54
0 to 100	0 to 6.9	PX409-100GUSB	PX409-100AUSB	54
0 to 150	0 to 10.3	PX409-150GUSB	PX409-150AUSB	54
0 to 250	0 to 17.2	PX409-250GUSB	PX409-250AUSB	54
0 to 500	0 to 34.5	PX409-500GUSB	PX409-500AUSB	54
0 to 750	0 to 51.7	PX409-750GUSB	PX409-750AUSB	54
0 to 1000	0 to 69	PX409-1.0KGUSB	PX409-1.0KAUSB	54
0 to 1500	0 to 103	PX409-1.5KGUSB	PX409-1.5KAUSB	54
0 to 2500	0 to 172	PX409-2.5KGUSB	PX409-2.5KAUSB	54
0 to 3500	0 to 241	PX409-3.5KGUSB	PX409-3.5KAUSB	54
0 to 5000	0 to 345	PX409-5.0KGUSB	PX409-5.0KAUSB	54
uum Ranges (Negativ	ve Gage Pressure)			
0 to -10 inH ₂ O	0 to -25 mb	PX409-10WVUSB	_	\$60
0 to -1 psi	0 to -69 mb	PX409-001VUSB	_	60
0 to -2.5 psi	0 to -172 mb	PX409-2.5VUSB		60
0 to -5 psi	0 to -354 mb	PX409-005VUSB		5
0 to -15 psi	0 to -1034 mb	PX409-015VUSB	_	5
npound Gage Ranges	S			
±10 inH ₂ O	±25 mb	PX409-10WCGUSB	_	\$60
±1 psi	±69 mb	PX409-001CGUSB	_	66
±2.5 psi	±172 mb	PX409-2.5CGUSB	_	6
±5 psi	±345 mb	PX409-005CGUSB	_	6
±15 psi	± 1 bar	PX409-015CGUSB		6

Comes complete with NIST traceable 5-point calibration certificate, CD with charting and graphing software plus drivers.

Ordering Examples: PX409-10WGUSB, 2 m (6') cable termination with USB connector, 10 inH₂O gage pressure, USB output, \$595.

PX409-015VUSB, 2 m (6') cable termination with USB connector, 0 to -15 psi vacuum pressure, USB output, \$550.



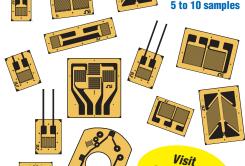




Covers set-up, artwork and 5 to 10 samples

omega.com/

strain_gages

















LD620





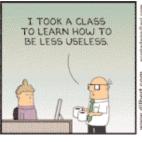




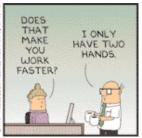










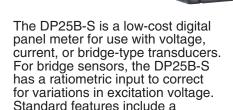


Dilbert © United Feature Syndicate

Economical Strain Indicators with Built-In Sensor Excitation

DP25B-S





DP25B-S, \$245, shown smaller than actual size.

> front-panel tare button and a peak hold feature. Options include dual 5 A alarm relays and a scalable analog output configurable for 0 to 10V or 4 to 20 mA.

✓ NEMA 4 (IP65) **Front Panel**

- ✓ 4-Digit Display, -1999 to 9999 counts
- Excitation Supply, Front Panel Tare, and **Peak Hold Standard**
- Accepts Voltage, Current, or Millivolt Inputs
- Easily Scaled to Display Readings in **Engineering Units**
- Program to Display in Red, Amber, or Green

MOST POPULAR MODEL LISTED!

For Complete

Details Visit omega.com/ dp25b

To Order (Specify Model Number)						
Model No.	Price	Input Ranges*	Excitation			
DP25B-S	\$245	0 to 100 mV, ±50 mV, 0 to 10V, ±5 V, 0 to 20 mA, 4 to 20 mA	24V @ 25 mA or 12V @ 50 mA, 5V @ 60 mA or 10V @ 120 mA			

CIOMEGA

* Input ranges and excitation are user selectable.

Ordering Example: DP25B-S-AR, 115 Vac powered digital strain meter with analog and relay output options, \$245 + 80 + 70 = \$395.

High Performance Strain Meter with High Resolution 6-Digit Display

For Complete Details Visit Visit omega.com/ dp41-s

DP41-S



DP41-S-GN, \$545, shown smaller than actual size.

- Compatible with Strain Gage Bridge Sensors or Ratiometric Voltage Sensors
- Adjustable Filtering Up to 13 Hz
- ✓ Displays Up to 999,999 Counts
- ✓ NEMA 4 (IP65) Front Panel
- ✓ Remote Tare, Min. Max. Reset. and Hold Features
- Min/Max (Peak/Valley) Detection
- Red LED Display Standard, Green Optional

The high-performance DP41-S strain gage indicators have inputs for strain gage bridge and ratiometric voltage sensors. Built-in excitation is standard. The input range is selected via internal jumpers, and the user can perform scaling to engineering units on the front keypad. With optional RS232 or RS485 communications, the operator can program the display remotely.



MOST POPULAR MODEL LISTED!

To Order (Specify Model Number)				
Model No. Price Description				
DP41-S \$545 Strain gage indicator				

Ordering Example: DP41-S-S2-A, DP41 unit for one full Wheatstone bridge inputs with 115 Vac power, RS232 communications and analog output, \$545 + 110 + 110 = **\$765**

Very-High-Accuracy Digital Pressure Gauge Large, Easy-To-Read Display

DPG4000 Series Starts at

\$820



Backlit Display Standard!



✓ Ranges from Vaccum to 10,000 psi

✓ RS232
 Communications
 Standard

- ✓ Very High Accuracy: ±0.05% FS
- ✓ Large, Backlit,
 5-Digit Display
 with 16.5 mm (0.65")
 High Digits and
 20-Segment
 Bar Graph
- ✓ Rugged Stainless Steel Case Meets NEMA 4 (IP65) Rating

For Complete Details Visit omega.com/ dpg4000

DPG4000-30, \$820, shown smaller than actual size.

MOST POPULAR MODELS LISTED!

To Order (Specify Model Number)							
Model No.	Price	Description (Range/Resolution)	Proof Pressure	Burst Pressure			
DPG4000-15	\$820	0 to 15 psi range gauge	30 psi	500 psi			
DPG4000-30	820	0 to 30 psi range gauge	60 psi	500 psi			
DPG4000-500	820	0 to 500 psi range gauge	1000 psi	2000 psi			
DPG4000-1K	820	0 to 1000 psi range gauge	2000 psi	10k psi			

Comes complete with 3 "AA" batteries (when applicable), NIST-traceable calibration certificate, rubber boot and operator's manual

Note: Lower fitting standard. To order with rear mount, add suffix "-RM" to model number, and \$75 (all ranges, all models). To order 24 Vdc power option, add suffix "-DC" to model number and \$75 to price.

Backlit

Display

Optional!

Ordering Example: DPG4000-15-RM, 0.05% digital pressure gauge with rear fitting and 0 to 15 psig range, \$820 + 75 = \$895.

Battery-, Loop-, and AC-Powered Digital Pressure Gauges

Three Power Options: Battery, Loop, or AC/DC

DPG1000 Series Starts at

\$259

For Complete Details Visit omega.com/ dpg1000





NIST DPG1001 Models

✓ Vacuum to 5000 psi Ranges

✓ 316 SS Wetted Parts

✓ Loop Test Function

✓ Easy-to-Read 3½ Digit LCD

✓ Pressure or Vacuum Applications

Rugged Aluminum or NEMA 4X (IP66) Case The DPG1000 Series is a versatile family of industrial pressure/vacuum gauges. All DPG1000 models feature a large 13 mm (½") high digital display in a rugged, splashproof extruded aluminum case.

A ¼-18 NPT 316 stainless steel fitting is standard for the pressure connection. Media compatibility includes all liquids and gases compatible with 316 SS.

The DPG1000B Series features a wide operating temperature range of -20 to 85° C (-4 to 185° F). Many standard pressure/vacuum ranges (in a choice of engineering units) with both gauge and absolute references are available. The series also features \pm 2x overpressure, and 4x burst specifications, and are available with either 0.25% or 0.10% accuracy.

120

Electronic Pressure Switches Integral Display and

Integral Display and Solid State Outputs

For Complete Details Visit omega.com/ psw2000

PSW2000/1000 Series Starts at

\$380





- Dual Outputs: Two SSRs or SSR and Analog Output
- ✓ 3-Digit 10 mm Red LED Display
- ✓ 10-Bit A/D Resolution

PSW1000 Series

- Three Outputs: Dual SSRs plus Analog Output
- 4-Digit 5 mm Alphanumeric Green Display
- ✓ 12-Bit A/D Resolution

PSW2002-750, \$380, with PSW2000-CONN optional DIN connector, \$40, both shown smaller than actual size.

The PSW2000 and PSW1000 high performance pressure switches feature 304 SS wetted parts with a piezoresistive pressure sensor. Both units have 0.5% FS accuracy, solid state switch output(s), and are easy to program, with 3 pushbuttons.





PSW1000-150-I with DIN connector included, \$570.

Industrial Digital Pressure Gauges DC-, Loop-, or Battery-Powered Models

All Models Meet ASME B 40.1 Grade 3A (±0.25% of Span) Accuracy 3 or 4½" Gauges

DPG9000 Series Starts at

\$345





- ✓ NEMA 4 (IP65) Weatherproof Case
- √ 76 mm (3") Stainless Steel Case or 114 mm (4½") Fiberglass-Reinforced Thermoplastic Case
- Extra-Large Display with Bar Graph
- Min/Max Readings
- Easy-to-Use Menu Options (All Password Protected)
- ✓ 10 User-Selectable Engineering Units
- Backlit Display Available





DPG9245-300-A, 4½" gauge, with battery back-up, backlit display and 4 to 20 mA output, \$635, shown smaller than actual size.



Backlit Display Available on All Models



Dual Input Differential Manometer USB and **Wireless** Versions Available

HHP886 Series Starts at







HHP886, \$155, shown smaller than actual size.

AVAILABLE FOR FAST DELIVERY!

To Order (S	To Order (Specify Model Number)					
Model No.	Price	Description				
HHP886	\$155	Battery powered dual input manometer				
HHP886U	175	Battery powered dual input manometer with USB output, includes USB cable and software				
HHP886W	210	Battery powered dual input manometer with wireless interface (US version), includes wireless receiver and software				

Comes complete with two 1.5 m (5') lengths of tubing with 1/8 MNPT adaptors, 4 "AAA" batteries, protective rubber boot and operator's manual.

Ordering Examples: HHP886, handheld manometer with tubing and fittings, \$155. HHP886W, handheld manometer with tubing, wireless receiver and software, \$210.

Dual Display and Dual **Pressure Inputs**

- Displays Input 1, Input 2 or Differential Pressure
- User Selectable Units. psi, mbar, inH2O and mmH₂O
- ✓ Protective Rubber Boot Included
- ✓ USB and Wireless **Models with Data** Logging Software

Handheld Digital Manometer For Differential, Gage And Absolute Pressure

HHP240 Series Starts at



For Complete Details Visit omega.com/ hhp240

- Gage, Absolute and **Differential Pressure Models**
- ✓ MIN/MAX, Hold and Display **Averaging Modes**
- ✓ 8 User Selectable **Engineering Units**
- User Activated Back Light
- Auto Shutoff After 20 Minutes of Keypad Inactivity
- ✓ 0 to 100% Horizontal Bargraph

HHP241-100G, \$380, shown smaller than actual size.



To Order (Specify Model Number)							
Model No.	Price	Accuracy	Model No.	Price	Accuracy	Range	
HHP241-005G	\$380	±0.25% FS	HHP242-005G	\$450	±0.1% FS	0 to 0.3 bar (0 to 5 psi) gage	
HHP241-015G	380	±0.25% FS	HHP242-015G	450	±0.1% FS	0 to 1 bar (0 to 15 psi) gage	
HHP241-030G	380	±0.25% FS	HHP242-030G	450	±0.1% FS	0 to 2 bar (0 to 30 psi) gage	
HHP241-100G	380	±0.25% FS	HHP242-100G	450	±0.1% FS	0 to 7 bar (0 to 100 psi) gage	
HHP241-028D	380	±0.25% FS	HHP242-028D	450	±0.1% FS	0 to 70 mbar (0 to 28 inH ₂ O) differential	
HHP241-138D	380	±0.25% FS	HHP242-138D	450	±0.1% FS	0 to 344 mbar (0 to 138 inH ₂ O) differential	
HHP241-832D	380	±0.25% FS	HHP242-832D	450	±0.1% FS	0 to 2072 mbar (0 to 832 inH ₂ O) differential	
HHP241-015A	400	±0.25% FS	HHP242-015A	475	±0.1% FS	0 to 775 mmHg (0 to 15 psi) absolute	
HHP241-030A	400	±0.25% FS	HHP242-030A	475	±0.1% FS	0 to 1551 mmHg (0 to 30 psi) absolute	

Comes complete with 3 "AA" batteries, protective rubber boot and operator's manual.

Ordering Examples: HHP241-030G, handheld manometer with ±0.25% FS accuracy and a 0 to 2 bar (0 to 30 psig) range, \$380. HHP242-832D, handheld manometer with ±0.1% FS accuracy and a 0 to 832 inH₂O (2.07 bar) of water differential pressure range, \$450.



Handheld Smart Manometer For Differential, Gage And Absolute Pressure

Gage And Absolute Models: Wet

HHP350 Series Starts at





- User Selectable Engineering Units
- ✓ High Accuracy, 0.05% FS Standard with 0.025% Optional
- MIN/MAX Hold and Leak **Test Functions**
- Programmable Damping Rates, and Auto Shutoff

HHP351-C, \$775, shown smaller than actual size.

For Complete Details Visit omega.com/ hhp351



HHP360

MOST POPULAR MODELS LISTED!

To Order (S	Specify	Model Nun				
Model No.	Price	Accuracy	Model No.	Price	Accuracy	Range
HHP351-A	\$925	0.05% FS	_	_	_	0 to 70 mbar (0 to 28) inH ₂ O differential
HHP351-B	775	0.05% FS	HHP352-B	\$925	0.025% FS	0 to 500 mbar (0 to 200) inH ₂ O differential
HHP351-C	775	0.05% FS	HHP352-C	925	0.025% FS	0 to 2000 inH ₂ O (72 psi) differential pressure range
HHP351-D	925	0.05% FS	HHP352-D	1075	0.025% FS	0 to 1 bar (0 to 15 psi) gage pressure
HHP351-G	925	0.05% FS	HHP352-G	1075	0.025% FS	0 to 21 bar (0 to 300 psi) gage pressure
HHP351-I	975	0.05% FS	HHP352-I	1125	0.025% FS	0 to 2000 mm (0 to 79) inHg absolute pressure

Comes complete with 4 "AA" batteries, protective rubber boot and operator's manual.

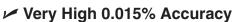
Ordering Example: HHP352-G, handheld manometer with 0.025% FS accuracy and 0 to 21 bar (0 to 300 psig) range, \$1075.

High Accuracy Digital Barometer Precision Absolute Manometer

HHP360 Series Starts at







- Absolute Pressure
- ✓ Barometric Pressure (Corrected to Sea Level)
- ✓ Altitude in Meters or Feet (Corrected to Sea Level)
- Altitude Can be User **Set Based Upon Map or** Trig Marker or for **Local Conditions**
- 7 Pressure Units
- Easy to Read **Backlight Display**





To Order (Specify Model Number)					
Model No.	Price	Description			
HHP360-A	\$1595	Precision absolute manometer, 0 to 900 mmHg (0 to 17 psia)			
ННР360-В	1475	Precision absolute manometer, 0 to 2000 mmHg (0 to 38 psia)			

HHP360-B

\$1475.

Comes complete with operator's manual, NIST traceable calibration certificate, 4 "AA" batteries, and protective rubber boot.

Ordering Example: HHP360-B, precision handheld manometer, 0 to 2000 mmHg range, \$1475.

Pressure Calibration Kit With 0.05% Digital Pressure Gauge and Hand Pump

DPG4000-KIT Starts at



- Ranges from Vacuum to 10,000 psi
- RS232 Digital **Communications Standard**
- Pump and Hose Included
- Very High Accuracy: ±0.05% FS
- ✓ Temperature Compensated: 0 to 50°C (32 to 122°F)
- ✓ Displays in 18 **Standard or Custom Engineering Units**







✓ Large, Backlit, 5-Digit Display with 16.5 mm (0.65") High Digits and 20-Segment Bar Graph

Kit includes gauge, hand pump, carrying case and hose.

29.937

High-Accuracy Pressure Calibrators Single and Dual Range Models **For Complete Details Visit**

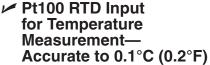
PCL341 Series Starts at



- ✓ Triple Display: Pressure, Temperature, Process **Voltage and Current**
- ✓ Isolated, Stainless Steel **Pressure Sensors with** 0.025% FS Accuracy
- External Connection Supports All OMEGA® **PCL-PM Series Pressure** Modules (25 Ranges) for **Greater Measurement** Capability



PCL341 series comes complete with 4 "AA" batteries, test leads, soft case, and NIST calibration certificate.



- ✓ Measures 4 to 20 mA Input
- ✓ Internal 24 V Loop Power Supply Can Power a **Transmitter Under Test**
- Measures Up to 30 Vdc

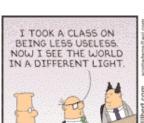
✓ Large, Graphic-Style LCD with Backlight

¼ FNPT ports for pressure use.

- Can Display Up to 3 Inputs Simultaneously (e.g., Pressure 1, Pressure 2, and RTD)
- ✓ Up to 5-Setups Can be Stored: Last Setup **Automatically Recalled** on Power-Up



for your daily dose of DILBERT!





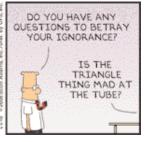
















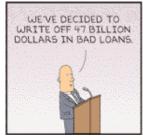














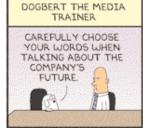


Subminiature Industrial Compression Load Cell Very Low Profile Compression 0-2.2 lb to 0-1000 lb 0-10 to 0-5000 N



Starts at \$550











Dilbert © United Feature Syndicate

NEW

Precision Handheld Pumps
For Pressure and

For Pressure and Vacuum Calibration

HPP Series
Starts at

\$345







- Hydraulic Model for 0 to 690 bar (0 to 10,000 psi)
- Precision Vernier for Fine Adjustments
- Designed for High Reliability and High Performance

OMEGA's HPP Series precision calibration pumps are designed to provide long term reliability in harsh environments. Four models are available to cover ranges from vacuum up to 690 bar (10,000 psi). Pumps can be purchased separately or as a kit that includes a carrying case, tubing and fittings.

The HPP-100 and HPP-VAC are economical pumps designed for 0 to 6.9 bar (0 to 100 psi) or 0 to -0.95 bar (0 to -28 inHg vacuum). Both models feature dual O-rings on all pistons for smooth operation with zero leakage. A "mash proof" schrader valve replaces the needle valve commonly used for the vent.



HPP-600 The HPP-600 is a pneumatic pump that can generate both vacuum and pressure. It covers a range from -0.95 bar (28 inHg) vacuum to 41 bar (600 psi) pressure. Dual O-rings, oversized check valves, and a "mash proof" vent valve ensure smooth, trouble free operation.

HPP-10K The HPP-10K hydraulic pump can generate pressure from 0 to 690 bar (0 to 10,000 psi). It is compatible with most hydraulic fluids, oils and water. A precision stroke control adjustment allows for fast priming or shorter stroke for easier pumping at high pressure. It features a shatter proof reservoir, triple filtration system and a built-in pressure relief valve.

MOST POPULAR MODELS HIGHLIGHTED!

To Order (Specify Model Number)						
Pumps Only						
Model No.	Price	Description				
HPP-100	\$345	Handheld pneumatic pressure pump, 0 to 6.9 bar (0 to 100 psi)				
HPP-VAC	345	Handheld pneumatic vacuum pump, 0 to -0.95 bar (0 to -28 inHg vacuum)				
HPP-600	545	Handheld pneumatic vacuum/pressure pump, -0.95 to 41 bar (-28 inHg to 600 psi)				
HPP-10K	845	Handheld hydraulic pressure pump, 0 to 690 bar (0 to 10,000 psi)				
Pump Kits (Kit	s Include F	Pump, Carrying Case, Tubing with Fittings)				
HPP-100-KIT	\$465	HPP-100 pump, carrying case, HPP-HOSE and 64 mm (2 ½") gauge				
HPP-VAC-KIT	465	HPP-VAC pump, carrying case, HPP-HOSE and 64 mm (2 ½") gauge				
HPP-600-KIT	695	HPP-600 pump, carrying case and HPP-600-HOSE				
HPP-10K-KIT	995	HPP-10K pump, carrying case, fluid bottle and HPP-10K-HOSE				

Accessories

Model No.	Price	Description
HPP-HOSE	\$49	0.6 m (2') tubing with 1/8 NPT fittings for HPP-100 or HPP-VAC
HPP-600-HOSE	69	0.6 m (2') tubing with 1/8 NPT fittings for HPP-600
HPP-10K-HOSE	145	0.9 m (3') high pressure tubing for HPP-10K with (2) ¼ BSPM self sealing test point adaptors
HPP-10K-FW	25	Replacement filters and washers for HPP-10K

Comes complete with operator's manual. Units with BSP fittings also include NPT adaptors. **Ordering Examples: HPP-100**, handheld pressure pump, 0 to 6.9 bar (0 to 100 psi), **\$345**. **HPP-600-KIT**, vacuum to 41 bar (600 psi) pump kit with carrying case, tubing and fittings, **\$695**. Current to Pressure (I/P) and Voltage to Pressure (E/P) Models

> **IP510 Series** Starts at



- Hazardous Location and **Intrinsically Safe Ratings**
- ✓ NEMA 4X (IP66)
- ✓ 0.1% Accuracy Typical
- Closed-Loop Pressure Feedback Control





smaller than actual size.

For Complete Details Visit omega.com/ip510

Miniature I/P Transducers **Electronic Air Pressure Control**

IP610 Series Up to 1% Accuracy 3-15 to 0-120 psi IP710 Series ±0.1% Accuracy 3-15 to 0-100 psi

IP610 and IP710 Series Starts at

For Complete Details Visit omega.com/ip610

enclosure.













✓ NEMA 4X (IP65) Enclosure

✓ 4 to 20 mA Loop Powered



IP710-X100-D with DIN electrical termination, \$490.



IP610-X60 with conduit electrical termination, \$320.

MOST POPULAR MODELS LISTED!

To Order (Specify Model Number)							
Model No.	Price	Range	Accuracy*	Impedance	Air Consumption	Supply Pressure (psi)	Flow Capacity
General Pu	General Purpose I/P Converters						
IP610-X15	\$320	3 to 15 psi	±1.0% span	180 Ω	1.8 scfh @	20 to 100	4.5 scfm @ 25 psig
IP610-X60	320	2 to 60 psi		245 Ω	mid-range	65 to 150	12 scfm @ 100 psig
IP610-120	370	0 to 120 psi	±2.5% span	315 Ω	6.0 scfh @ mid-range	125 to150	12 scfm @ 100 psig 20 scfm @ 150 psig
High Accuracy I/P Converters							
IP710-X15	\$450	3 to 15 psi	0.100/	10 kΩ	1.5 scfh @ mid-range	20 to 100	4.5 scfh @ 25 psig 12 scfm @ 100 psig
IP710-X100	475	2 to 100 psi	±0.10% span		4.5 scfm @ mid-range	105 to 130	20 scfm @ 130 psig

^{*} Accuracy includes linearity, hysteresis and repeatability

To order with DIN connector, add suffix "-D" to model number and \$15 to price.

Comes complete with mounting bracket and operator's manual.

Ordering Example: IP610-X15, loop powered I/P converter with 3 to 15 psi range and conduit connection, \$320.



Stainless Steel Filter Regulators For Harsh Environments

PRG354 up to 20 scfm PRG352 up to 160 scfm

> **PRG350 Series** Starts at



- ✓ All 316 Stainless Steel Construction
- High Flow Capacity
- ✓ Tapped Exhaust Port for **Remote Venting**
- Minimal Air Consumption
- 25 Micron Filter

The PRG350 Series of stainless steel filter regulators are designed to stand up to the harshest environments while providing highly accurate pressure regulation. Proven 316 stainless steel housing and filter assemblies along with fluorocarbon elastomers make the PRG350 compatible with sour gas and adaptable to off shore environments.



MOST POPULAR MODELS LISTED!

To Order (Specify Model Number)						
		Output Pressure Range				
Model No.	Price	psi	bar			
1/4 NPT Pressure Ports						
PRG354-30	\$365	0 to 30	0 to 2.1			
PRG354-100			0 to 6.9			
½ NPT Pressure Ports						
PRG352-100	\$505	0 to 100	0 to 6.9			

Comes complete with operator's manual.

Ordering Example: PRG354-30, stainless steel pressure regulator with 0 to 30 psi range and 1/4 NPT ports. \$365.

Precision Air Pressure Regulator For Accurate, Stable Pressure Control

14 scfm at 100 psi

PRG200 Series Starts at



- Accurate Pressure Regulation to Within 0.1%
- Stable Output Across **Full Flow Range**
- High Relief Capacity
- ✓ Locking Nut Included
- Built In Gauge Ports

The PRG200 Series is a high precision multi-stage regulator, which provides the highest level of regulation accuracy and repeatability available. A stainless

steel measuring capsule is used as a sensing element to activate the high gain servo balanced control mechanism in which the main valve is controlled by a pilot valve. This allows for greater accuracy and eliminates many of the problems associated with conventional regulators using range springs and diaphragms.

For Complete Details Visit omega.com/prg200

> PRG200-40, \$100, shown smaller



AVAILABLE FOR FAST DELIVERY!

To Order (Specify Model Number)						
		Output Pressure Range				
Model No.	Price	psi	bar			
PRG200-25	\$125	0.5 to 25	0.03 to 1.72			
PRG200-40	100	2 to 40	0.14 to 2.76			
PRG200-60	100	2 to 60	0.14 to 4.14			
PRG200-120	100	2 to 120	0.14 to 8.27			
High Relief Model						
PRG200-120H	\$115	2 to 120	0.14 to 8.27			

Comes complete with operator's manual.

Ordering Example: PRG200-60, precision air pressure regulator, 2 to 60 psi (0.14 to 4.14 bar), \$100.

Economical Digital Force GagesWith 0.5% Full Scale Accuracy

\$630 All Models



- User Selectable Units of Measure
- ✓ Accuracy ±0.5% of Full Scale
- NIST Calibration Certificate Included
- Selectable Display Languages
- Battery Operated with Automatic Shutoff
- ✓ 115/230 Vac Adaptor with US/EUR/UK Plugs Included

OMEGAs DFG21 Series is an economical digital force gage ideal for applications where users are interested in basic peak force measurement. It is available in four capacities (10, 50, 100, and 200 lbf) and features a measurement accuracy of better than 0.5% full scale. The DFG21 operates using two 9 Vdc alkaline batteries or using the universal battery eliminator. A large, easy-to-read, high resolution dot matrix LCD supports a variety of standard gage functions including normal and peak readings. Loads are displayed in ozf, gf, lbf, kgf and Newtons and the display language may be set-up to indicate in English, Spanish, French, German, Portuguese and Chinese.



MOST POPULAR MODELS LISTED!

To Order (Specify Model Number)						
		Range vs Resolution				
Model No.	Price	_ <u>_</u> _	g	lb	kg	Newton
DFG21-10						50 x 0.005
DFG21-100	630	1600 x 2	50,000 x 50	100 x 0.1	50 x 0.05	500 x 0.5

Comes complete with a hard carrying case, two 9 Vdc batteries, universal battery eliminator, hook, flat tip, calibration certificate, and operator's manual.

Ordering Example: DFG21-10, 10 lb digital force gage, \$630.

Electronically Controlled Proportioning Valves

PV Series Starts at

\$920





- Precision Control is Achieved via a 10-Bit Converter Controlling a 200 Stepper Revolution Motor
- Rugged Construction for Industrial Applications

External Safety Override Contacts to Open/Close Valve

For Complete

Details Visit

omega.com/ pv_valves

✓ NEMA 4 (IP65) Rating for Outdoor Use

Ideal for Liquid and Gas Applications

Brass or Stainless Steel Body Available

ride ose Valve of for PV14-SS, \$1145, shown much smaller than actual size.

MOST POPULAR MODELS LISTED!

To Order (Specify Model Number)						
Model No.	Price	Valve Size mm (in)	Fitting Size	C _v	Max Flow @ 50 psi	Body Material
PV14-B	\$920	6.35 (1/4)	½ NPT	0.6	4 GPM	Brass
PV38-B	950	9.53 (%)	½ NPT	1.7	12 GPM	Brass
PV12-B	1140	12.70 (1/2)	3/4 NPT	3.5	24 GPM	Brass
PV12-SS	1420	12.70 (1/2)	3/4 NPT	3.5	24 GPM	316 SS
PV34-B	1510	19.05 (¾)	1 NPT	6.5	45 GPM	Brass

Comes complete with operator's manual.

Ordering Example: PV14-B, 4 GPM brass proportioning valve, \$920.

High-Accuracy Portable, Pressure Calibrators With Built-In Pneumatic Pressure Pump

PCL810 Series Starts at









- ✓ 0.025% FS Accuracy
- Calibration Certified to **International Standards**
- ✓ Integral Pressure/ Vacuum Pumps
- Dual Backlit Display of Output Pressure and Electrical Input
- Test with Auto Step and Ramp
- USB Interface with SD Card Data Storage
- Multilingual Display
- Available Built-In WiFi Option

For Complete Details Visit omega.com/ pc1810





PCL810PC-300, \$2950, shown smaller than actual size.



MOST POPULAR MODELS LISTED!

To Order (Specify Model Number)					
Model No.	Price	Range (psi)	Description		
PCL810PC-300	\$2950	-15 to 300	Electric/pneumatic pressure calibrator		
PCL810HC-3K	4190	0 to 3000	Hydraulic pressure calibrator		

Comes complete with carrying case, 6 "C" rechargeable batteries, charger, calibration certificate, SD card, USB cable, user software, and operator's manual. Visit omega.com/pcl810 for remote sensor ranges.

Ordering Example: PCL810PC-300-W, -15 to 300 psi calibrator with WiFi option,

Very High Accuracy Digital Pressure Gauge 316 SS Body, Analog Output and Optional Wireless Transmitter

DPG409 Series Starts at

1 YEAR NIST WARRANTY Standard

- ✓ Large Backlit Display with 25 mm (1") Digits **Readable From Over** 10.7 m (35')
- High Accuracy and Repeatability
- ✓ Ranges From 10 inH₂O to 5000 psi (25 mb to 345 bar)
- ✓ All Stainless Steel **Wetted Parts**

Charting and Data Logging Software Included FREE with Wireless Option

> **For Complete** Details Visit omega.com/ dpg409

- Gage and Absolute **Pressure Models**
- or 0 to 10V Analog Output Standard
- Free Setup and **Calibration Software** with USB Connection
- Optional Wireless Transmitter Available
- Long Battery Life



DPG409-500G-W, \$795, shown actual size.







Paddlewheel Flow and Temperature Sensor/ Transmitter System

> FP7002A Starts at \$365



























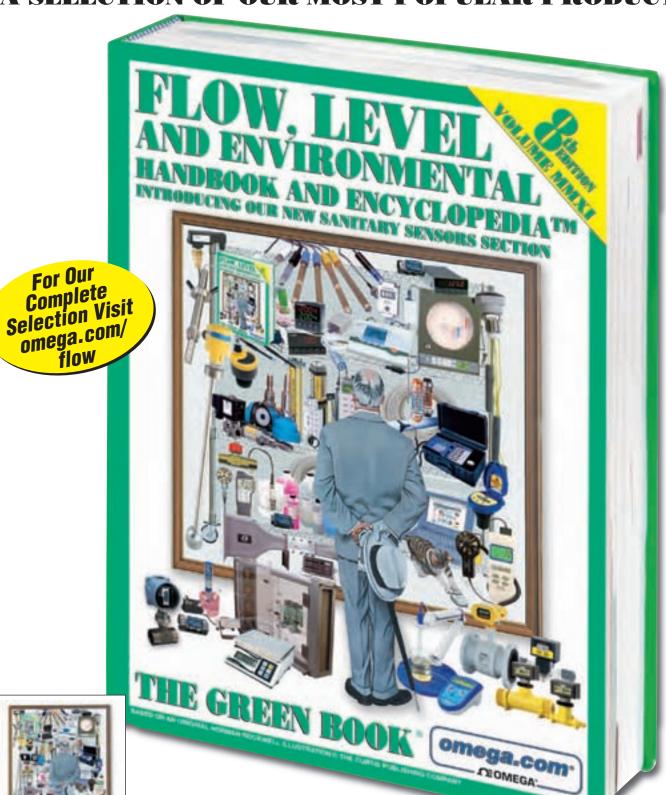








A SELECTION OF OUR MOST POPULAR PRODUCTS



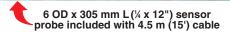


For Our

Cover Art: Based on an Original Norman Rockwell Illustration © The Curtis Publishing Company

General Purpose Industrial Air Velocity/Temperature Transmitter/Indicator





FMA1000 Series Starts at

\$665



USA







HHF1000 Wireless Handheld Version on Page 146

- Measures Air Velocities up to 50.8 m/sec (10,000 FPM)
- Measures Air Temperature up to 121°C (250°F)
- ✓ High Temperature Model Measures Air Temperature up to 171°C (340°F)
- ✓ 1.5% Full Scale Accuracy (Velocity)
- ✓ 0.5% Full Scale Accuracy (Temperature)
- Hot Wire Air Velocity Sensor Design
- ✓ 250 msec Response Time Programmable up to 2 Seconds
- ✓ Large Backlit LCD Displays Air Velocity and Air Temperature Simultaneously





FMA1001R-V1, \$695, shown smaller than actual size.

- Dual Linear Analog Outputs for Air Velocity and Temperature
- ✓ USB PC Interface with Windows® Based PC Software
- ✓ NEMA 4 (IP65) Industrial Enclosure

For a video of this product visit omega.com/video.

Economical, Laboratory-Grade Benchtop
Mini Wind Tunnel

\$2995



✓ 4 Selectable
 Air Speeds:
 2.5 m/s (492 fpm)
 5.0 m/s (984 fpm)
 10 m/s (1969 fpm)
 15 m/s (2953 fpm)



Accommodates Either Hot Wire or Vane Type Anemometers

- ✓ 10 cm (4") Diameter Internal Test Chamber
- Accuracy of 1% of Settings or 0.1 m/s, Whichever is Greater
- Remote Option for Variable Air Speed
- ✓ NIST Calibration Certificate Supplied
- Operates from 90 to 250 Vac Line Power

included and HHF11A anemometer, \$315, sold separately, shown smaller than actual size.

High-Performance Wind Tunnel For Thermal Evaluation of Circuit Boards, Heat Sinks, Components and Air Velocity Sensor Calibrations



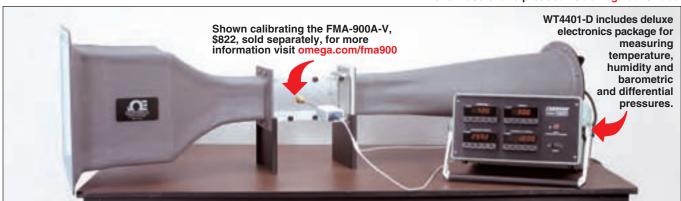
OMEGA's Laboratory-Grade Benchtop Wind Tunnel

\$11,700





For a video of this product visit omega.com/video.



- Precise Motor Control for Adjusting Flowrates
- ✓ NIST Calibration Supplied with Each Wind Tunnel
- Highly Accurate to 1% of Reading
- Large 101.6 x 101.6 mm (4 x 4") Test Chamber
- ✓ Fully Instrumented

Velocity and Temperature Measurement System

> TVS-1000 Series Starts at



- ✓ Flexible Sensors
- ✓ Thin Low Profile for Minimal Flow Disturbance
- High Accuracy
- Air Velocity and Temperature Measurements in One Sensor
- Research Quality Results

The TVS-1000 series employ patented, fast response, omni-directional sensors, which measure both temperature and velocity. Each precisely calibrated sensor is flexible and robust with a low-profile configuration that allows minimally intrusive mounting throughout the peaks and valleys created by the PCB components. These systems require a PC to operate.



The TVS-1004 Series is Supplied with One Miniature Candlestick Sensor for Each Channel.

MOST POPULAR MODELS LISTED!

LDH-380, \$169, with

39 cm (15") flexible

stainless'steel probe.

To Order (Specify Model Number)		
Model No.	Price	Description
TVS-1004	\$3025	Scanner, 4 velocity/temperature sensors and software
TVS-1108	6791	Scanner, 8 velocity/temperature sensors and software (factory expandable)

Comes complete with calibrated sensors, scanner, analysis software, power cord and operator's manual. Ordering Example: TVS-1004, 4-channel with velocity/temperature sensors, and software, \$3025.

Refrigerant Leak Detector

LDH-380 **\$169**



- Microprocessor Control with Advanced Digital Signal Processing
- ✓ Multi-Color Visual Display
- ✓ High-Low Leak Sensitivity Selector
- Semiconductor Gas Sensor
- Detection of R-134A. R-410A, R-407C and **R22 Freon Gases**

✓ Reference Leak Source Included

Ambient Concentration Reset

The LDH-380 refrigerant leakage detector is the perfect tool for maintaining the air-condition or a cooling system with compressor and refrigerant. This unit uses a newly developed semi-conductor sensor which is extremely sensitive to variety of general refrigerants.

AVAILABLE FOR FAST DELIVERY!

To Order (Specify Model Number) Model No. Price **Description** LDH-380 \$169 Handheld refrigerant leak detector

For Complete Details Visit omega.com/ Idh-380

Comes complete with 4 "AA" alkaline batteries, operator's manual, leak check bottle and carrying case.

Ordering Example: LDH-380, refrigerant leak detector for R-134A, R410A, R-407C, and R22 Freon gas, **\$169.**





Handheld Air Velocity/ Temperature **Meter with Wireless Option**

HHF1000 Series Starts at



- Measures Air Velocities up to 5000 FPM (25.4 m/sec)
- Measures Air Temperature up to 250°C (121°F)
- ✓ 1.5% Full Scale Accuracy (Velocity)
- ✓ 0.5% Full Scale Accuracy (Temperature)
- ✓ Two Sensor Probe Configurations—Fixed **Probe and Remote** Telescopic Probe
- ✓ Hot Wire Air Velocity **Sensor Design**
- ✓ Economical 6 OD x 305 mm L (¼ x 12") **Insertion Probe Design**

Large, Easy to Read Backlit LCD



- Backlit LCD Displays Air Velocity and Air **Temperature** Simultaneously
- Air Velocity and Air Temperature Can be **Displayed in Different Engineering Units Temperature**
- ✓ Volume Air Flow Calculation



MOST POPULAR MODELS LISTED!

For Complete **Details Visit**

omega.com/ fst1000

To Order (Specify Model Number)			
Model No.	Price	Range FPM (m/sec)	Description
HHF1001R	\$480	0 to 5000 (0 to 25.4)	Air velocity/temperature meter, remote telescopic probe
HHF1001A-W*			Air velocity/temperature meter, fixed probe, wireless

Comes complete with (12") long sensor probe (or remote telescopic probe), 9V lithium battery, USB cable, Windows based data logging software, and operator's manual.

* UWTC-REC1 wireless receiver is required for wireless PC interface.

Ordering Example: HHF1001A-W, wireless air velocity/temperature meter, 0 to 5000 FPM range, fixed probe, and UWTC-REC1 wireless receiver, \$495 + 225 = \$720.

Economical Air Flow Switch

FST1000 Series Starts at



- Air Velocity Range up to 10,000 FPM (50.8 m/sec)
- ✓ 2% Full Scale Accuracy
- Two Sensor Probe Configurations—Fixed **Probe and Remote Probe**
- Hot Wire Air Velocity Sensor Design
- Adjustable High and Low Alarm Set-Points
- ✓ Two SPST Alarm Contact Closures with Red LED Indicators
- Used in HVAC Monitoring, Exhaust/ Ventilation Hoods



FST1001A, \$265.

Thermal Flow Switches

FSW-420/30 Series Starts at \$205







- Automatic Scaling and Setpoint
- ✓ No Moving Parts
- Pushbutton Re-Scaling if Needed
- Easy to Install

The FSW-420/30 Series monitors your relative flow rate for applications where the actual flow rate is not important. The FSW-420/30 series is easy to install and use. Just put it into the pipe and it's ready to go. The FSW-420/30 series sets your present flow-rate at 100% at power up. Relative flow rate is indicated by the 7 LED lights. When the flow rate drops to 50%, an alarm goes off. If you prefer, you can adjust the alarm point to fit your needs. A green output indicating LED is also included.



Electromagnetic Low Flowmeter

FMG70 Series Starts at

\$1000



- ✓ No Moving Parts
- ✓ No Flow Obstructions
- ✓ Maintenance-Free
- ✓ Fast Response Time (< 500 ms)
 </p>
- Minimal Straight Pipe Requirements

The FMG70 series from OMEGA is a trio of extremely compact, low cost, inductive magnetic flow sensors.

Changes of temperature, density, viscosity, concentration or electrical conductivity (minimum conductivity of 50 S/cm) of the fluid do not affect the output signal.





FMG71, \$1000, shown smaller than actual size.

FMG70 series can be used in areas where flow sensors with moving parts cannot be applied due to contamination/particulate in the media.

The output signal frequency or current ("-A" models) is proportional to the flow.



Micro-Flow Meter

For Complete Details Visit omega.com/ ftb300_series

FTB300 Series Starts at









MICRO-FLO

- ✓ NEMA 4X (IP56) **Enclosure**
- ✓ 6-Digit LCD
- Displays both Rate and Total
- Non-Volatile **Programming and Total**

The FTB300 Series of digital paddle wheels are an economical choice for low flow rate applications. They use Infra-red light beam technology. Available connections include ½ FNPT, ¼ FNPT and ¾" OD tube fittings. Six available flow ranges as low as 30mL/min to

7000 mL/min. Models without a display have a 5 Vdc current sinking pulse output. Units with displays have a 6-digit LCD, with up to 4 decimal positions that display both flow rate and total. All units include an open collector alarm output.

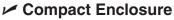
Transit-Time Ultrasonic Flowmeter

FDT-30 Series Starts at









Large Digital Display

✓ 4 to 20 mA, TTL and Turbine Simulated Outputs

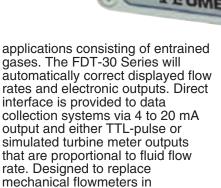
Rate and Total Displays

Clean Liquid Compatible

The FDT-30 Series provides easy and low cost installation by clamping to the outside of existing piping systems. Non-invasive transit time system allows solids to pass through the pipe with no affect on the meter. Y-strainers or filtering devices are not needed. Greater accuracy can be attained in

For Complete Details Visit omega.com/ fdt-30_series

> FDT-31, \$1277, shown smaller than actual size.



mechanical flow meter operation. No maintenance is required. The FDT-30 Series can be used on applications such as well water and other liquids with moderate amounts of suspended solids or aeration.

FDT-30 Series is housed in an enclosure suitable for outdoor mounting. Integral mount transducers are available for pipes 50 mm (2") and smaller.



applications where liquid conditions

tend to damage or impede

Digital Paddlewheel Meters

FP2000 Series Starts at

\$283



- ✓ Integral 6 Digit Display
- Models Available for Rate, Total or Rate and Total Flow
- ✓ For Pipe Sizes from 10 to 51 mm (¾ to 2"), 0.4 to 200 GPM
- Long Life Battery Operation (Batteries Included
- ✓ Low Pressure Drop Design
- Available with Polypropylene or PVDF Construction



The FP2000 Series is a family of economical paddlewheel sensors with integral 6-digit display. The FP2000-R models are rate indicators, while the FP2000-RT models indicate rate and total flow. Also available, the FP2000-T

display the total flow only. These units are battery power, with two "AAA" size batteries lasting up to a year. The FP2000 units feature a PVDF paddlewheel, with either polypropylene or PVDF piping.

Economical Liquid Turbine Flowmeters

Starts at
\$337

MADE IN TYEAR WARRANTY

Standard

FTB-1425, \$337.

For Complete Details Visit omega.com/ftb1400_series

Cost-Effective Solution for Turbine Flowmeter Applications

Rugged 316 Stainless Steel Construction Offers Long Service Life in Severe Operating Environments

- Accurate and Repeatable Flow Measurement
- ✓ Installation in Pipe Sizes from ½ to 2"

Flow Monitor
Digital Displays
For FTB-1400

Series Turbines

\$1400-D Starts at \$333









GPM

- Displays Rate and/or Total
- ✓ Large 8 Digit by ¾" Display for Easy Viewing
- ✓ One "D" 1.5V Alkaline Battery (Included) for Up to 3½ Years of Service
- User Friendly Front Panel Programming
- ✓ NEMA 4X (IP66) Enclosure
- Meter, Remote, or Swivel Mount Configurations

Benchtop Dissolved Oxygen Kit

DOB21 1008



✓ Scale Change in Auto-Range

✓ Auto Calibration of All Parameters

Automatic Temperature Compensation

Salinity and Barometric Pressure Compensation

- ✓ Data Logging up to 99 Points
- **∠** BOD Capability
- ✓ Zero and Span Auto Calibration
- **✓** RS232 Output

The DOB21 is a compact benchtop dissolved oxygen meter and a amperometric dissolved oxygen probe with automatictemperature compensation for field or laboratory applications.

The unit measures dissolved oxygen in ppm or percent saturation and temperature in degrees Celsius. Programming is conveniently done via a three button keypad and stored in the non-volatile memory. The unit also includes an audible minimum and maximum alarm. The DOB21 kit is supplied with the dissolved oxygen probe, a cell maintenance kit, BOD kit and operator's manual all in a hard carrying case.



AVAILABLE FOR FAST DELIVERY!

To Order (Specify Model Number)		
		Description
DOB21	\$1008	Benchtop dissolved oxygen kit

Comes complete with 1 dissolved oxygen probe, 1 cell maintenance kit, BOD kit, hard carrying case, 9V battery, and operator's manual. Ordering Example: DOB21, dissolved oxygen kit, CDH-30PW, AC power adaptor, \$1008 + 65 = \$1073.

pH/mV Benchtop Meter



Automatic Resolution Selection

Automatic Electrode Check

Maximum and Minimum Audible Alarm

Automatic Buffer Recognition

99 Points Data Logging

✓ RS232 Output for PC or Printer

The PHB21 is has a non-volatile memory (E2PROM), that stores your set-up values. Even under a loss of power condition your records are maintained. The menus are self-explanatory for easy operation and programmed from a simple 3-key face. The PHB21 benchtop meters also have advanced features like automatic electrode check and battery status displays. The displayed readings can be continuous, held or logged to memory. A user programmable audible alarm is included for minimum and maximum alerts.



AVAILABLE FOR FAST DELIVERY!

To Order (Specify Model Number)

Model No. Price Description

PHB21 \$660 Benchtop pH, mV and temperature meter

Comes complete with glass electrode, calibration buffers (4 and 7), 9V battery, operator's manual (CD) and carrying case.

Ordering Example: PHB21, benchtop PH, mV and temperature meter, **CDH-30PW**, 110/220 Vac power adaptor, \$660 + 65 = **\$725**.

150

Complete Water Treatment Controller Systems

CDCN13 Series Starts at

\$2550





CDCN13, \$2550, shown smaller than actual size.

✓ Six Feed Programs for 4 Chemical Additives

Water Test for Alkalinity and Hardness

Options Include:

- pH Control
- ORP Monitoring and Control
- ✓ 4 to 20 mA Analog Outputs
- ✓ RS485 Communications

The CDCN13 is a fully programmable controller designed for complete chemical automation (conductivity, pH and ORP) as well as control of chemical additives. This controller can easily handle cooling tower, boiler, industrial process water, food processing, drinking water and wastewater treatment applications. Engineering units can be displayed in either US or metric values using the 16-button

keypad and the large, 8-line LCD readout with simple scroll-through menus. The CDCN13 has 8 control relay outputs, for up to 4 chemical additives, fill valve, bleed valve, probe rinse, and remote alarm. Standard features also include dynamic probe failure testing for pH/ORP sensors, so the user can avoid dangerous out-of range conditions.



MOST POPULAR MODELS LISTED!

To Order (Specify Model Number)			
Model No.	Price	Input	Communications
CDCN13	\$2550	Conductivity	RS232
CDCN13-PH-A	3750	Conductivity/pH	RS232, 4 to 20 mA

Comes complete with operator's manual and 3V lithium battery. Probes sold separately. **Note:** When ordering the conductivty or pH controller, it is recommended to purchase pH buffer solution, such as PHA-7, pH buffer 7 and conductivity standard solution, such as CDSA-1413, 1413 µS/cm.

Ordering Example: CDCN13, conductivity controller, CDE10, conductivity sensor, CDSA-1413, conductivity standard solution, 1413 μ S/cm, \$2550 + 285 + 23 = \$2858.

Toroidal Conductivity or Concentration Analyzer

\$925



- ✓ NEMA 4X (IP68)
- ✓ 2 x 16 Digit LCD Readout
- ✓ Assembly in 51 mm (2") Tube or Flat Surface or Panel 144 x 144 x 100 mm DIN (5.7 x 5.7 x 4")
- ✓ Simple 3 Key Operation
- ✓ Cell Check
- ✓ RS485 Output MODBUS® and Proprietary Communication Protocol

The CDCN442 toroidal conductivity system is designed for online monitoring of chemically aggressive process solutions, water applications that coat or foul traditional sensors, and plating bath operations in which high current densities are present. Typical applications include waste water treatment, power plants, thermo electric plants, pharmaceutical, photographic industries, soft drinks industries.



AVAILABLE FOR FAST DELIVERY!

To Order (Specify Model Number)		
Model No.	Price	Description
CDCN442	\$925	Conductivity and concentration analyzer
CDE-442	660	Toroidal conductivity cell (1 required)
CDSA-10	50	10 μS conductivity solution

Comes complete with operator's manual, hardware for 51 mm (2") tube installation, and wall mount brackets (sensor sold separately).

Ordering Example: CDCN44, toroidal conductivity analyzer, and CDE-442, toroidal conductivity cell, \$925 + 660 = \$1585.



OMEGAFLEX® Peristaltic Pump and Pump Motor

FPU5-MT Series Starts at **\$125**









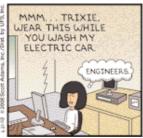
























pH/Temperature Circular Chart **SUPERECORDER**TM

> CTXL-PH **All Models**

















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OMEGA'S ICONS

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This icon indicates the newest state-of-the-art products available.



This icon indicates the length (in years) of the product's standard warranty.



This icon is to indicate that the product's calibration is NIST traceable.



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This icon indicates that this product is also available with SUPER OMEGACLAD® XL hightemperature sheath material. This material offers enhanced sheath performance, which eliminates high-temperature drifts.



This icon indicates that the product has a UL listing.



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This icon indicates that the design and processes used conform to the requirements of 3A standard 74-03.



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EXTENSIVE WARRANTY COVERAGE

Meeting the needs of customers in a timely manner and at a fair price is OMEGA's top priority. Our precision engineering and manufacturing ensure that our equipment will help your process run smoothly. After the sale, we stand 100% behind our products, with warranties that in many cases go beyond industry norms. Our standard and extended (OMEGACARE®) warranty programs guarantee our quality claims. If you need service, OMEGA's loaner program may provide a no-cost replacement while we repair your item.





OMEGA's policy is to make running changes, not model changes, whenever an improvement is possible. This affords our customers the latest in technology and engineering.

CORPORATE QUALITY SYSTEM

OMEGA recognizes that quality is the key to customer satisfaction. As part of our worldwide growth plan, we are committed to improving our products and services, expanding our product lines, strengthening our supplier partnerships, and fostering

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OMEGA maintains the worldwide quality standards set forth by ISO (International Organization for Standardization) through employee training, rigorous internal auditing, structured and controlled







documentation, and all required elements approved by our international accredited registrar. We have been certified as in compliance with the requirements of ISO 9001:2000 for the design, manufacture, and distribution of temperature, flow, pH, heating, data acquisition, pressure, and environmental instruments; for related process equipment, accessories, and custom assemblies; and for provision of calibration services and technical and scientific literature.

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Compliance Testing Services
• EMC • CE • FCC

The OMEGA Family

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