

2011

Rev. 01

TEST & MEASUREMENT INSTRUMENTS

- Cable Testers
- Clamp-On Meters
- Current Measurement Probes
- Data Loggers
- DC Power Supplies
- Decade Boxes
- Digital Multimeters
- Electrical Test Tools
- Environmental Testers
- Ground Resistance Testers
- High Voltage Testers
- Leakage Current Meters and Probes
- Megohmmeters
- Micro-Ohmmeters
- Oscilloscopes
- Power Quality Analyzers, Meters and Loggers
- Transformer Ratiometers
- Other Products from the Chauvin Arnoux Group



Our products are backed by over 100 years of experience in test and measurement equipment, and encompass the latest international standards for quality and safety.

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INSTRUMENTS
CHAUVIN ARNOUX GROUP

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- ◆ If you have difficulty locating a distributor near you, contact AEMC® Instruments or your local AEMC® Instruments sales representative or check www.aemc.com for a distributor in your area by clicking on the "Where to Order" tab:

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- ◆ For Ordering Information:

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Dover, NH 03820 USA
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- ◆ Direct Export Department Lines:

(978) 526-7667 • Fax (978) 526-7605

- ◆ When ordering, please use the catalog number and product description.

Example:

Quantity	Catalog #	Description
1	2117.61	Ground Resistance Tester Model 3731 (Clamp-On) with memory and alarm

- ◆ A separate price list is available. Contact your AEMC® Instruments distributor or AEMC® Instruments for an up-to-date copy.
- ◆ AEMC® Instruments reserves the right to discontinue models at any time, or change specifications, price or design without notice and without incurring any obligation. Please contact us, your local representative, agent or distributor for updates.

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Digital/Analog Megohmmeter Models 1030, 1040 & 1045

For motors, cables, switchgear and general applications

Features

- True Megohmmeter®
- Test voltage combinations of 250V, 500V and 1000V
- Insulation measurements to 2000MΩ (2GΩ)
- Automatic test inhibition (if live sample >25V)
- Automatic discharge for operator safety
- Multi-line 4000-count backlit digital display with analog bargraph
- Resistance measurements to 400kΩ
- Continuity with 200mA test current
- Timer function for easy DAR and PI (Model 1045)
- Slip-proof over-molded protective rubber housing for rugged field use
- EN 61010-1, 300V CAT II, EN 61557
- Includes test leads and soft carrying case (see page 3)



SPECIFICATIONS

MODELS	1030	1040	1045	
INSULATION TESTS				
Test Voltage	250V	50kΩ to 2000MΩ (2GΩ)	–	50kΩ to 2000MΩ (2GΩ)
	500V	100kΩ to 2000MΩ (2GΩ)	100kΩ to 2000MΩ (2GΩ)	100kΩ to 2000MΩ (2GΩ)
	1000V	–	200kΩ to 2000MΩ (2GΩ)	200kΩ to 2000MΩ (2GΩ)
Short Circuit Current	≤3mA			
Accuracy	<40MΩ	±3% of Reading ± 5cts		
	≥40MΩ	±3% of Reading ± 2cts		
Voltage Test/Safety Check	0 to 600VAc/dc			
Voltage Warning Indicator	>25V			
Test Inhibition	Yes >25V			
RESISTANCE TESTS (MODELS 1040 AND 1045)				
Measurement Range	–	0.0 to 400kΩ		
Test Voltage	–	7 to 9V		
Test Current	–	600μA		
Accuracy	>4kΩ	–	±3% of Reading ± 1ct	
CONTINUITY TESTS				
Measurement Range	0.00 to 19.99Ω			
Test Current	≥200mA			
Accuracy	±3% of Reading ± 1ct			
ELECTRICAL				
Power Source	6 x 1.5V AA Alkaline batteries (included)			



Hands-free carrying case
Catalog #2118.99



Field kits include megohmmeter, field case, two color-coded leads, black test probe, two alligator clips, remote test probe, batteries and user manual.

CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2116.89	Megohmmeter Model 1030 (Digital, with Analog Bargraph, 250V, 500V)	\$499.00	\$75.00
2116.92	Megohmmeter Model 1040 (Digital, with Analog Bargraph, Alarm, Backlight, 500V, 1000V, 400kΩ, Continuity)	\$579.00	\$94.00
2116.93	Megohmmeter Model 1045 (Digital, with Analog Bargraph, Alarm, Timer, Backlight, 250V, 500V, 1000V, 400kΩ, Continuity)	\$649.00	\$94.00
2117.30	Megohmmeter Model 1040 Field Kit	\$889.00	\$94.00
2117.31	Megohmmeter Model 1045 Field Kit	\$949.00	\$94.00
Accessories (Optional)			
2118.97	Remote Test Probe	\$194.00	–
2118.98	Field Case (Waterproof)	\$160.00	–
2118.99	Hands-Free Carrying Case	\$ 75.00	–

Multi-Function Voice, Data, Video Cable Testing Megohmmeter Models 1035 & 1039

For voice, data and video cable applications

Features

Common features with Models 1030, 1040 & 1045, plus:

- True Megohmmeter®
- Test voltage combinations of 50V, 100V, 250V and 500V
- Insulation measurement to 20,000MΩ (20GΩ) (Model 1035)
- Insulation measurement to 400MΩ (Model 1039)
- Capacitance measurement to 4000nF (Model 1039)
- Cable length measurement to 80.0km (>264,000 ft) (Model 1039)
- Ideal for telecom testing and high sensitivity measurements
- EN 61010-1, 600V CAT III, EN 61557



Test leads, soft carrying case and user manual included.

Field kits include megohmmeter, field case, three color-coded leads, black test probe, three alligator clips, two grip probes, remote test probe, batteries and user manual.

SPECIFICATIONS			
MODELS		1035	1039
INSULATION TESTS			
Test Voltage	50V	10kΩ to 2000MΩ (2GΩ)	10kΩ to 400MΩ
	100V	20kΩ to 2000MΩ (2GΩ)	20kΩ to 400MΩ
	250V	50kΩ to 20,000MΩ (20GΩ)	-
	500V	100kΩ to 20,000MΩ (20GΩ)	-
Open Circuit Voltage		<75V @ 50V, <150V @ 100V, <375V @ 250V, <750V @ 500V	
Short Circuit Current		≤3mA	
Accuracy		±3% of Reading ± 5cts	
Voltage Test/Safety Check		0 to 600Vac/dc	
Voltage Warning Indicator		>25V	
Test Inhibition		Yes >25V	
RESISTANCE TESTS			
Measurement Range		0.0 to 400kΩ	0.0 to 40.0kΩ
Test Voltage		7 to 9V	7 to 9V
Test Current		600µA < 400Ω; 6µA > 40Ω	600µA < 400Ω
Accuracy	>400kΩ	±3% of Reading ± 1ct	±3% of Reading ± 1ct
CURRENT TESTS			
AC Current Range		-	0.00 to 400mA (240A) (with probe option)
CAPACITANCE/CABLE LENGTH			
Capacitance Range		-	0.00 to 4000nF
Cable Length Range		-	0.000 to 80.0km
VOLTAGE TESTS			
Measurement Range		-	0 to 400Vac
Accuracy		-	±3% of Reading ± 1ct
ELECTRICAL			
Power Source		6 x 1.5V AA Alkaline batteries (included)	

CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2116.90	Megohmmeter Model 1035 (Digital, with Analog Bargraph, Alarm, Backlight, 50V, 100V, 250V, 500V, 400kΩ)	\$699.00	\$94.00
2116.91	Megohmmeter Model 1039 (Digital, with Analog Bargraph, Alarm, ΔRel, Backlight, 50V, 100V, mA, nF, km)	\$799.00	\$94.00
2115.42	Megohmmeter Model 1035 Field Kit	\$999.00	\$94.00
Accessories (Optional)			
2118.97	Remote Test Probe	\$194.00	-
2118.98	Field Case (Waterproof)	\$160.00	-
2118.99	Hands-Free Carrying Case	\$ 75.00	-



1000V Digital/Analog Megohmmeter Models 1050 & 1060



Model 1060



SPECIFICATIONS

MODELS	1050	1060
INSULATION TESTS		
Test Voltage	50V 100V 250V 500V 1000V	2kΩ to 200GΩ 4kΩ to 400GΩ 10kΩ to 1000GΩ (1TΩ) 20kΩ to 2000GΩ (2TΩ) 40kΩ to 4000GΩ (4TΩ)
Accuracy	2kΩ to 400GΩ 400GΩ to 4TΩ	±5% of Reading ± 3cts ±5% of Reading ± 10cts
Voltage Test/Safety Check		0 to 1000VAc/dc
Voltage Warning Indicator		>25V
Test Inhibition		Yes >25V
Smooth Function		Yes
RESISTANCE TESTS		
Measurement Range		0.01Ω to 400kΩ
Test Voltage		12.4Vdc max
Test Current		<6mAac
Accuracy		±3% of Reading ± 3cts
CONTINUITY TESTS		
Measurement Range		0.01 to 39.99Ω
Test Current		≥200mA from 0.01 to 20.00Ω
Accuracy		±3% of Reading ± 4cts
COMMUNICATION		
Memory of Reading over Time R(t)	Yes (20 Readings)	Yes (128kB memory)
Report Print Out Direct to Printer	No	Preset format
Memory of Test Results in Files	No	128kB memory with RS-232
PC Software/Report Generation	No	DataView® (included)
ELECTRICAL		
Power Source	Eight 1.5V C Cells (included)	9.6V NiMH Battery Pack (included) 85 to 256V (50/60Hz)

Features

- True Megohmmeter®
- Test voltage selections of 50V, 100V, 250V, 500V and 1000V
- Insulation measurements to 4000GΩ (4TΩ)
- Direct measurement of DAR and PI values
- Direct measurement of sample Capacitance
- Display of test voltage and run time
- Programmable test run times and PI times
- Smooth and Alarm functions
- Automatic test inhibition (if live sample >25V)
- Automatic discharge and display of discharge voltage
- Large dual display with time, voltage and measurement
- Bright blue electroluminescent backlight
- Battery powered (Model 1050)
- Auto power-down when not in use
- Remote operation with optional test probe
- Rugged, dual wall, weatherproof field case with detachable lead/accessory pouch
- EN 61010-1, 600V CAT III, EN 61557

Model 1060 includes the following additional features:

- AC rechargeable NiMH battery pack
- RS-232 interface to DataView® for easy report printing
- 128kB memory to store measurements in specific files
- Remote operation of megohmmeter through PC
- Includes DataView® software for data storage, real-time display, analysis and report generation



Models 1050 and 1060 include detachable accessory pouch including one red, one blue test lead, one black shielded lead, one each black, red and blue alligator clips, one black test probe and user manual. Model 1060 also includes PC RS-232, DB9 F/F 6 ft null modem cable, rechargeable battery, DataView® software and US 120V power cord.

CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2130.01	Megohmmeter Model 1050 (Digital, with Analog Bargraph, Backlight, Alarm, Timer, 50V, 100V, 250V, 500V, 1000V, Auto DAR/PI, Resistance, Continuity)	\$1,519.00	\$98.00
2130.03	Megohmmeter Model 1060 (Digital, with Analog Bargraph, Backlight, Alarm, Timer, 50V, 100V, 250V, 500V, 1000V, Auto DAR/PI, Resistance, Continuity, RS-232 w/ DataView® software, 128kB Memory)	\$1,899.00	\$98.00
2118.97	Remote Test Probe	\$ 194.00	-

5000V Megohmmeter Model 6505

Features

- True Megohmmeter®
- Simple operation
- Test voltage selections of 500V, 1000V, 2500V and 5000V
- Insulation measurements from 30kΩ to 10TΩ (10,000GΩ)
- Adjustable and programmable test voltage (40 to 5100V)
- Automatic calculation of DAR and PI values
- Direct measurement and display of Capacitance and Leakage Current
- Display resistance, test voltage and run time
- Programmable test run times and PI ratio times
- Automatic test inhibition (if live sample >25V)
- Automatic discharge and display of discharge voltage
- Large backlight LCD dual-display with time, voltage and measurements shown
- Rugged, dual wall, weatherproof field case
- Designed and built to IEC safety standards
- EN 61010-1, 1000V CAT III



Includes Megohmmeter, extra-large classic tool bag, three color-coded leads, three alligator clips, 0.35m guarded jumper cable, batteries and user manual.



SPECIFICATIONS		6505
MODEL		6505
INSULATION TESTS		
Test Voltage/Range	500V 1000V 2500V 5000V	30kΩ to 2000GΩ (2TΩ) 100kΩ to 4000GΩ (4TΩ) 100kΩ to 10,000GΩ (10TΩ) 300kΩ to 10,000GΩ (10TΩ)
User Programmable Test		40 to 1000V: 10V increments 1000 to 5100V: 100V increments
Short Circuit Current		<1.6mA ± 5%
Accuracy	10kΩ to 40GΩ 40GΩ to 10TΩ	±5% of Reading ± 3cts ±15% of Reading ± 10cts
DAR (1 min/30 sec)		0.02 to 50.00
PI (10 min/1 min & user programmable)		0.02 to 50.00
Capacitance Measurement		0.005 to 49.99µF; Max resolution 1nF
Leakage Current Measurement		0.00nA to 3mA; Max resolution 1pA
Programmable Run Time R(t)		1 to 60 minutes
Discharge After Test		Yes, automatic
Discharge Voltage Display		Yes
Voltage Test/Safety Check		0 to 1000VAC/DC (16 to 420Hz); 1V Resolution
Voltage Warning Indicator		Yes >25V
Test Inhibition*		Yes >25V
Guard Terminal		Yes
ELECTRICAL		
Power Source		Eight NiMH rechargeable batteries (included); Line power: 85 to 256VAC (50/60Hz)

*Inhibit voltage is selectable at 3, 10 or 20% of test voltage

CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2130.18	Megohmmeter Model 6505 (Digital, with Analog Bargraph, Backlight, 500V, 1000V, 2500V, 5000V, Auto DAR/PI)	\$2,295.00	\$142.00
Accessories (Optional)			
2119.76	Lead – Set of 3, color-coded 10ft 5kv Safety w/3 color-coded Alligator Clips, for use with Megohmmeter Models 5050/5060/5070/6505	\$ 335.00	–
2119.77	Lead – Replacement, Set of 3, Color-coded 6ft 5KV safety for Megohmmeter Model 6505	\$ 299.00	–
2119.85	Lead – Set of 3, color-coded 10ft 5KV Safety with Integral Hippo Clips, and jumper lead for use with Megohmmeter Model 6505 (replacement for 5050/5060/5070)	\$ 439.00	–
2119.86	Lead – Set of 3, color-coded 25ft 5KV Safety with Integral Hippo Clips for use with Megohmmeter Models 5050/5060/5070/6505 [Jumper lead not included]	\$ 595.00	–
2119.87	Lead – Set of 3, color-coded 45ft 5KV Safety with Integral Hippo Clips for use with Megohmmeter Models 5050/5060/5070/6505 [Jumper lead not included]	\$ 895.00	–



5000V Digital/Analog Megohmmeter Models 5050 & 5060



Features

- True Megohmmeter®
- Test voltage selections of 500V, 1000V, 2500V and 5000V
- Insulation measurements from 30kΩ to 10,000GΩ (10TΩ)
- Selectable and programmable test voltage (40 to 5100V)
- Automatic calculation of DAR, PI and DD ratios
- Direct measurement and display of Capacitance and Leakage Current
- Display resistance, test voltage and run time
- Programmable test run times and PI ratio times
- Smooth and Alarm functions
- Automatic test inhibition (if live sample >25V)
- Automatic discharge and display of discharge voltage
- Large dual display with time, voltage and measurements shown
- Bright blue electroluminescent backlight
- Programmable test voltage lock-out
- Programmable alarm setting
- Auto power-down when not in use
- AC or DC powered with rechargeable NiMH battery pack - run while charging
- Rugged, weatherproof field case
- Designed and built to IEC safety standards
- EN 61010-1, 1000V CAT III

SPECIFICATIONS

MODELS	5050	5060
INSULATION TESTS		
Test Voltage	500V 1000V 2500V 5000V	30kΩ to 2000GΩ (2TΩ) 100kΩ to 4000GΩ (4TΩ) 100kΩ to 10,000GΩ (10TΩ) 300kΩ to 10,000GΩ (10TΩ)
User Selectable Test Voltage	Programmable: 40 to 1000V: 10V increments; 1000 to 5100V: 100V increments	
Automatic Step Voltage	-	
Accuracy	1kΩ to 40GΩ ±5% of Reading ± 3cts 40GΩ to 10TΩ ±15% of Reading ± 10cts	
Voltage Test/Safety Check	0 to 1000VAC/DC	
Voltage Warning Indicator	Yes >25V	
Test Inhibition*	Yes — adjustable from 25 to 1000V depending on test voltage range in use	
Smooth Function (user selectable)	Digital filtering stabilizes display readings	
COMMUNICATION		
Storage of Readings over Time R(t)	4kB memory	128kB memory
Report Print Out Direct to Printer	No	Preset format
Storage of Test Results	20 Readings	Stores over 1500 test results
Communication Port	-	RS-232
PC Software/Report Generation	No	DataView® (included)
ELECTRICAL		
Power Source	Eight 1.2V rechargeable batteries (included) – line power: 85 to 256V (50/60Hz)	

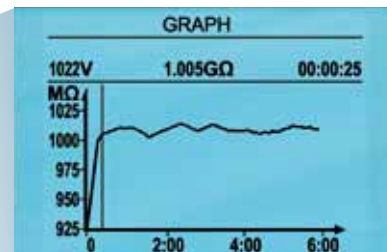
*Inhibit voltage is selectable at 3, 10 or 20% of test voltage

CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2130.20	Megohmmeter Model 5050 (Digital, with Analog Bargraph, Backlight, Alarm, Timer, 500V, 1000V, 2500V, 5000V, Auto DAR/PI/DD)	\$2,795.00	\$ 142.00
2130.21	Megohmmeter Model 5060 (Digital, with Analog Bargraph, Backlight, Alarm, Timer, 500V, 1000V, 2500V, 5000V Auto DAR/PI/DD, RS-232 w/DataView® software)	\$3,195.00	\$ 142.00

5000V Graphical Megohmmeter Model 5070

Features

- True Megohmmeter®
- Test voltage selections of 500V, 1000V, 2500V and 5000V
- Insulation measurements from 30kΩ to 10,000GΩ (10TΩ)
- Selectable and programmable test voltage (40 to 5100V)
- Automatic calculation of DAR, PI and DD ratios
- Direct measurement and display of Capacitance and Leakage Current
- Display resistance, test voltage and run time
- Programmable test run times and PI ratio times
- Smooth and Alarm functions
- Automatic test inhibition (if live sample >25V)
- Automatic discharge and display of discharge voltage
- Graphic and digital display of test voltage, resistance and more
- Bright blue electroluminescent backlight
- Programmable test voltage lock-out
- Programmable alarm setting
- Auto power-down when not in use
- AC or DC powered with rechargeable NiMH battery pack - run while charging
- Rugged, weatherproof field case
- Designed and built to IEC safety standards
- EN 61010-1, 1000V CAT III



Clear and easy to read graphic display of measurement



SPECIFICATIONS		MODEL	5070
INSULATION TESTS			
Test Voltage	500V 1000V 2500V 5000V		30kΩ to 2000GΩ (2TΩ) 100kΩ to 4000GΩ (4TΩ) 100kΩ to 10,000GΩ (10TΩ) 300kΩ to 10,000GΩ (10TΩ)
User Selectable Test Voltage			Programmable: 40 to 1000V: 10V increments; 1000 to 5100V: 100V increments
Automatic Step Voltage			Programmable step voltage and duration up to five steps. Three profiles can be stored.
Accuracy	1kΩ to 40GΩ 40GΩ to 10TΩ		±5% of Reading ± 3cts ±15% of Reading ± 10cts
Voltage Test/Safety Check			0 to 1000V _{AC/DC}
Voltage Warning Indicator			Yes >25V
Test Inhibition*			Yes — adjustable from 25 to 1000V depending on test voltage range in use
Smooth Function (user selectable)			Digital filtering stabilizes display readings
COMMUNICATION			
Storage of Readings over Time R(t)			128kB memory
Report Print Out Direct to Printer			Preset format
Storage of Test Results			Stores over 1500 test results
Communication Port			RS-232
PC Software/Report Generation			DataView® (included)
ELECTRICAL			
Power Source			Eight 1.2V rechargeable batteries (included) – line power: 85 to 256V (50/60Hz)

*Inhibit voltage is selectable at 3, 10 or 20% of test voltage

CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2130.30	Megohmmeter Model 5070 (Graphical, Analog Bargraph, Backlight, Alarm, Timer, 500V, 1000V, 2500V, 5000V, Ramp, Auto DAR/PI/DD, RS-232 w/DataView® software)	\$3,995.00	\$ 142.00
Accessories			
2119.45	Cable, PC RS-232, DB9 F/F 6 ft Null Modem Cable (for use with Models 1060, 5060 & 5070)	\$ 16.95	–
2119.46	Cable, PC RS-232, DB9 F/F 6 ft (for serial printer)	\$ 11.95	–
2119.76	Lead – Set of 3, Color-coded 10 ft 5kV Safety w/3 color-coded Alligator Clips, for use with Megohmmeter Models 5050/5060/5070/6505	\$ 335.00	–
2119.85	Lead – Set of 3, Color-coded 10 ft 5kV Safety with Integral Hippo Clips, and jumper lead for use with Megohmmeter Models 5050/5060/5070/6505	\$ 439.00	–
2119.86	Lead – Set of 3, Color-coded 25 ft 5kV Safety with Integral Hippo Clips for use with Megohmmeter Models 5050/5060/5070/6505 [Jumper lead not included]	\$ 595.00	–
2119.87	Lead – Set of 3, Color-coded 45 ft 5kV Safety with Integral Hippo Clips for use with Megohmmeter Models 5050/5060/5070/6505 [Jumper lead not included]	\$ 895.00	–



FEATURES & FUNCTIONS					
MODELS		6505	5050	5060	5070
Test Voltage	500V	✓	✓	✓	✓
	1000V	✓	✓	✓	✓
	2500V	✓	✓	✓	✓
	5000V	✓	✓	✓	✓
	Selectable 40 to 5100V	✓	✓	✓	✓
Step Voltage		-	-	-	✓
Rechargeable Batteries		✓	✓	✓	✓
AC Powered		✓	✓	✓	✓
Smooth Function		-	✓	✓	✓
Alarm Function		-	✓	✓	✓
Test Voltage Lockout		-	✓	✓	✓
Timer Function		-	✓	✓	✓
Record Function		-	-	✓	✓
Print Function		-	-	✓	✓
Graph Function		-	-	-	✓
Temperature Correction Function		-	-	-	✓
Software Included		-	-	✓	✓

Models 5060 & 5070 include these additional features

- RS-232 interface to DataView® for easy report printing
- 128kB memory for storing extensive field test data
- Configure instrument and run tests from a PC
- Includes DataView® software for data storage, real-time display, analysis and report generation (see page 9)

Model 5070 includes these additional features

- Selectable and programmable test voltage (40 to 5100V) - three can be stored
- Automatic step voltage with programmable step and dwell times - three profiles can be stored, each with up to five steps
- Programmable temperature compensation of resistance readings
- Large graphic display with five line alphanumeric display and graph of all test results

Models 5050, 5060 and 5070 include one red, one blue and one black lead with integral 5kV rated hippo clips, one jumper lead for use with guard terminal, rechargeable battery, US 120V power cord, soft accessory bag and user manual.



Models 5060 and 5070 also include PC RS-232, DB9 F/F 6 ft null modem cable and DataView® software.



DataView®

Data Analysis and Reporting Software for Megohmmeters

Configure all functions of the Megohmmeter Models 1060, 5060 & 5070

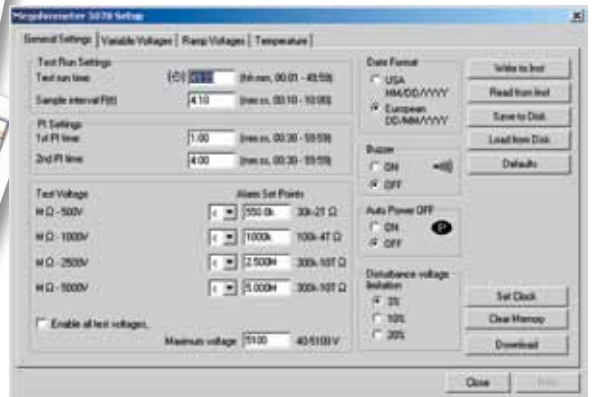
- Print reports of all test results
- Select test voltage and run tests from your computer with a simple click and execute process
- Capture and display data in real time
- Retrieve data from the instrument's memory:
 - Over 1500 insulation resistance measurements
 - Over 4000 resistance measurements
- Display DAR and PI ratios
- Plot graphs of manual and timed tests
- Include your analysis comments section with the report
- Store a library of setups for different applications
- Certification of results through report generation
- Free updates are available on our website www.aemc.com



DataView® software



Clear and easy setup from one dialog box for Model 5060.

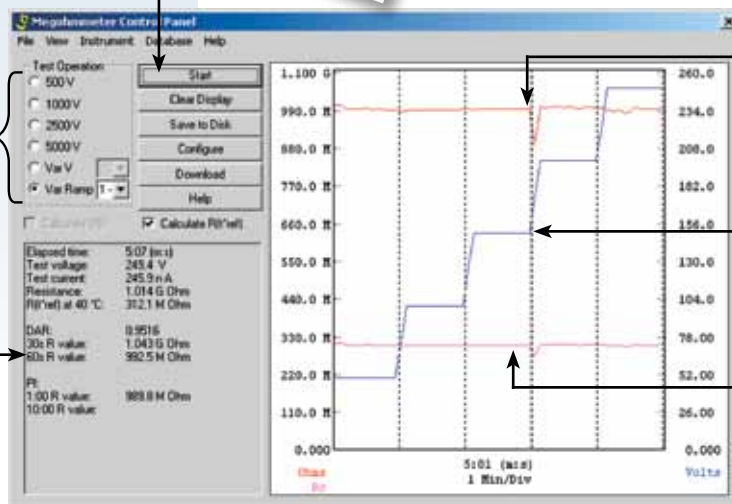


Four tabbed dialog boxes allow for clear and easy setup of all functions of the Model 5070, including setup for variable voltage and alarm set points, as well as step voltage tests and temperature compensation.

One button operation starts test and graphs results

Test voltage selection

Test result status box displays complete test results in real time



Run test and display text and graphical results from one dialog box. Model 5070 also displays step voltage.

1000V Megohmmeter Model 1015



Features

- True Megohmmeter®
- Test voltage selections of 500V or 1000V
- Insulation measurements to 1000MΩ
- Push button for battery check
- Resistance range to 1000Ω
- 0 to 10Ω- and 0 to 10Ω+ continuity ranges
- Continuity measurements with 200mA test current
- Compact and lightweight
- Large, direct-reading, colored scale
- 600V test voltage range (safety check)
- Includes a yellow, non-slip shockproof rubber housing and soft carrying case

SPECIFICATIONS	
MODEL	1015
INSULATION TESTS	
Test Voltage	500V 0.1 to 1000MΩ 1000V 0.1 to 1000MΩ
Short Circuit Current	≤6mA (max)
Accuracy	±5% of Reading
Voltage Test/Safety Check	0 to 600Vac
RESISTANCE TESTS	
Measurement Range	0 to 1000Ω
Short Circuit Current	≥2mA
Open Circuit Current	4.5 to 6.5V
Accuracy	±3% of Full Scale
CONTINUITY TESTS	
Measurement Range	0 to 10Ω-; 0 to 10Ω+
Short Circuit Current	≥200mA
Open Circuit Current	4.5 to 6.5V
Accuracy	±3% of Full Scale
VOLTAGE TESTS	
Measurement Range	0 to 600Vac
Frequency	45 to 400Hz
Accuracy	±3% of Full Scale
Input Impedance	300kΩ
ELECTRICAL	
Power Source	4 x 1.5V AA Alkaline batteries (included)



Model 1015 includes shockproof rubber housing, one set of black and red leads, one black test probe, one red alligator clip, spare fuse (inside Megohmmeter), four 1.5V Alkaline AA batteries, soft carrying case and user manual.

CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
1403.01	Megohmmeter Model 1015 (Analog, 500V, 1000V, Resistance, Continuity)	\$589.00	\$96.00

1000V Digital Megohmmeter Model 1026

Features

- Test voltage selections of 250V, 500V and 1000V
- Insulation measurements to 4000MΩ
- Resistance measurements to 4000Ω
- Continuity test
- Continuity beeper
- 600VAC/DC test voltage range
- Large, easy-to-read digital display
- Data hold switch
- Test button may be “locked-on” for three minutes for hands-free operation
- Automatic discharge when test button is released
- Low battery indicator
- Includes test leads and soft carrying case
- EN 61010-1, 1000V CAT II, 600V CAT III



Model 1026 includes test leads, screw on alligator clips, batteries, soft carrying case and user manual.

SPECIFICATIONS		MODEL	1026
INSULATION TESTS			
Test Voltage	250V	1kΩ to 4000MΩ	
	500V	1kΩ to 4000MΩ	
	1000V	1kΩ to 4000MΩ	
Accuracy	<2000MΩ	±3% of Reading ± 5cts	
	≥2000MΩ	±5% of Reading ± 5cts	
RESISTANCE TESTS			
Measurement Range		Auto ranging to 4000Ω	
Resolution		0.1 to 1Ω	
Accuracy		±1% of Reading ± 5cts	
CONTINUITY TESTS			
Measurement Range		Displays and beeps below 40Ω	
Active		≤40Ω	
Protection		600Vrms	
VOLTAGE TESTS			
AC VOLTAGE			
Measurement Range		0 to 600V	
Accuracy		±1.5% of Reading ± 5cts	
DC VOLTAGE			
Measurement Range		0 to 600V	
Accuracy		±1% of Reading ± 3cts	
ELECTRICAL			
Power Source		8 x 1.5V AA Alkaline batteries (included)	

CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2117.72	Megohmmeter Model 1026 (Digital, 250V, 500V, 1000V, 4000Ω, V)	\$269.00	\$ 94.00



500V Hand-cranked Megohmmeter Model 6501 1000V Hand-cranked Megohmmeter Model 6503



Features

- True Megohmmeter®
- Test voltages of 250V, 500V and 1000V
- Insulation measurements to 200 and 5000MΩ
- LED indicates constant voltage output and proper cranked speed controlled by voltage regulator
- Automatic discharge when measurement is finished
- Auto-Ranging – dual scale operation for better sensitivity and easier readings
- Compact self-contained package; folded crank
- Voltage displayed prior to, during and at the end of test
- Large direct reading scale
- EN 61010-1, 600V CAT II, 300V CAT III

SPECIFICATIONS			
MODELS		6501	6503
INSULATION TESTS			
Test Ranges*	250V	–	1 to 11MΩ; 11 to 500MΩ
	500V	up to 200MΩ	1 to 11MΩ; 11 to 500MΩ
	1000V	–	10 to 110MΩ; 110 to 5000MΩ
Short Circuit Current		5mA (max)	
Voltage Measurement/ Safety Check		0 to 600Vac	
Accuracy (MΩ)		2.5% of Full Scale Length	2% of Full Scale Length
Automatic Discharge		5s/μF	8s/μF
Charge Time	250V	0.5s/μF	0.2s/μF
	500V	–	0.5s/μF
	1000V	–	0.5s/μF
RESISTANCE TESTS			
Measurement Range		0 to 45kΩ; 45 to 500kΩ	–
Test Current		1mA _{DC}	–
Accuracy		2.5% of Full Scale Length	–
CONTINUITY TESTS			
Measurement Range		0 to 9Ω; 9 to 100Ω	–
Test Voltage		5mA _{DC} (10V max)	–
Accuracy		2% of Full Scale Length	–

*DC Test voltage generated 5.5 to 200MΩ in full across the entire measurement range.



Includes test leads, clips, test probe, soft carrying case and user manual.

CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2126.51	Megohmmeter Model 6501 (Hand-cranked, 500V, 500kΩ, Continuity)	\$495.00	\$94.00
2126.52	Megohmmeter Model 6503 (Hand-cranked, 250V, 500V, 1000V)	\$595.00	\$94.00

AEMC MODEL NUMBER	AEMC CATALOG NUMBER	TEST VOLTAGE	INSULATION RANGE	RESISTANCE RANGE	CONTINUITY RANGE	CAPACITANCE RANGE	VOLTAGE TEST	POWER SOURCE	DISPLAY
1030	2116.89	250V 500V	50k to 2GΩ 100k to 2GΩ	—	0.00 to 19.99Ω	—	0 to 600VAc/dc	Battery	Digital/ Analog
1035	2116.90	50V 100V 250V 500V	10k to 2GΩ 20k to 2GΩ 50k to 2GΩ 100k to 2GΩ	0.0 to 400kΩ	—	—	0 to 600VAc/dc	Battery	Digital/ Analog
1035 Field Kit	2115.42	50V 100V 250V 500V	10k to 2GΩ 20k to 2GΩ 50k to 2GΩ 100k to 2GΩ	0.0 to 400kΩ	—	—	0 to 600VAc/dc	Battery	Digital/ Analog
1039	2116.91	50V 100V	10k to 400MΩ 20k to 400MΩ	0.0 to 40.0kΩ	—	0 to 4000nF	0 to 600VAc/dc	Battery	Digital/ Analog
1040	2116.92	500V 1000V	100k to 2GΩ 200k to 2GΩ	0.0 to 400kΩ	0.00 to 19.99Ω	—	0 to 600VAc/dc	Battery	Digital/ Analog
1045	2116.93	250V 500V 1000V	50k to 2GΩ 100k to 2GΩ 200k to 2GΩ	0.0 to 400kΩ	0.00 to 19.99Ω	—	0 to 600VAc/dc	Battery	Digital/ Analog
1040 Field Kit	2117.30	500V 1000V	100k to 2GΩ 200k to 2GΩ	0.0 to 400kΩ	0.00 to 19.99Ω	—	0 to 600VAc/dc	Battery	Digital/ Analog
1045 Field Kit	2117.31	250V 500V 1000V	50k to 2GΩ 100k to 2GΩ 200k to 2GΩ	0.0 to 400kΩ	0.00 to 19.99Ω	—	0 to 600VAc/dc	Battery	Digital/ Analog
1050	2130.01	50V 100V 250V 500V 1000V	2k to 200GΩ 4k to 4000GΩ 10k to 1TΩ 20k to 2TΩ 40k to 4TΩ	0.01 to 400kΩ	0.01 to 39.99Ω	—	0 to 1000VAc/dc	Battery	Digital/ Analog
1060	2130.03	50V 100V 250V 500V 1000V	2k to 200GΩ 4k to 4000GΩ 10k to 1TΩ 20k to 2TΩ 40k to 4TΩ	0.01 to 400kΩ	0.01 to 39.99Ω	—	0 to 1000VAc/dc	Rechargeable NiMH Battery	Digital/ Analog
6505	2130.18	500V 1000V 2500V 5000V	30kΩ to 2000GΩ 100kΩ to 4000GΩ 100kΩ to 10,000GΩ 300kΩ to 10,000GΩ	—	—	0.005 to 49.99μF	0 to 1000VAc/dc	Rechargeable NiMH Battery	Digital/ Analog
5050	2130.20	500V 1000V 2500V 5000V	30k to 2TΩ 100k to 4TΩ 100k to 10TΩ 300k to 10TΩ	—	—	0 to 49.99μF	0 to 1000VAc/dc	Rechargeable NiMH Battery	Digital/ Analog
5060	2130.21	500V 1000V 2500V 5000V	30k to 2TΩ 100k to 4TΩ 100k to 10TΩ 300k to 10TΩ	—	—	0 to 49.99μF	0 to 1000VAc/dc	Rechargeable NiMH Battery	Digital/ Analog
5070	2130.30	500V 1000V 2500V 5000V	30k to 2TΩ 100k to 4TΩ 100k to 10TΩ 300k to 10TΩ	—	—	0 to 49.99μF	0 to 1000VAc/dc	Rechargeable NiMH Battery	Digital/ Analog
1015	1403.01	500V 1000V	0.1 to 1000MΩ 0 to 1000MΩ	0 to 1000Ω	0 to 10.0Ω±	—	0 to 600VAc	Battery	Analog
1026	2117.72	250V 500V 1000V	1k to 4000MΩ 1k to 4000MΩ 1k to 4000MΩ	400 to 4000Ω	≤40	—	0 to 600VAc	Battery	Digital/ Analog
6501	2126.51	500V	0.5 to 200MΩ	0 to 500kΩ	0 to 100Ω	—	0 to 600VAc	Hand-cranked	Analog
6503	2126.52	250V 500V 1000V	1 to 500MΩ 1 to 500MΩ 10 to 5000MΩ	—	—	—	0 to 600VAc	Hand-cranked	Analog

Three-Phase Power Quality Analyzer PowerPad® Model 3945-B

Captures & records transients, events & waveforms simultaneously!

FREE full featured software included for complete power quality analysis and reporting!



(upon registering)



Features

- True RMS single-, two- and three-phase measurements at 256 samples/cycle, plus DC
- Real-time color waveforms
- Easy-to-use on-screen setup
- Automatic current probe recognition and scaling
- True RMS voltage and current measurement
- Measures DC volts, amps and power
- Display and capture voltage, current and power harmonics to 50th order, including direction, in real time
- Capture transients down to 1/256th of a cycle
- Stores comprehensive data base of logged data
- Phasor diagram display
- VA, VAR and W per phase and total
- kVAh, VARh and kWh per phase and total
- Neutral current calculated and displayed for three-phase
- Transformer K-factor display
- Power Factor, displacement PF display
- Captures up to 50 transients
- Short-term flicker display
- Phase unbalance (current and voltage)
- Harmonic Distortion (total and individual) from 1st to 50th
- Alarms, surges and sags
- Screen snapshot function captures waveforms or other information on the display
- Includes DataView® software FREE for data storage, real-time display, analysis and report generation

Three voltage and three current inputs

SPECIFICATIONS	
MODEL	3945-B
ELECTRICAL	
Sampling Frequency	256 samples/cycle
Data Storage	4MB partitioned for snapshot, transients, alarms & trend recording
Voltage (TRMS)	Phase-to-Phase: 960V, Phase-to-Neutral: 480V
Current (TRMS)	MN Clamp: 5mA to 6A/1 to 120A MR Clamp: 10 to 1000Aac, 10 to 1400Adc SR Clamp: 3 to 1200A MiniFlex®: 10 to 1000A AmpFlex®: 10 to 6500A ⁽¹⁾
Frequency (Hz)	40 to 69Hz
Other Measurements	kW, kVAR, PF, DPF, kWh, kVARh, kVAh, K-Factor, Flicker
Harmonics	1 st to 50 th , Direction, Sequence
Power Source	9.6V NiMH rechargeable battery pack (included) AC Supply: 110/230VAC ±20% (50/60Hz)
Battery Life	≥Eight hours with display on; ≤35 hours with display off (record mode)
MECHANICAL	
Communication Port	Optically coupled RS-232
Display	¼ VGA (320 x 240) color LCD display with adjustable brightness & contrast
Dimensions	9.5 x 7 x 2" (240 x 180 x 55mm)
Weight	4.6 lbs (2.1kg)
Safety Rating	EN 61010, 600V CAT IV ⁽²⁾ , 1000V CAT III, Pollution Degree 2

⁽¹⁾Crest factor at 6500 = 1

⁽²⁾When used with SR193 or AmpFlex® probes.
600V CAT III with MN193 or MR193 probes.



All models include three color-coded current probes with 10 ft leads (AmpFlex® example shown), four color-coded 10 ft voltage leads, four color-coded alligator clips, RS-232 DB9F optically coupled serial cable, NiMH battery, US 120V power cord, DataView® software, carrying bag, soft carrying pouch and user manual.

Choose from a variety of current probe options



Set of three color-coded SR193 (1200A) current probes, rated 600V CAT IV



Set of three color-coded AmpFlex® 193 (6500A) flexible current probes (available in 24" or 36" lengths), rated 600V CAT IV



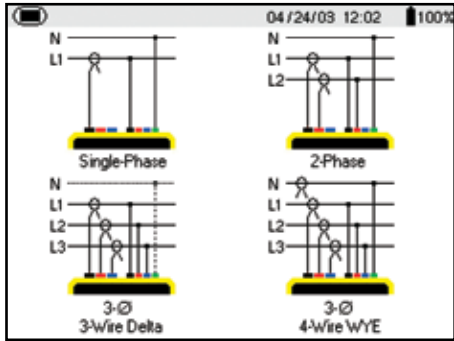
Set of three color-coded MR193-BK (1000Aac/1400Adc) current probes, rated 600V CAT III



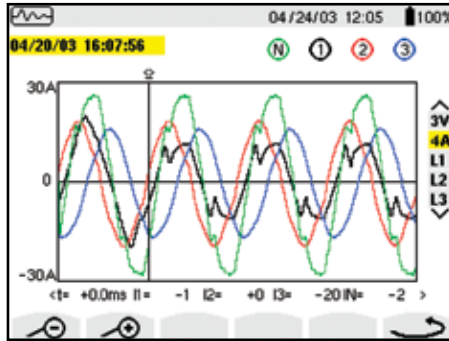
Set of three color-coded MN93 (240A) current probes or MN193 (6A/120A) current probes, rated 600V CAT III

Large Color Display!

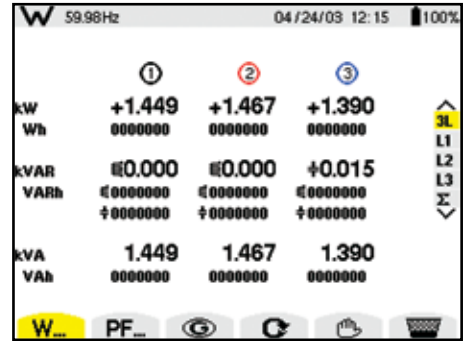
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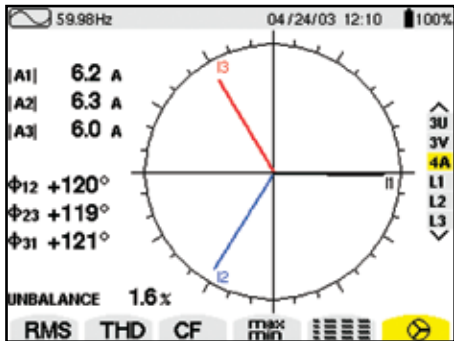
Transient Mode



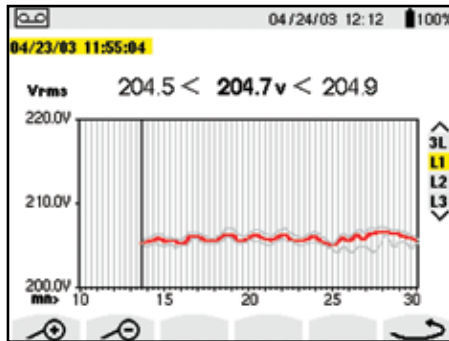
Power and Energy Mode



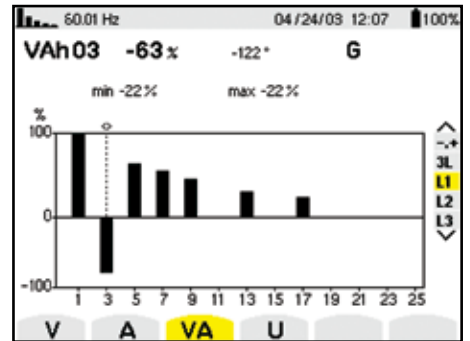
Phasor Diagram



Recording Mode



Harmonics Mode



CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2130.74	PowerPad® Model 3945-B (no probes)	\$3,495.00	\$150.00
2130.75	PowerPad® Model 3945-B w/MN93 (240A)	\$3,695.00	\$190.00
2130.76	PowerPad® Model 3945-B w/SR193 (1200A)	\$3,895.00	\$190.00
2130.77	PowerPad® Model 3945-B w/24" AmpFlex® 193-24 (6500A)	\$3,995.00	\$190.00
2130.78	PowerPad® Model 3945-B w/36" AmpFlex® 193-36 (6500A)	\$4,195.00	\$190.00
2130.79	PowerPad® Model 3945-B w/MR193 (1000Aac/1400Adc)	\$4,095.00	\$190.00
2130.80	PowerPad® Model 3945-B w/MN193 (6A/120Aac)	\$3,995.00	\$190.00
Accessories (Optional)			
2140.09	Set of 3, color-coded MN93 probes (240A) with 10 ft leads	\$ 527.00	-
2140.10	Set of 3, color-coded SR193 probes (1200A) with 10 ft leads	\$ 849.00	-
2140.11	Set of 3, color-coded 24" AmpFlex® 193-24 probes (6500A) with 10 ft leads	\$ 719.00	-
2140.12	Set of 3, color-coded 36" AmpFlex® 193-36 probes (6500A) with 10 ft leads	\$ 999.00	-
2140.13	Set of 3, color-coded MR193 probes (1000Aac/1400Adc) with 10 ft leads	\$1,089.00	-
2140.14	Set of 3, color-coded MN193 probes (6A/120Aac) with 10 ft leads	\$ 699.00	-
2140.17	5A Adapter box (<i>special order only</i>)	-	-
2140.61	Set of 4, color-coded 30 ft voltage leads (rated 600V CAT IV, 10A)	\$ 129.00	-
2140.28	One AC/DC Current Probe Model MR193-BK (black connector) (1000Aac/1400Adc)	\$ 369.00	-
2140.48	One MiniFlex® Sensor 10" Model MA193-10-BK (1000A)	\$ 259.00	-

Three-Phase Power Quality Analyzer PowerPad® Model 8335

FREE full featured software included for complete power quality analysis and reporting!



(upon registering)



Features

- Measurement of TRMS voltages up to 1000Vrms AC/DC for two, three, four or five-wire systems
- Measurement of TRMS currents up to 6500Arms (sensor dependent)
- Color coded input ID markers included
- Direct measurement of neutral current & voltage
- Frequency measurement (40 to 69Hz systems)
- Record and display trend data as fast as once per second for one month for up to 25 variables
- Transient detection on all V and I inputs (up to 210A)
- Selectable PT and CT ratios
- Inrush current measurement
- Calculation of Crest Factors for V and A
- Calculation of the K-Factor for transformers
- Calculation of short-term flicker
- Calculation of the Three-Phase voltage unbalance
- Harmonic measurements (referenced to the fundamental or RMS value) for voltage, current or power, up to 50th harmonic
- Displays of harmonic sequencing and direction and calculation of overall harmonics
- Real time display of Phasor diagrams including values and phase angles
- Monitors the average value of any parameter, calculated for a period from 1 sec to 2 hrs
- Measurement of active, reactive and apparent power per phase and their respective sum total
- Calculation of power factor, displacement power factor and tangent factor
- Recording, time stamping and characterization of disturbance (swells, sags and interruptions, exceedence of power and harmonic thresholds)
- 2GB internal Trend Recording memory; Alarm, Photo and Transient Inrush memories are separate
- Measurement of energy VAh, VARh & Wh
- The Max and Min RMS measurements are calculated every half-period

Four voltage and four current inputs

SPECIFICATIONS	
MODEL	8335
ELECTRICAL	
Sampling Frequency	256 samples/cycle
Data Storage	2GB SD Card, 12.5MB partitioned for snapshot, transients, Inrush, alarms & trend recording
Voltage (TRMS)	Phase-to-Phase: 2000V; Phase-to-Neutral: 1000V Voltage Ratio: up to 500kV
Current (TRMS)	MN Clamp: 0 to 6A/120A or 0 to 240A SR Clamp: 0 to 1200A MR Clamp: 0 to 1000Aac, 0 to 1400Aac MiniFlex®: 10 to 1000A AmpFlex®: 10 to 6500A ⁽¹⁾ Current Ratio: 10mA to 50kA
Frequency (Hz)	40 to 69Hz
Other Measurements	kW, kVAR, kVA, PF, DPF, kWh, kVARh, kVAh, K-Factor, Flicker
Harmonics	1 st to 50 th , Direction, Sequence
Power Source	9.6V NiMH rechargeable battery pack (included) External AC supply: 110/230VAC ±10% (50/60Hz)
Battery Life	≥8 hours with display on; ≤35 hours with display off (record mode)
MECHANICAL	
Communication Port	Optically isolated USB
Display	¼ VGA (320 x 240) color LCD display with adjustable brightness & contrast
Dimensions	9.8 x 7.8 x 2.6" (250 x 200 x 67mm)
Weight	4.3 lbs (1.95kg)
Safety Rating	EN 61010-1, 600V CAT IV ⁽²⁾ , 1000V CAT III, Pollution Degree 2

⁽¹⁾Crest factor at 6500 = 1

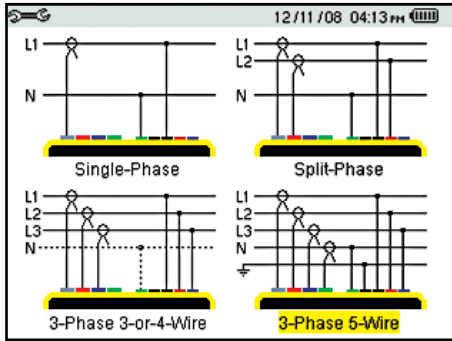
⁽²⁾When used with SR193 or AmpFlex® probes. 600V CAT III with MN193 or MR193 probes.



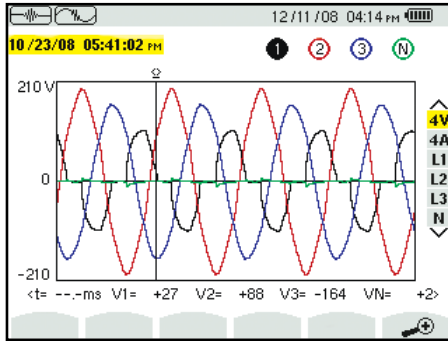
All models include five 10 ft black voltage leads, five black alligator clips, twelve color-coded rings, USB cable, NiMH battery, 110/240V power adapter with US power cord, DataView® software, large classic tool bag, soft carrying pouch and user manual. (See page 20 for optional current probes)

Large Color Display!

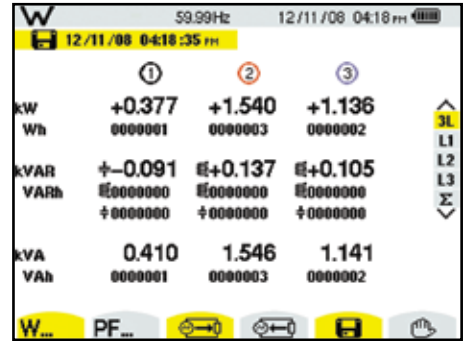
Configuration



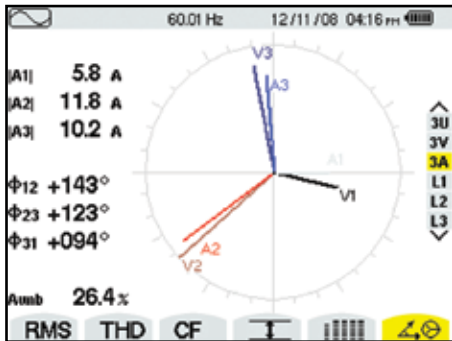
Transient Mode



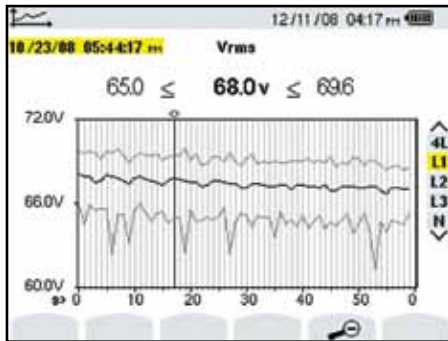
Power and Energy Mode



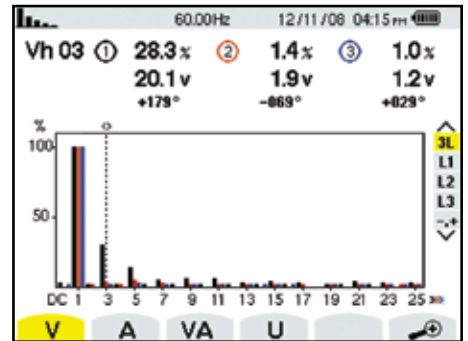
Phasor Diagram



Recording Mode



Harmonics Mode



CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2136.20	PowerPad® Model 8335 (no probes)	\$5,145.00	\$150.00
2136.21	PowerPad® Model 8335 w/4 MN93-BK (200A)	\$5,295.00	\$190.00
2136.22	PowerPad® Model 8335 w/4 SR193-BK (1200A)	\$5,495.00	\$190.00
2136.23	PowerPad® Model 8335 w/4 24" AmpFlex® 193-24-BK (6500A)	\$5,595.00	\$190.00
2136.24	PowerPad® Model 8335 w/4 36" AmpFlex® 193-36-BK (6500A)	\$5,795.00	\$190.00
2136.25	PowerPad® Model 8335 w/4 MR193-BK (1000Aac/1400Aac)	\$5,895.00	\$190.00
2136.26	PowerPad® Model 8335 w/4 MN193-BK (5A/100A)	\$5,595.00	\$190.00
2136.27	PowerPad® Model 8335 w/4 MA193-10-BK (1000A)	\$5,695.00	\$190.00
Accessories (Optional)			
2133.73	Extra Large Classic Tool Bag	\$ 44.00	-
2140.15	Replacement – Soft Carrying Pouch	\$ 19.00	-
2140.17	5A Adapter box (<i>special order only</i>)	-	\$ 94.00
2140.19	Replacement – Battery 9.6V NiMH	\$ 199.50	-
2140.28	AC Current Probe Model MR193-BK (1000Aac/1400Aac)	\$ 369.00	-
2140.32	AC Current Probe Model MN93-BK (200A)	\$ 189.00	-
2140.33	AC Current Probe Model SR193-BK (1200A)	\$ 299.00	-
2140.34	AmpFlex® Sensor 24" Model 193-24-BK (6500A)	\$ 289.00	-
2140.35	AmpFlex® Sensor 36" Model 193-36-BK (6500A)	\$ 339.00	-
2140.36	AC Current Probe Model MN193-BK (5A/100A)	\$ 249.00	-
2140.43	Replacement – Set of 5, 10ft (3m) black leads w/5 black alligator clips	\$ 99.00	-
2140.44	Lead, 1 10ft (3m) black lead w/black alligator clip	\$ 20.00	-
2140.45	Replacement – Set of 12, Color-coded Input ID Markers	\$ 18.50	-
2140.46	Replacement – 5 ft USB cable	\$ 10.95	-
2140.48	One MiniFlex® Sensor 10" Model MA193-10-BK (1000A)	\$ 259.00	-

Power Quality Meter Model 8220



Features

- Measures up to 660Vrms or Vdc
- Measures up to 6500Aac or 1400Adc (probe dependent)
- Displays Min, Max and Average Volts and Amps, Crest Factor, Peak value and K-Factor
- Calculates and displays Watts, VARs and VA, Power Factor and Displacement Power Factor for single-phase and balanced three-phase
- Measures and records power systems (kW, VA, kVAR)
- Energy metering (kAh, VARh, kWh)
- Displays total harmonic distortion (THD-F and THD-R) for voltage and current
- Displays individual harmonic values and % for Volts and Amps through the 50th harmonic
- Captures and displays inrush current
- Calculates and displays phase rotation and RPM
- Displays temperature in both °F and °C
- Displays resistance up to 2000Ω
- Conducts continuity and diode tests
- Stores up to nine complete sets of readings for all volt, amp, power and harmonic measurements
- Configurable from DataView® software or front panel
- Download stored data to DataView® software via optical USB port (included)
- Operates off batteries or optional power adapter
- Includes DataView® software free for data storage, real-time waveform display, analysis and report generation
- The Max and Min RMS measurements are calculated every half-period

SPECIFICATIONS

MODEL	8220
ELECTRICAL	
Voltage (TRMS)	Phase-to-Phase: 660V; Phase-to-Neutral: 600V
Current (TRMS)	MN Clamp: 5mA to 6A/120A or 2 to 240A MR Clamp: 10 to 1000Aac, 10 to 1400Adc SR Clamp: 3 to 1200A MiniFlex®: 10 to 1000A AmpFlex®: 10 to 6500A ⁽¹⁾
Frequency (Hz)	40 to 70Hz
Other Measurements	kW, kVAR, PF, DPF, VA, kWh, kVARh, VAh, Phase Rotation Temperature, RPM, Resistance, Continuity, Diode Test
Harmonics	1 st to 50 th
Sampling Frequency	256 samples / cycle
Data Storage	Stores nine sets of readings for volts, amps, power and harmonics
Power Source	Six 1.5V AA Alkaline batteries (included)
Battery Life	≥8 hrs with display on ≥40 hrs with display off (recording mode)
MECHANICAL	
Communication Port	Optically isolated USB
Display	Three-line backlit color LCD digital display with custom icons and adjustable brightness & contrast
Dimensions	8.3 x 4.3 x 2.4" (211 x 108 x 60mm)
Weight	1.9 lbs (0.88kg)
Safety Rating	EN 61010, 600V CAT III, IP 54, Pollution Degree 2

⁽¹⁾Crest factor at 6500 = 1



All models include current probe with 10 ft lead and black connector (MN93 example shown), black and red 10 ft voltage leads and alligator clips, optical USB cable, six 1.5V batteries, two safety test probes, DataView® software, carrying bag and user manual.
An optional AC Power adapter is available.
(See page 20 for optional accessories available for Model 8220.)

Single-Phase Power Quality Analyzer PowerPad® Jr. Model 8230

Features

- Measures up to 660Vrms or VDC
- Measures up to 6500AAC or 1400ADC (probe dependent)
- Displays Min, Max and Average Volts and Amps, Crest Factor, Peak value and K-Factor
- Calculates and displays Watts, VARs and VA, Power Factor and Displacement Power Factor for single-phase and balanced three-phase
- Measures and records power systems (kW, VA, kVAR)
- Energy metering (kAh, VARh, kWh)
- Displays total harmonic distortion (THD-F and THD-R) for voltage and current
- Displays individual harmonic values and % for Volts and Amps through the 50th harmonic
- Captures, displays and stores inrush current waveforms and statistics
- Stores up to eight screen captures
- Stores up to 1MB of trend recorded data
- Configurable from DataView® software or front panel
- Download stored data to DataView® software via optical USB port (included)
- Captures up to 4096 alarm events from up to 10 different thresholds
- Displays and records up to 17 different power quality parameters
- Includes DataView® software free for data storage, real-time waveform display, analysis and report generation
- The Max and Min RMS measurements are calculated every half-period



All models include current probe with 10 ft lead and black connector (MN93 example shown), black and red 10 ft voltage leads and alligator clips, optical USB cable, NiMH battery, 120V US wall charger, DataView® software, carrying bag and user manual.

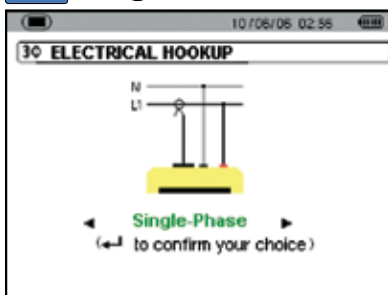


SPECIFICATIONS	
MODEL	8230
ELECTRICAL	
Voltage (TRMS)	Phase-to-Phase: 660V Phase-to-Neutral: 600V
Current (TRMS)	MN Clamp: 5mA to 6A/120A or 2 to 240A MR Clamp: 10 to 1000Aac, 10 to 1400Aac SR Clamp: 3 to 1200A MiniFlex®: 10 to 1000A AmpFlex®: 10 to 6500A ⁽¹⁾
Frequency (Hz)	40 to 70Hz
Other Measurements	kW, kVAR, PF, DPF, kWh, kVARh, kVAh, K-Factor, Flicker, Harmonic Phase Shift, Phase Rotation
Harmonics	THD-R, THD-F, V, A, VA 1 st to 50 th , Direction, Sequence
Sampling Frequency	256 samples/cycle
Data Storage	1.5MB partitioned for waveforms, alarms and trend recording
Power Source	NiMH rechargeable battery pack (included) AC Supply: 120/230VAc (50/60Hz)
Battery Life	≥8 hrs with display on ≥40 hrs with display off (recording mode)
MECHANICAL	
Communication Port	Optically isolated USB
Display	¼ VGA (320 x 240) color LCD display with adjustable brightness & contrast
Dimensions	8.3 x 4.3 x 2.4" (211 x 108 x 60mm)
Weight	1.9 lbs (0.88kg)
Safety Rating	EN 61010, 600V CAT III, Pollution Degree 2

⁽¹⁾Crest factor at 6500 = 1

Large Color Display!

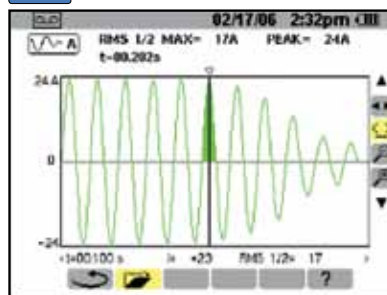
Configuration



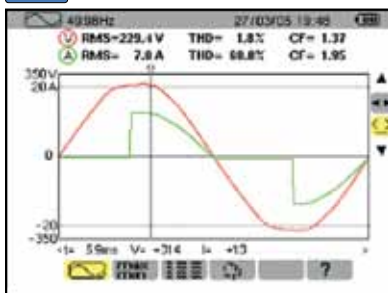
Recording Setup



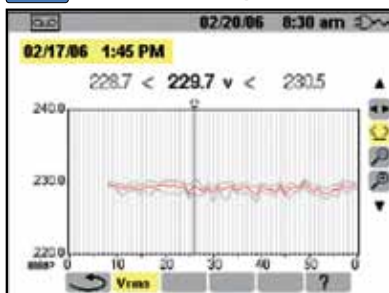
Inrush Mode



Waveform Mode



Trend Recording



Harmonics Mode



The screens above are a sample of the many available on Models 8220 & 8230

Choose from a variety of current probe options for Models 3945-B, 8335, 8220 & 8230



MR93-BK (1000Aac/1400Aac) current probe



SR193-BK (1200A) current probe



AmpFlex® 193-BK (6500A) flexible current probe (available in 24" or 36" lengths)



MN93-BK (240A) current probe or MN193-BK (6A/120A) current probe



MiniFlex® MA193 (1000A) 10" sensor

CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2130.90	Power Quality Meter Model 8220 (no probes)	\$ 979.00	\$98.00
2130.91	Power Quality Meter Model 8220 w/MN93-BK (240A)	\$1,109.00	\$98.00
2130.92	Power Quality Meter Model 8220 w/SR193-BK (1200A)	\$1,219.00	\$98.00
2130.93	Power Quality Meter Model 8220 w/24" AmpFlex® 193-24-BK (6500A)	\$1,229.00	\$98.00
2130.96	Power Quality Meter Model 8220 w/MN193-BK (6A/120A)	\$1,169.00	\$98.00
2130.97	Power Quality Meter Model 8220 w/MA193-10-BK (1000A)	\$1,179.00	\$98.00
2130.81	PowerPad® Jr. Model 8230 (no probes)	\$1,749.00	\$98.00
2130.82	PowerPad® Jr. Model 8230 w/MN93-BK (240A)	\$1,895.00	\$98.00
2130.83	PowerPad® Jr. Model 8230 w/SR193-BK (1200A)	\$1,995.00	\$98.00
2130.84	PowerPad® Jr. Model 8230 w/24" AmpFlex® 193-24-BK (6500A)	\$1,995.00	\$98.00
2130.87	PowerPad® Jr. Model 8230 w/MN193-BK (6A/120Aac)	\$1,949.00	\$98.00
2130.88	PowerPad® Jr. Model 8230 w/MA193-10-BK (1000A)	\$1,959.00	\$98.00
Accessories (Optional for Models 8230 & 8220)			
2140.37	Adapter - US 110V Power Adapter (eliminates need for batteries) <i>Model 8220</i>	\$ 129.00	-
2140.28	AC Current Probe Model MR193-BK (1000Aac/1400Aac) with 10 ft leads	\$ 369.00	-
2140.32	AC Current Probe Model MN93-BK (240A) with 10 ft leads	\$ 189.00	-
2140.33	AC Current Probe Model SR193-BK (1200A) with 10 ft leads	\$ 299.00	-
2140.34	AmpFlex® sensor 24" Model 193-24-BK (6500A) with 10 ft leads	\$ 289.00	-
2140.35	AmpFlex® Sensor 36" Model 193-36-BK (6500A)	\$ 339.00	-
2140.36	AC Current Probe Model MN193-BK (6A/120A) with 10 ft leads	\$ 249.00	-
2140.48	MiniFlex® Sensor 10" Model MA193-10-BK (1000A)	\$ 259.00	-

DataView®

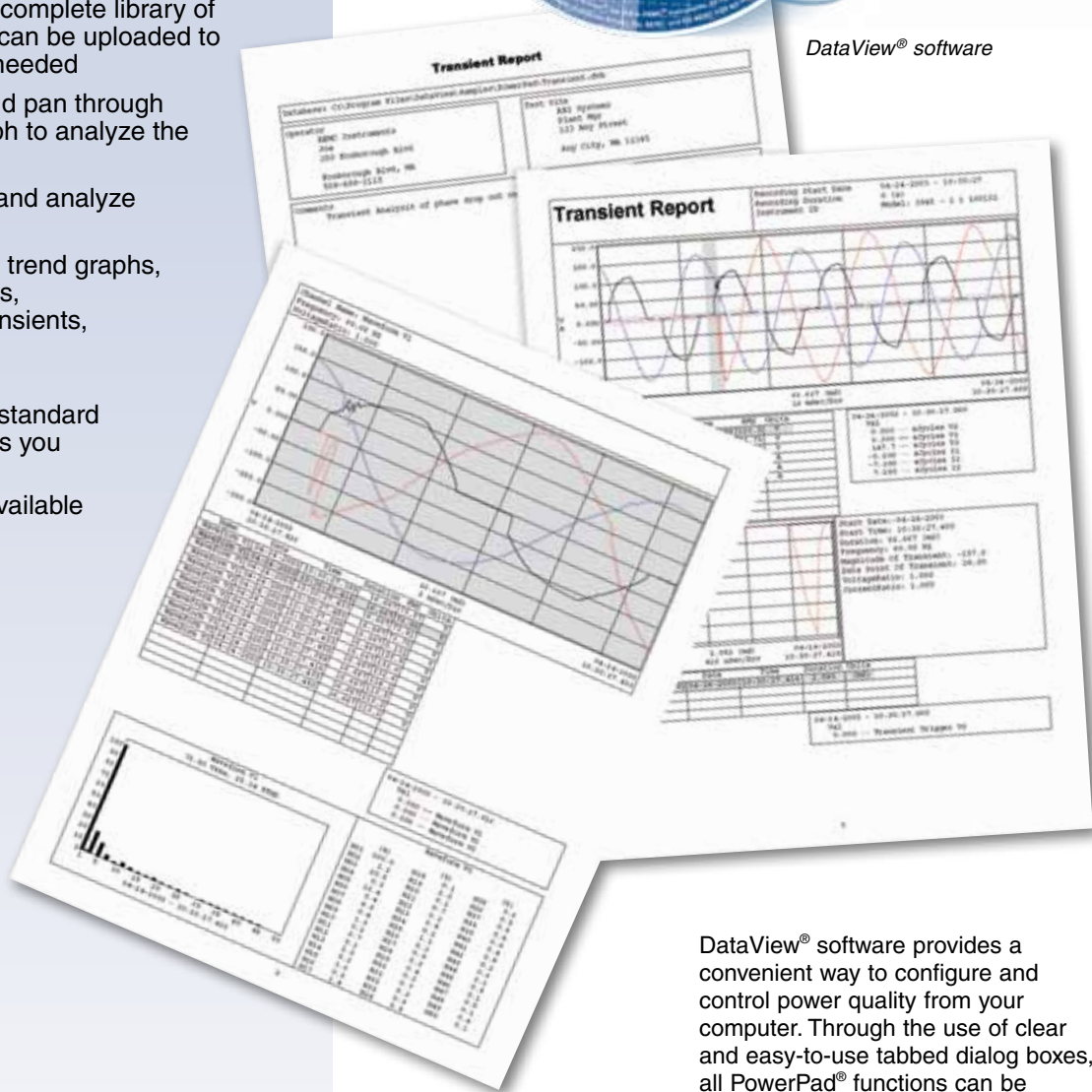
Data Analysis and Reporting Software for Power Quality Meters

Configure all functions of the PowerPad®

- Display and analyze real-time data on your PC
- Configure all PowerPad® functions and parameters from your PC
- Customize views, templates and reports to your exact needs
- Create and store a complete library of configurations that can be uploaded to the PowerPad® as needed
- Zoom in and out and pan through sections of the graph to analyze the data
- Download, display and analyze recorded data
- Display waveforms, trend graphs, harmonic spectrums, text summaries, transients, event logs and stored alarms
- Print reports using standard or custom templates you design
- Free updates are available on our website www.aemc.com

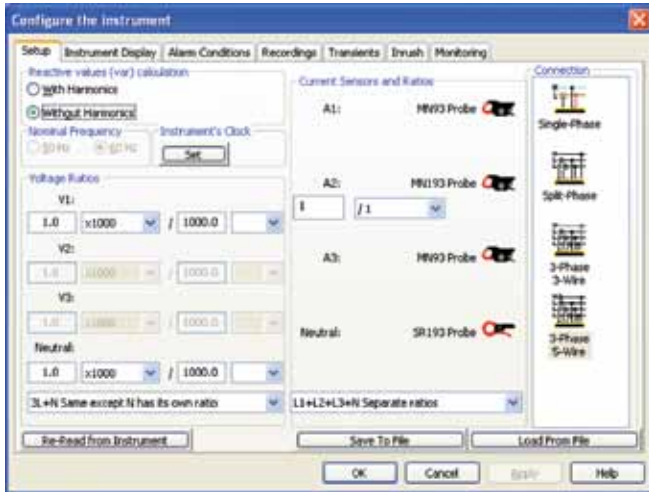


DataView® software

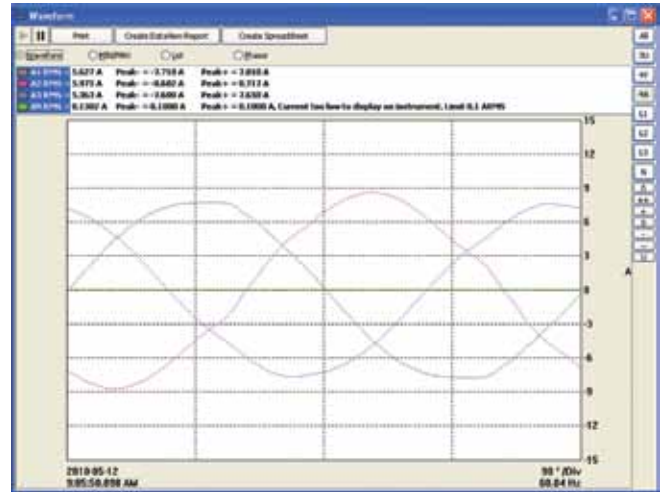


DataView® software provides a convenient way to configure and control power quality from your computer. Through the use of clear and easy-to-use tabbed dialog boxes, all PowerPad® functions can be configured and tests can be initiated. Results can be displayed in real time and stored in your PC. Reports may be printed along with the operator's comments and analysis.

Typical DataView® Functional Displays for PowerPad®



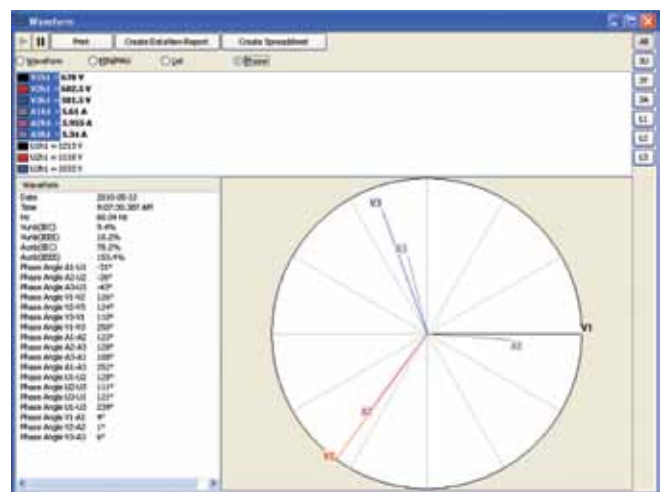
Clear and easy setup of all functions from one tabbed dialog box.



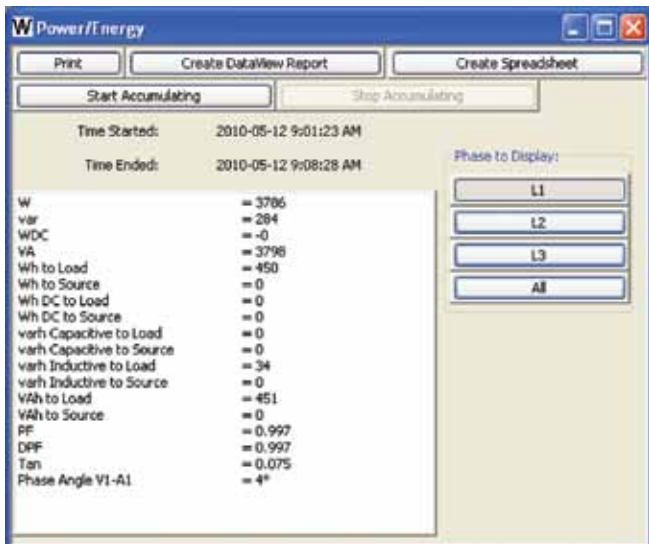
Display real-time waveforms by phase, parameter or total.



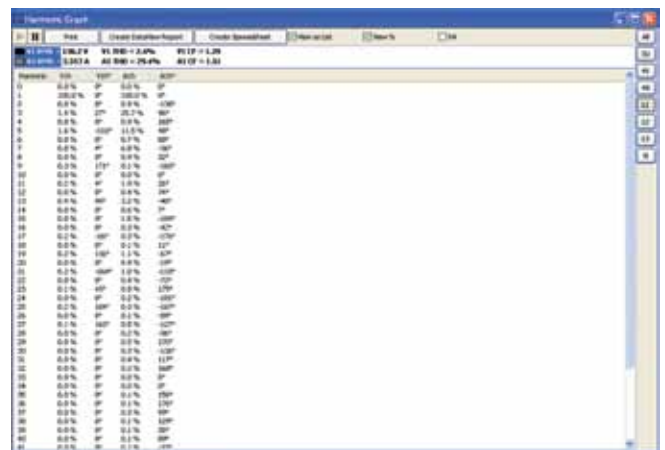
Display all harmonics from 1st to 50th in bargraph form for voltage, current and power.



Display real-time phasor diagrams. Includes unbalance for both voltage and current.



Display power and energy parameters – both instantaneous and total.



Display harmonics in a text table from harmonic 0 (DC) through the 50th.

Features

- 2- and 4-Wire Bond Resistance/Continuity Measurement (DC Resistance) with automatic polarity reversal
- 3-Pole (3-Point) Fall-of-Potential measurement with manual or automatic frequency selection
- 4-Pole (4-Point) Fall-of-Potential measurement for very low resistance measurements with manual and automatic frequency selection and automatic lead compensation
- 4-Pole (4-Point) Soil Resistivity measurement with automatic calculation of Rho (ρ) and user selection of the Wenner or Schlumberger test method
- 3-Pole (3-Point) Earth Coupling measurement
- Manual and automatic frequency scan from 40 to 513Hz for optimum test accuracy in electrically noisy environments
- Selectable test voltage of 16 or 32V up to 250mA of test current
- Auto-off power management
- Automatic recognition of all electrode connections and their resistance value
- Stores up to 512 complete test results in internal memory
- Optically isolated USB communication cable included
- Display with automatic backlight when entering a function
- Remote set up and operation of all measurements using DataView® software supplied
- Automatic report generation
- Rechargeable NiMH batteries from wall charger or vehicle power
- Rugged dustproof and rainproof field case – IP54 rated in closed position
- Grounding standards IEC 61557 parts 4 and 5 compliant
- Includes DataView® software for data storage, real-time display, analysis, report generation and system configuration



The Model 6470-B quickly checks ground rod resistance with its Connect – Press – Read approach.

Multi-Function Ground Resistance Tester Model 6470-B

**Measure ground
resistance, soil
resistivity and
bonding resistance
with one instrument!**



SPECIFICATIONS

MODEL	6470-B
ELECTRICAL	
3-Point Measurement	
Range (Auto-Ranging)	0.01 to 99.99k Ω
Resolution	0.01 to 100 Ω
Test Voltage	16 or 32V selectable
Resistance Measurement Frequency	40 to 513Hz selectable or automatic selection
Test Current	Up to 250mA
Accuracy	$\pm 2\%$ of Reading + 1ct
Soil Resistivity 4-Point Measurement	
Test Method	Wenner or Schlumberger selectable with automatic calculation of test results displayed in Ω -meters
Range (Auto-Ranging)	0.01 to 99.99k Ω
Resolution	0.01 to 100 Ω
Test Voltage	16 or 32V selectable
Frequency	41 to 128Hz selectable
External Voltage Measurement	
Range (Auto-Ranging)	0.1 to 65.0VAc/dc – DC to 450Hz
Accuracy	2% of Reading + 2cts
Resistance Measurement (Bond Testing)	
Measurement Type	2-Point or 4-Point user selectable
Range (Auto-Ranging)	2-Point 0.01 to 99.9k Ω ; 4-Point 0.001 to 99.99k Ω
Accuracy	$\pm 2\%$ of Reading + 2cts
Test Voltage	16Vdc
Test Current	200mA max
Data Storage	
Memory Capacity	512 test results (64KB)
Communication	Optically isolated USB
Power Source	
9.6V NiMH rechargeable battery pack (included)	
Recharging Source	
110/120 50/60Hz external charge with 18Vdc, 1.9A output or 12Vdc vehicle power	

Large Display!

4-Point Bond Test



The 4-Point Bond test shows lead connections, bond resistance test results, test voltage and current.

3-Point Fall-of-Potential Test



The 3-Point Fall-of-Potential test displays test lead connection, grounding rod resistance and test electrode resistances.

Schlumberger Test



The Schlumberger test displays test lead connection, soil resistivity (ρ) test results and electrode spacing.

Frequency Test



The Frequency selection screen displays selected test frequency and voltage for the test as well as lead connection.

Data Storage



Displays test results stored at a specific memory location as well as the test function.

Wenner Test



The Wenner test displays test lead connection, soil resistivity (ρ) test results, electrode spacing and resistance.



Multi-Function Ground Resistance Tester Model 6470-B Kit (500 ft) includes meter, NiMH batteries, optical USB cable, DataView® software, external battery charger, power cord 110/240V (line), one 30 ft green wire, one each 500 ft red and blue wire, one each 100 ft black and green wire, set of five spaded lugs, four auxiliary ground electrodes, tape measure, carrying case and user manual. Catalog #2135.04

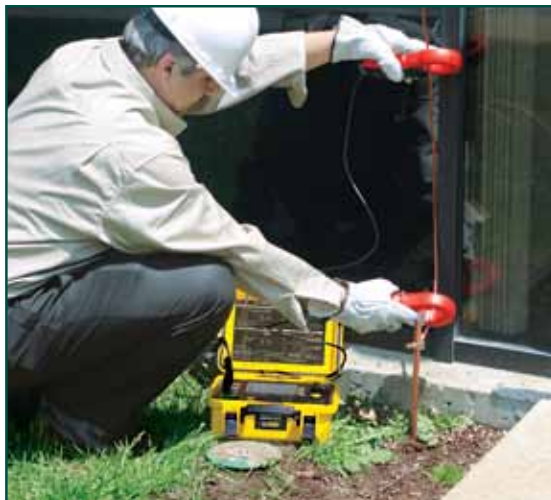


Model 6470-B includes meter, NiMH batteries, optical USB cable, DataView® software, external battery charger, power cord 110/240V (line) and user manual.

CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2135.01	Ground Resistance Tester Model 6470-B (2-Point, 3-Point, 4-Point, Bond Test, Digital, Rechargeable Battery, DataView® software)	\$2,250.00	\$99.00
2135.02	Ground Resistance Tester Model 6470-B Kit – 150 ft (Model 6470-B and Catalog #2135.35)	\$2,649.00	\$99.00
2135.03	Ground Resistance Tester Model 6470-B Kit – 300 ft (Model 6470-B and Catalog #2135.36)	\$2,749.00	\$99.00
2135.04	Ground Resistance Tester Model 6470-B Kit – 500 ft (Model 6470-B and Catalog #2135.37)	\$2,849.00	\$99.00
Accessories (Optional)			
2135.35	Test Kit for 3-Point testing (includes two 150 ft color-coded leads on spools (red/blue), one 30 ft lead (green), two 14.5" T-shaped auxiliary ground electrodes, set of five spaded lugs, 100 ft tape measure and soft carrying bag)	\$ 449.00	-
2135.36	Test Kit for 4-Point testing (includes two 300 ft color-coded leads on spools (red/blue), two 100 ft color-coded leads (hand-tied green/black), four 14.5" T-shaped auxiliary ground electrodes, set of five spaded lugs, 100 ft tape measure and soft carrying bag)	\$ 549.00	-
2135.37	Test Kit for 4-Point testing (includes two 500 ft color-coded leads on spools (red/blue), two 100 ft color-coded leads (hand-tied green/black), one 30 ft lead (green), four 14.5" T-shaped auxiliary ground electrodes, set of five spaded lugs, 100 ft tape measure and soft carrying bag)	\$ 649.00	-
2135.38	Ground Test Kit for 3-Point testing (Supplemental for 4-Point testing – includes two 100 ft color-coded leads (hand-tied green/black), one 30 ft lead (green), two 14.5" T-shaped auxiliary ground electrodes and soft carrying bag)	\$ 249.00	-

Features

- Ground Resistance testing using the 2 clamp method (no auxiliary rods needed)
- 2- and 4-Point Bond Resistance/Continuity measurement (DC Resistance) with automatic polarity reversal
- 3-Point Fall-of-Potential measurement with manual or automatic frequency selection
- 4-Point Soil Resistivity measurement with automatic calculation of Rho (ρ) and user selection of the Wenner or Schlumberger test method
- 3-Point Earth Coupling measurement
- Manual and Automatic frequency scan from 41 to 513Hz for optimum test accuracy in electrically noisy environments
- Selectable test voltage of 16 or 32V up to 250mA of test current
- Auto-off power management
- Automatic recognition of all electrode connections and their resistance value
- Stores up to 512 complete test results in internal memory
- Display with automatic backlight when entering a function
- Optically isolated USB communication cable included
- Remote set up and operation of all measurements using DataView® software
- Rechargeable NiMH batteries from wall charger or vehicle power
- Rugged dustproof and rainproof field case – IP54 rated in closed position
- Grounding standards IEC 61557 parts 4 and 5 compliant
- Includes DataView® software for data storage, real-time display, analysis, report generation and system configuration



The Model 6471 performs a fast and easy way to measure the value of the earth/ground using the 2 Clamp method (no auxiliary rods needed).

Multi-Function Ground Resistance Tester Model 6471



AC Current Probes
Model SR182



SPECIFICATIONS

MODEL	6471
ELECTRICAL	
2 Clamp Measurement	
Range	0.10 to 500 Ω
Resolution	0.01 to 1 Ω
Measurement Frequency	Auto: 1367Hz Manual: 128Hz-1367Hz-1611Hz-1758Hz
3-Point Measurement	
Range (Auto-Ranging)	0.09 Ω to 99.9k Ω
Resolution	0.01 Ω to 100 Ω
Test Voltage	Nominal 16 or 32Vrms user selectable
Resistance Measurement Frequency	41 to 513Hz automatic or user selectable
Test Current	Up to 250mA
Accuracy	$\pm 2\%$ of Reading + 1ct @ 128Hz
Soil Resistivity 4-Point Measurement	
Test Method	Wenner or Schlumberger selectable with automatic calculation in Ω -meters
Range (Auto-Ranging)	0.01 to 99.99k Ω ; ρ Max: 999k Ω m
Resolution	0.01 to 100 Ω
Test Voltage	16 or 32V user selectable
Frequency	From 41 to 128Hz selectable
External Voltage Measurement	
Range (Auto-Ranging)	0.1 to 65.0VAc/dc – DC to 440Hz
Accuracy	$\pm 2\%$ of Reading + 1ct
Resistance Measurement (Bond Testing)	
Measurement Type	2-Pole (with lead resistance compensation) or 4-Pole (Kelvin sensing) user selectable
Range (Auto-Ranging)	2-Pole 0.01 Ω to 99.9k Ω ; 4-Pole 0.001 Ω to 99.99k Ω
Accuracy	$\pm 2\%$ of Reading + 2cts
Test Voltage	16Vdc (+, - or auto polarity)
Test Current	Up to 250mA max
Data Storage	
Memory Capacity	512 test results (64KB)
Communication	Optically Isolated USB
Power Source	
9.6V rechargeable battery pack (included)	
Recharging Source	
110/220 50/60Hz external charger with 18Vdc, 1.9A output or 12V vehicle power	

Large Display!

4-Point Bond Test



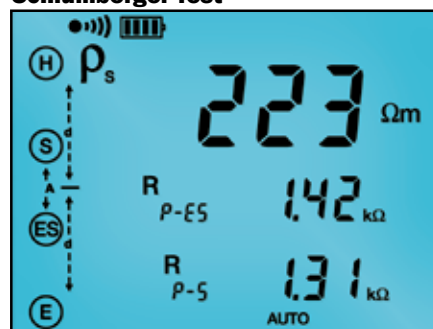
The 4-Point Bond test displaying lead connections, bond resistance test results, test voltage and current.

3-Point Fall-of-Potential Test



The 3-Point Fall-of-Potential test displaying test lead connection, grounding electrode resistance, test voltage and frequency.

Schlumberger Test



The Schlumberger test displays test lead connection, soil resistivity (ρ) test results, test electrode resistance and more.

Two Clamp Test



The 2 Clamp method displays clamp connection resistance, test current and frequency.

Data Storage



Memory Recall displays test results stored at a specific memory location.

Wenner Test



The Wenner test displays test lead connection, soil resistivity (ρ) test results, electrode spacing and resistance.

NOTE: More information for each test is available by scrolling through the displays.



Includes meter, set of two SR182 current probes, rechargeable NiMH batteries, optical USB cable, power adapter 110/240V with power cord 115V US, two 300 ft color-coded leads on spools (red/blue), two 100 ft color-coded leads (hand-tied, green/black), four T-shaped auxiliary ground electrodes, set of five spaded lugs, one 100 ft tape measure, DataView® software, ground tester workbook CD, carrying bag for meter, carrying bag for kit, product warranty and registration card and a user manual.
Catalog #2135.50

Current Probe accessory options (For use in two clamp and selective ground testing methods)

AC Current Probe Model MN82
Catalog #2135.71
(Optional)



AC Current Probe Model SR182
Catalog #2135.72



CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2135.49	Ground Resistance Tester Model 6471 (set of two SR182 current probes, 2-Point, 3-Point, 4-Point, Bond Test, Digital, Rechargeable Battery, DataView® software)	\$2,795.00	\$99.00
2135.50	Ground Resistance Tester Model 6471 Kit – 300 ft (Catalog #2135.49 and Catalog #2135.36)	\$3,295.00	\$99.00
Accessories (Optional)			
2135.71*	AC Current Probe Model MN82 for use with Model 6471	\$299.00	-
2135.72*	AC Current Probe Model SR182 for use with Model 6471	\$369.00	-

*2 probes required for two clamp testing method.

Features

- Ground Resistance testing using the 2 clamp method (no auxiliary rods needed)
- 2- and 4-Wire Bond Resistance/Continuity Measurement (DC Resistance) with automatic polarity reversal
- 3-Point Fall-of-Potential measurement with manual or automatic frequency selection
- 4-Point soil resistivity measurement with automatic calculation of Rho (ρ) and user selection of the Wenner or Schlumberger test method
- 3-Point earth coupling measurement
- Measures Ground Impedance at frequencies up to 5kHz to test lightning strike protection
- Manual and automatic frequency scan from 41 to 5078Hz for optimum test accuracy in electrically noisy environments
- Selectable test voltage of 16 or 32V up to 250mA of test current
- Auto-off power management
- Automatic recognition of all electrode connections and their resistance value
- Stores up to 512 complete test results
- Display with automatic backlight when entering a function
- Optically isolated USB communication cable included
- Remote set up and operation of all measurements using DataView® software
- Automatic report generation including the fall of potential plot
- Rechargeable NiMH batteries from wall charger or vehicle power
- Rugged dustproof and rainproof field case
- Includes DataView® software for data storage, real-time display, analysis, report generation and system configuration



The Model 6472 performs an automated way to measure the value of the earth/ground using the Fall-of-Potential method and storing measurements.

Multi-Function Ground Resistance Tester Model 6472



SPECIFICATIONS

MODEL	6472
ELECTRICAL	
3-Point Measurement	
Range (Auto-Ranging)	0.09 Ω to 99.9k Ω
Resolution	0.01 Ω to 100 Ω
Test Voltage	Nominal 16 or 32Vrms user selectable
Resistance Measurement Frequency	41 to 5078Hz automatic or user selectable
Test Current	Up to 250mA
Accuracy	$\pm 2\%$ of Reading + 1ct @ 128Hz
2 Clamp Measurement	
Range	0.1 to 500 Ω
Resolution	0.01 to 1 Ω
Measurement Frequency	Auto: 1367Hz Manual: 128Hz-1367Hz-1611Hz-1758Hz
Soil Resistivity 4-Point Measurement	
Test Method	Wenner or Schlumberger selectable with automatic calculation of test results in Ω -meters
Range (Auto-Ranging)	0.01 to 99.99k Ω ; ρ Max: 999k Ω m
Resolution	0.01 to 100 Ω
Test Voltage	16 or 32V user selectable
Frequency	From 41 to 128Hz selectable
External Voltage Measurement	
Range (Auto-Ranging)	0.1 to 65.0VAc/dc – DC to 440Hz
Accuracy	$\pm 2\%$ of Reading + 1ct
Resistance Measurement (Bond Testing)	
Measurement Type	2-Pole (with lead resistance compensation) or 4-Pole (Kelvin sensing) user selectable
Range (Auto-Ranging)	2-Pole 0.01 Ω to 99.9k Ω ; 4-Pole 0.001 Ω to 99.99k Ω
Accuracy	$\pm 2\%$ of Reading + 2cts
Test Voltage	16Vdc (+, - or auto polarity)
Test Current	Up to 250mA max
Data Storage	
Memory Capacity	512 test results (64KB)
Power Source	
9.6V rechargeable battery pack (included)	
Recharging Source	
110/220 50/60Hz external charger with 18Vdc, 1.9A output or 12V vehicle power	

Large Display!

4-Point Bond Test



The 4-Point Bond test displaying lead connections, bond resistance test results, test voltage and current.

3-Point Fall-of-Potential Test



The 3-Point Fall-of-Potential test displaying test lead connection, grounding electrode resistance, test voltage and frequency.

Schlumberger Test



The Schlumberger test displays test lead connection, soil resistivity (ρ) test results, test electrode resistance and more.

Frequency Selection Test



The Frequency selection screen displays selected test frequency and voltage for the test as well as lead connection.

Data Storage



Memory Recall displays test results stored at a specific memory location.

Wenner Test



The Wenner test displays test lead connection, soil resistivity (ρ) test results, electrode spacing and resistance.



Includes meter, rechargeable NiMH batteries, optical USB cable, power adapter 110/240V with power cord 115V US, two 500 ft color-coded leads on spools (red/blue), two 100 ft color-coded leads (hand-tied, green/black), one 30 ft lead (green), four T-shaped auxiliary ground electrodes, set of five spaded lugs, one 100 ft tape measure, DataView® software, ground tester workbook CD, carrying bag for meter, carrying bag for kit, product warranty and registration card and a user manual.
Catalog #2135.54

Current Probe accessory options (For use in two clamp and selective ground testing methods)

AC Current Probe
Model MN82
Catalog #2135.71



AC Current Probe
Model SR182
Catalog #2135.72



CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2135.51	Ground Resistance Tester Model 6472 (2-Point, 3-Point, 4-Point, Bond Test, Digital, Rechargeable Battery, DataView® software)	\$3,795.00	\$99.00
2135.52	Ground Resistance Tester Model 6472 Kit – 150 ft (Model 6472 and Catalog #2135.35)	\$4,195.00	\$99.00
2135.53	Ground Resistance Tester Model 6472 Kit – 300 ft (Model 6472 and Catalog #2135.36)	\$4,295.00	\$99.00
2135.54	Ground Resistance Tester Model 6472 Kit – 500 ft (Model 6472 and Catalog #2135.37)	\$4,395.00	\$99.00
Accessories (Optional) Refer to page 24 for Model 6472 Kits Catalog #2135.35, #2135.36 & #2135.37			
2135.71*	AC Current Probe Model MN82 for use with Model 6472	\$ 299.00	-
2135.72*	AC Current Probe Model SR182 for use with Model 6472	\$ 369.00	-

*2 probes required for two clamp testing method.

DataView®

Data Analysis and Reporting Software for Ground Testers

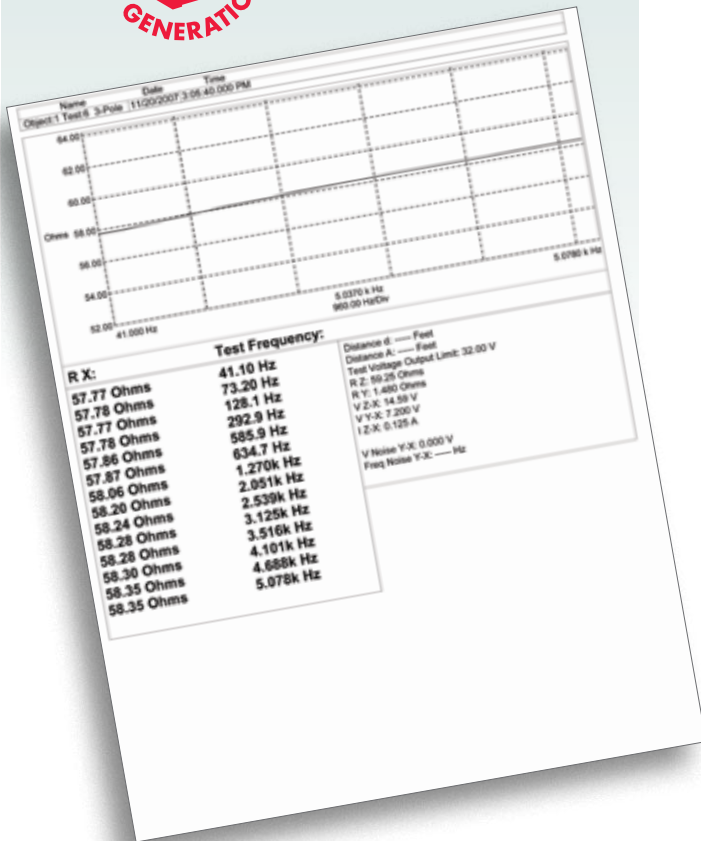
Configure all functions of the Models 6470-B, 6471 & 6472

- Run tests and analyze real-time data from your PC
- Configure all test functions and parameters from your PC
- Customize views, templates and reports to your exact needs
- Display Fall-of-Potential plots, tabular listings of test results, resistance vs. frequency plots, soil resistivity and bonding tests
- Print reports using standard or custom templates you design
- Free updates are available on our website www.aemc.com



DataView® software

DataView® software provides a convenient way to configure and control ground resistance tests from your computer. Through the use of clear and easy-to-use tabbed dialog boxes, all ground tester functions can be configured and tests can be initiated. Results can be displayed in real time and stored in your PC. Reports may be printed along with the operator's comments and analysis.



Fall-of-Potential Plot

Name of Operator _____ Date _____
 Model _____ Location _____ Rod Depth _____ ft
 Serial # _____ Ground System Type: Single Rod Multiple Rods (Grid) Longest Diagonal Dimension _____ ft
 Z Electrode Distance _____ ft

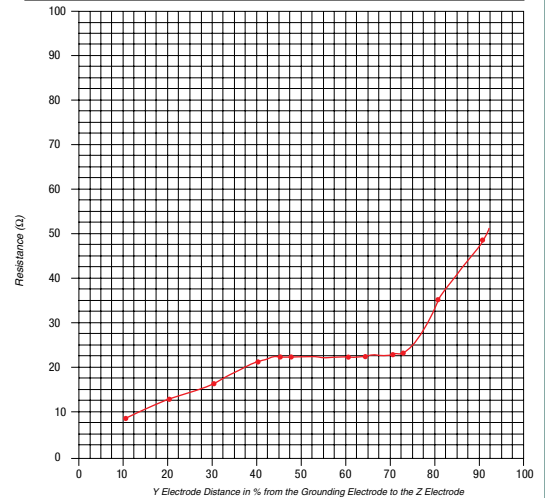
%	FEET	OHMS
90	180	49.3
80	160	34.2
72	144	22.1
70	140	22.1
62	124	21.8
60	120	21.8
52	104	21.6
50	100	21.6
40	80	20.4
30	60	16.2
20	40	12.8
10	20	9.1

Test Conditions

Temp: _____ Soil: Moist Dry

Soil Type

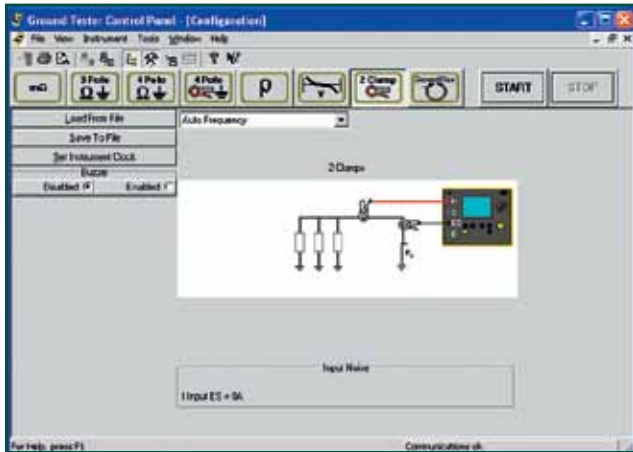
Loam Sand & Gravel Shale Clay Limestone
 Sandstone Granite Slate Other _____



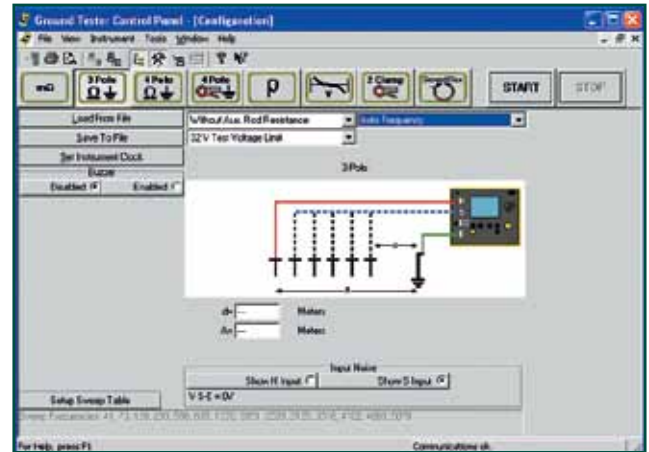
Typical report showing Fall-of-Potential plot using DataView® software.

Typical DataView® Functional Displays for Ground Testers

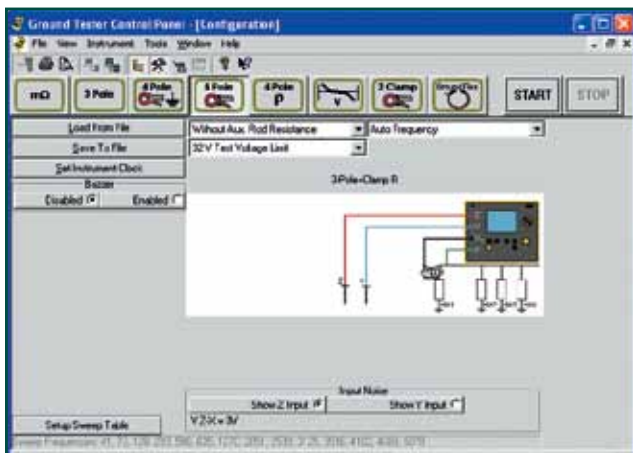
2 Clamp Method Setup



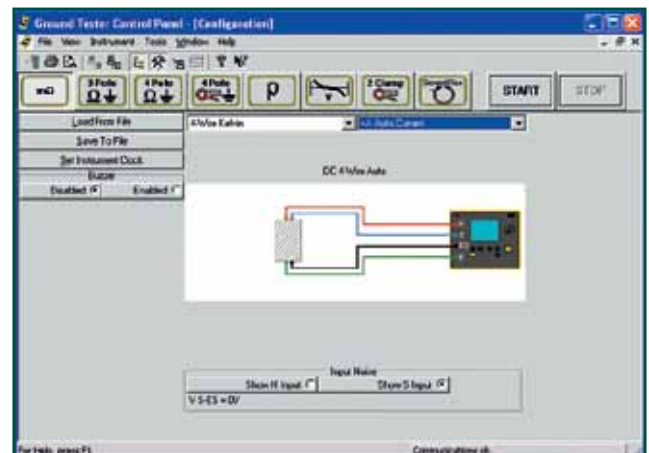
Fall of Potential, Step-Touch Potential



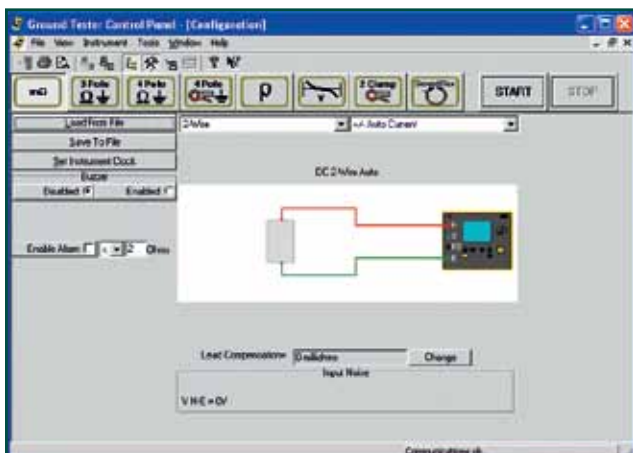
Selective 3-Point Testing of Multiple Rods



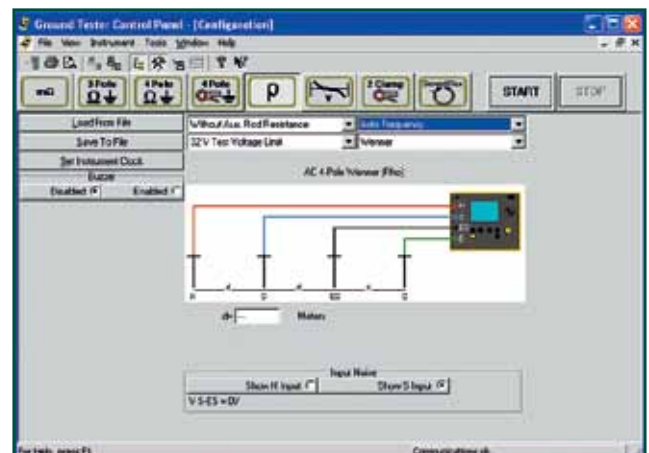
4-Point Bonding For Very Low Resistance



Bonding



Soil Resistivity



Ground Resistance Tester Models 4620 & 4630

Features

- Measures soil resistivity (4-Point)
- Measures ground resistance (2- and 3-Point) Fall-of-Potential method
- Step voltage tests and touch potential measurements
- Auto-Ranging: automatically selects the optimum resistance range and test current
- Designed to reject high levels of noise and interference
- Extremely simple to operate: connect - press - read
- LED on faceplate informs operator of high input noise, high auxiliary rod resistance and fault connections
- Large easy-to-read backlit display
- Battery powered (Model 4620)
- AC powered with rechargeable NiMH battery pack (Model 4630)
- Rugged dustproof and rainproof field case
- Can also be used for continuity tests on bonding
- Color-coded terminals

All Models 4620 & 4630 include batteries

Test Kit for 3-Point testing includes two 150 ft color-coded leads on spools (red and blue), one 30 ft lead (green), two 14.5" T-shaped auxiliary ground electrodes, one set of five spaded lugs, 100 ft tape measure and carrying bag. Catalog #2135.35

Test Kit for 4-Point testing includes two 300 ft color-coded leads on spools (red and blue), two 100 ft color-coded leads (green and black), four 14.5" T-shaped auxiliary ground electrodes, one set of five spaded lugs, 100 ft tape measure and carrying bag. Catalog #2135.36

Test Kit for 4-Point testing includes two 500 ft color-coded leads on spools (red and blue), two 100 ft color-coded leads (green and black), one 30 ft lead (green), four 14.5" T-shaped auxiliary ground electrodes, one set of five spaded lugs, 100 ft tape measure and carrying bag. Catalog #2135.37



Model 4630



SPECIFICATIONS

MODELS	4620	4630	
ELECTRICAL			
Range	20Ω	200Ω	2000Ω
Measurement Range	0.00 to 19.99Ω	20.0 to 199.9Ω	200 to 1999Ω
Resolution	10mΩ	100mΩ	1Ω
Open Voltage	≤42V peak	≤42V peak	≤42V peak
Resistance Measurement Frequency	128Hz square wave	128Hz square wave	128Hz square wave
Test Current	10mA	1mA	0.1mA
Accuracy	±2% of Reading ± 1ct	±2% of Reading ± 1ct	±2% of Reading ± 3ct
Auxiliary Electrode Influence			
Max Res. in Current Circuit	3kΩ	30kΩ	50kΩ
Max Res. in Voltage Circuit	50kΩ	50kΩ	50kΩ
Response Time	Approximately four to eight seconds for a stabilized measurement		
Withstanding Voltage	250Vac or 100Vdc		
Power Source	Eight C cell batteries (included); Alkaline recommended	120/230V 50/60Hz Rechargeable 9.6V, 3.5 Ah NiMH battery pack (included)	
Battery Life	>2000 15-second measurements; LO BAT indication on LCD		
Fuse Protection	0.1A, >250V, 0.25 x 1.25"; 30kA Interrupt Capacity		

CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2130.43	Ground Resistance Tester Model 4620 (Digital, 4-Point, Battery Powered)	\$1,095.00	\$ 94.00
2130.44	Ground Resistance Tester Model 4630 (Digital, 4-Point, Rechargeable Battery)	\$1,695.00	\$ 94.00
2135.19	Ground Resistance Tester Model 4620 Kit – 150 ft (Model 4620 and Catalog #2135.35)	\$1,499.00	\$ 105.00
2135.20	Ground Resistance Tester Model 4620 Kit – 300 ft (Model 4620 and Catalog #2135.36)	\$1,599.00	\$ 105.00
2135.21	Ground Resistance Tester Model 4620 Kit – 500 ft (Model 4620 and Catalog #2135.37)	\$1,699.00	\$ 105.00
2135.22	Ground Resistance Tester Model 4630 Kit – 150 ft (Model 4630 and Catalog #2135.35)	\$1,999.00	\$ 105.00
2135.23	Ground Resistance Tester Model 4630 Kit – 300 ft (Model 4630 and Catalog #2135.36)	\$2,099.00	\$ 105.00
2135.24	Ground Resistance Tester Model 4630 Kit – 500 ft (Model 4630 and Catalog #2135.37)	\$2,199.00	\$ 105.00
Accessories (Optional)			
2130.60	Tape Measure (100 ft)	\$ 34.95	–
2135.35	Test Kit for 3-Point testing – 150 ft (see descriptions above for details)	\$ 449.00	–
2135.36	Test Kit for 4-Point testing – 300 ft (see descriptions above for details)	\$ 549.00	–
2135.37	Test Kit for 4-Point testing – 500 ft (see descriptions above for details)	\$ 649.00	–
2135.38	Ground Test Kit for 3-Point testing (Supplemental for 4-Point testing – includes two 100 ft color-coded leads, one 30 ft lead (green), two 14.5" T-shaped auxiliary ground electrodes and soft carrying bag)	\$ 249.00	–
2130.59	Calibration checker – 25Ω for Models 3620, 3640, 4500, 4610, 4620 and 4630	\$ 54.95	–



Ground Resistance Tester Models 3620 & 3640



Model 3640



All individual units include soft carrying case, batteries and user manual.

SPECIFICATIONS				
MODELS	3620	3640		
Types of Measurements	2- and 3-Point			
Display	Analog	Digital		
Soil Resistivity Test	No			
Measurement Ranges	0.5 to 1000Ω	20Ω: 0.00 to 19.99Ω	200Ω: 20.0 to 199Ω	2000Ω: 200 to 1999Ω
Resolution	10mΩ	10mΩ	100mΩ	1Ω
Test Current	10mA	10mA	1mA	0.1mA
Open Voltage	≤24V peak	≤42V peak		
Operating Frequency	128Hz square wave			
Accuracy	±5% of Reading + 0.1% scale length	±2% of Reading ± 1ct		
Interference	All models reject high levels of interference voltage (DC, 50 to 60Hz, harmonics)			
Power Source	Eight 1.5V AA batteries (included)			
Battery Life	Approx. 1680 15-second measurements	Approx. 1800 15-second measurements		
Low Battery Indication	Yes			
Fuse Protection	High breaking capacity, 0.1A, >250V			

Features

- Measures ground resistance (2- and 3-Point) Fall-of-Potential method
- Large analog display (Model 3620)
- Large LCD digital display (Model 3640)
- Designed to reject high levels of noise and interference
- Auto-Ranging: automatically selects the optimum range (Model 3640)
- Battery powered
- Extremely simple to operate: connect - press - read
- Error indicator lights
- Rugged dustproof and rainproof case
- Color-coded terminals and lead identification



Catalog #2135.35

See page 31 for Ground Testing Kit descriptions.



Catalog #2135.36

CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2114.90	Ground Resistance Tester Model 3620 (Analog, 3-Point)	\$ 795.00	\$ 94.00
2114.92	Ground Resistance Tester Model 3640 (Digital, 3-Point)	\$ 795.00	\$ 94.00
2135.10	Ground Resistance Tester Model 3620 Kit – 150 ft (Model 3620 and Catalog #2135.35)	\$1,199.00	\$105.00
2135.11	Ground Resistance Tester Model 3620 Kit – 300 ft (Model 3620 and Catalog #2135.36)	\$1,299.00	\$105.00
2135.13	Ground Resistance Tester Model 3640 Kit – 150 ft (Model 3640 and Catalog #2135.35)	\$1,199.00	\$105.00
2135.14	Ground Resistance Tester Model 3640 Kit – 300 ft (Model 3640 and Catalog #2135.36)	\$1,299.00	\$105.00
2130.59	Calibration checker – 25Ω for Models 3620, 3640, 4620 and 4630	\$ 54.95	–

Clamp-On Ground Resistance Tester Models 3711 & 3731

Features

- Simple and fast clamp-on operation - no leads, no auxiliary rods or spacing requirements
- Direct reading of ground resistance from 0.1 to 1200Ω
- Direct reading of continuity and ground loop resistance
- Direct reading of ground leakage or phase current from 1mA to 30Arms
- Jaw design with large 1.25" (32mm) window - accommodates up to 1000kcmil cables
- Auto-Off for power management
- Alarm function with adjustable set point and buzzer for quick field checks (Model 3731)
- Memory function to store 99 field measurements for later retrieval and analysis (Model 3731)
- Rugged Lexan® head and body construction resists breakage
- Alarm settings and stored memory information saved during shutdown (Model 3731)
- Noise icon and buzzer alert user to presence of dangerous voltage and current levels
- Designed to EN 61010-1, 150V CAT III, 300V CAT II safety standards
- Patented design



Models 3711 & 3731
US Patent No. 362,639



FEATURES & FUNCTIONS

MODELS	3711	3731
Ohms Range	✓	✓
Arms Range	✓	✓
Hold Function	✓	✓
Self Test	✓	✓
Auto-Off	✓	✓
Battery Life Indicator	✓	✓
Noise Indicator	✓	✓
Open Jaw Indicator	✓	✓
Closed Loop Indicator	✓	✓
Multi-Tone Beeper	✓	✓
Alarm Function	-	✓
Memory (Logging)	-	✓



Models 3711 and 3731 include calibration loop, battery, hard carrying case and user manual.

SPECIFICATIONS

MODELS	3711 & 3731			
ELECTRICAL				
Ground Resistance	Measurement Range	Resolution	Accuracy (% of Reading)	
	0.1 to 1.0Ω	0.01Ω	±(2% ± 0.02Ω)	
	1.0 to 50.00Ω	0.1Ω	±(1.5% ± 0.1Ω)	
	Auto-Ranging	50.0 to 100.0Ω	0.5Ω	±(2.0% ± 0.5Ω)
	0.01 to 1200Ω	100 to 200Ω	1Ω	±(3.0% ± 1Ω)
	200 to 400Ω	5Ω	±(6% ± 5Ω)	
	400 to 600Ω	10Ω	±(10% ± 10Ω)	
Current Measurement	1 to 299mA	1mA	±(2.5% + 2mA)	
	Auto-Ranging	0.300 to 2.999A	0.001A	±(2.5% + 2mA)
	1mA to 30.00Arms	3.00 to 29.99A	0.01A	±(2.5% + 20mA)
Resistance Measurement Frequency	2403Hz			
Current Measurement Frequency	47 to 800Hz			
Current Overload	OL displayed above 29.99Arms			
Power Source	9V Alkaline battery (included); Battery life: Eight hours or approximately 1000 measurements of 30 seconds			

CATALOG NO. DESCRIPTION

CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2117.60	Ground Resistance Tester Model 3711 (Clamp-On)	\$1,425.00	\$ 98.00
2117.61	Ground Resistance Tester Model 3731 (Clamp-On with memory and alarm)	\$1,625.00	\$ 98.00



GROUND RESISTANCE TESTER SELECTION CHART

AEMC MODEL NUMBER	AEMC CATALOG NUMBER	RESISTANCE RANGE	POWER SOURCE	2 POINT TEST	3 POINT TEST	4 POINT/ SELECTIVE	SOIL RESISTIVITY TEST	EARTH COUPLING	2-CLAMP	BONDING	DISPLAY	
6470-B	2135.01	0.01 to 99,000Ω	Rechargeable Battery	✓	✓	—	✓	✓	—	✓	Digital	
6470-B Kit 150FT	2135.02	0.01 to 99,000Ω	Rechargeable Battery	✓	✓	—	✓*	✓	—	—	Digital	
6470-B Kit 300FT	2135.03	0.01 to 99,000Ω	Rechargeable Battery	✓	✓	—	✓	✓	—	✓	Digital	
6470-B Kit 500FT	2135.04	0.01 to 99,000Ω	Rechargeable Battery	✓	✓	—	✓	✓	—	✓	Digital	
6471	2135.49	0.01 to 99.99kΩ	Rechargeable Battery	✓	✓	✓	✓	✓	✓	✓	Digital	
6471 Kit 300FT	2135.50	0.01 to 99.99kΩ	Rechargeable Battery	✓	✓	✓	✓	✓	✓	✓	Digital	
6472	2135.51	0.01 to 99,000Ω	Rechargeable Battery	✓	✓	✓	✓	✓	✓	✓	Digital	
6472 Kit 150FT	2135.52	0.01 to 99,000Ω	Rechargeable Battery	✓	✓	✓	✓*	✓	✓	—	Digital	
6472 Kit 300FT	2135.53	0.01 to 99,000Ω	Rechargeable Battery	✓	✓	✓	✓	✓	✓	✓	Digital	
6472 Kit 500FT	2135.54	0.01 to 99,000Ω	Rechargeable Battery	✓	✓	✓	✓	✓	✓	✓	Digital	
4620	2130.43	0.0 to 1.999kΩ	Battery	✓	✓	—	✓	—	—	—	Digital	
4620 Kit 150FT	2135.19	0.0 to 1.999kΩ	Battery	✓	✓	—	✓*	—	—	—	Digital	
4620 Kit 300FT	2135.20	0.0 to 1.999kΩ	Battery	✓	✓	—	✓	—	—	—	Digital	
4620 Kit 500FT	2135.21	0.0 to 1.999kΩ	Battery	✓	✓	—	✓	—	—	—	Digital	
4630	2130.44	0.0 to 1.999kΩ	Rechargeable Battery	✓	✓	—	✓	—	—	—	Digital	
4630 Kit 150FT	2135.22	0.0 to 1.999kΩ	Rechargeable Battery	✓	✓	—	✓*	—	—	—	Digital	
4630 Kit 300FT	2135.23	0.0 to 1.999kΩ	Rechargeable Battery	✓	✓	—	✓	—	—	—	Digital	
4630 Kit 500FT	2135.24	0.0 to 1.999kΩ	Rechargeable Battery	✓	✓	—	✓	—	—	—	Digital	
3620	2114.90	0.50 to 1000Ω	Battery	✓	✓	—	—	—	—	—	Analog	
3620 Kit 150FT	2135.10	0.50 to 1000Ω	Battery	✓	✓	—	—	—	—	—	Analog	
3620 Kit 300FT	2135.11	0.50 to 1000Ω	Battery	✓	✓	—	—	—	—	—	Analog	
3640	2114.92	0.0 to 1.999kΩ	Battery	✓	✓	—	—	—	—	—	Digital	
3640 Kit 150FT	2135.13	0.0 to 1.999kΩ	Battery	✓	✓	—	—	—	—	—	Digital	
3640 Kit 300FT	2135.14	0.0 to 1.999kΩ	Battery	✓	✓	—	—	—	—	—	Digital	
3711	2117.60	0.0 to 1200Ω	Battery	Clamp-On Ground Resistance Tester				—	—	—	✓**	Digital
3731	2117.61	0.0 to 1200Ω	Battery	Clamp-On Ground Resistance Tester w/Alarm & Memory				—	—	—	✓**	Digital

* Performing soil resistivity tests with this kit requires two additional auxiliary electrodes not supplied in the 150ft kit and one additional test lead.

**Clamp-on Ground Resistance Tester can measure system continuity inclusive of all bonding points.

Features

- Hand-held Cable Length Meter and Fault Locator for multiple conductor cables
- Detects opens and shorts and the distance to them from one end of the cable
- Measure cable length up to 6000 ft or 2000m (selectable)
- Automatic cable impedance compensation
- Built-in library of most common cables and their Velocity of Propagation (Vp)
- Manual selection of Vp for all cables not found in library
- User programmable cable library with 15 storage positions
- Vp setting displayed along with length and cable type (if in library)
- Built-in tone generator for tracing and locating cables
- Large high-visibility blue electroluminescent backlit display

Tone Receiver/Cable Tracer Model TR03:

- Compatible with Models CA7024, CA7026 and CA7028
- One button operation
- Volume control
- Audio output



Model CA7024 includes BNC pigtail cable with alligator clips, four 1.5V AA batteries, soft carrying case and user manual.



Model TR03

Cable Length Meter & Fault Locator Alphanumeric TDR Model CA7024

Finds opens, shorts and cable length



SPECIFICATIONS

MODEL	CA7024
MEASUREMENTS	
Range @ Vp = 70%	6000 ft or 2000m (selectable)
Resolution	0.1 ft up to 100 ft, then 1 ft (0.1m up to 100m, then 1m)
Accuracy	±2% of Reading
Minimum Cable Length	12 ft (4m)
Cable Library	Built-in, user selectable and user programmable
Velocity of Propagation (Vp)	Adjustable from 0 to 99%
Output Pulse	5V (peak to peak) into open circuit; nanosecond rise Step Function
Output Impedance	Automatic compensation
Display Resolution	128 x 64 pixel graphical LCD
Tone Generator	Oscillating 810 to 1110Hz
Voltage Warning	Triggers at >10VAC/DC
Power Source	Four 1.5V AA Alkaline batteries (included)
Auto-Off	After three minutes
Weight	12 oz (350g)

CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2127.80	Fault Mapper® Model CA7024 (Cable Length Meter & Fault Locator – Alphanumeric TDR)	\$495.00	-
Accessories (Optional)			
2127.76	Tone Receiver/Cable Tracer Model TR03	\$ 59.00	-



Fault Mapper Pro[®] Telephone/Coaxial/Parallel Cable Tester Graphical TDR Model CA7026

Maps and pinpoints the locations of errors in ethernet cables terminated with RJ-45 connectors



Features

- Hand-held Graphical TDR (Time Domain Reflectometer)
- Detects opens, shorts, taps, faulty taps, bridge taps, splitters, high resistance, wet cables, splices and more for multiple conductor cables
- Identifies impedance mismatches
- Indicates cable faults and terminations up to 11,700 ft or 3500m (selectable)
- Works with twisted pair, parallel and coaxial cable
- Selectable cable impedance (50Ω, 75Ω, 100Ω)
- Over-voltage protection up to 250V
- Adjustable cursor assists in locating faults and termination
- Built-in tone generator for tracing and locating cables
- Auto-Ranging scale
- Large high-visibility blue electroluminescent backlit display

Tone Receiver/Cable Tracer Model TR03 is available as an accessory (see page 35)

SPECIFICATIONS	
MODEL	CA7026
MEASUREMENTS	
Range @ Vp = 70%	670, 1470, 2900, 5830 and 11,700 ft (220, 440, 870, 1750 and 3500m) auto-ranging
Resolution	Approximately 1% of selected range
Accuracy	±1% of range
Range Selection	Automatic range selection against cursor position
Minimum Cable Length	50 ft (15m)
Sensitivity	Minimum 3 pixel return on a fault at 6000 ft (2km)
Velocity of Propagation (Vp)	Adjustable from 0 to 99% in 1% steps
Output Pulse	+5V into an open circuit or +1.5V into 50Ω load; 25ns min to 2.15μs dependent on range
Cable Impedance	Selectable between 50, 75 and 100Ω
Display Resolution	128 x 64 pixel graphical LCD
Tone Generator	Oscillating 810 to 1110Hz
Scan Rate	Single shot or 6.7 pulses per second (selectable)
Power Source	Four 1.5V AA Alkaline batteries (included)
Auto-Off	After three minutes
Weight	12 oz (350g)



Model CA7026 includes BNC pigtail cable with alligator clips, four 1.5V AA batteries, soft carrying case and user manual.

CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2127.81	Fault Mapper Pro [®] Model CA7026 (Telephone Cable Tester/Graphical TDR)	\$795.00	-
Accessories (Optional)			
2127.76	Tone Receiver/Cable Tracer Model TR03	\$ 59.00	-

Wire Mapper Pro[®] LAN & Cable Tester Model CA7028

The only wire-mapper in its class with graphical and digital display of fault type and fault location



Features

- Hand-held LAN Cable Mapping and Troubleshooting Tester
- Indicates all common wiring faults including split pairs, shorts, opens, reversed pairs and crossed wires
- Unique graphical and digital display of fault information and length
- Active remote unit indicates Pass/Fail by Green/Red LED during the test
- Indicates distances to opens and shorts and identifies location
- Display fault location up to 500 ft or 150m (selectable)
- Built-in tone generator for tracing and locating cables
- Built-in service check function to detect telephone, 10BaseT, 100Mbit+ and Token Ring
- Visual and audible warning of live telephone network voltages
- Works with all category cables
- Rugged design weighs less than 12 oz (350g)
- Large high-visibility blue electroluminescent backlit display
- Complete with remote unit and mini patch leads
- Active remote identifiers indicate Pass/Fail at remote end using Green/Red LED
- Up to 16 unique remote identifiers available
- Works with TIA 568A/B, USOC and ISDN wiring schemes

Tone Receiver/Cable Tracer Model TR03 is available as an accessory (see page 35)



Model CA7028 includes remote ID (#1), two patch cords, four 1.5V AA batteries, soft carrying case and user manual.

SPECIFICATIONS

MODEL	CA7028
MEASUREMENTS	
Range	500 ft or 150m (selectable)
Accuracy	±5% of Reading
Cable Type	UTP, STP, FTP and SSTP
Faults Indicated	Short Circuit Pair, Open Circuit Wire, Short Between Pairs, Split/Cross Pairs, Pair Reversals, Shield Continuity
Fault Location	Near end, remote end, or distance to fault
Fault Display	All fault and setting info displayed textually and graphically
Wiring Schemes	TIA 568A/B, USOC and ISDN
Service Indication	Telephone, 10BaseT, 100Mbit+, Token Ring
Voltage Warning	Audible and visual warning of TNV (Telecom Network Voltage)
Test Inhibit	Inhibits testing in the presence of live voltages
Tone Generator	Oscillating 810 to 1110Hz
Power Source	Four 1.5V AA Alkaline batteries (included)
Display Backlight	Blue electroluminescent
Remote Display	Green/Red Pass/Fail LED
Auto-Off	After three minutes
Weight	Main unit: 12 oz (350g); Remote unit: 1.5 oz (40g)

CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2127.82	Wire Mapper Pro [®] Model CA7028 (LAN Cable Tester)	\$495.00	-
Accessories (Optional)			
2127.76	Tone Receiver/Cable Tracer Model TR03	\$ 59.00	-



Simple Logger® II TRMS Clamp-On Current Model CL601



Features

- 0 to 600Arms
- True RMS measurements
- Self contained, no exposed connections
- Overload indication
- Isolated USB 2.0 communication output (cable included)
- One button operation
- Alarm function
- 5 LED indicators quickly and clearly display logger status
- Includes DataView® software for data storage, real-time display, analysis and report generation
- EN 61010-1; 300V CAT IV, 600V CAT III

Applications

- Machine load monitoring
- HVAC troubleshooting
- Load profiling
- Electrical troubleshooting
- Start-Stop time stamping

SPECIFICATIONS

MODEL	CL601
ELECTRICAL	
Channels	One
Input	Split CT – AC Current
Measurement Range	0 to 600Aac
Resolution	0.1A
Accuracy (50/60Hz)	0 to 5A: unspecified 5 to 50A: $\pm(1\% \text{ of Reading} + 1A)$ 50 to 400A: $\pm(1\% \text{ of Reading} + 0.5A)$ 400 to 600A: $\pm(3\% \text{ of Reading} + 1A)$
Sample Rate	64 samples/cycle
Storage Rate	Programmable from 8 every second to 1 every day
Storage Modes	Start/Stop, FIFO and Extended Recording Mode* (XRM™)
Recording Length	15 minutes to 8 weeks, programmable using DataView®
Memory	240,000 measurements (512KB) - The recorded data is stored in non-volatile memory and will be retained even if the battery is low or removed.
Communication	USB 2.0 optically isolated
Power Source	2 x 1.5V AA-cell Alkaline batteries (included)
Battery Life	100 hours to >45 days (dependent on sample rate and recording length)
MECHANICAL	
Dimensions	9.25 x 4.0 x 1.63" (235 x 102 x 41mm)
Max Conductor Size	1 conductor - \varnothing 1.65" (42mm) 2 conductor - \varnothing 1.00" (25.4mm) ea
Weight (with battery)	17.1 oz (485g)
Case	UL94-V0
Vibration	IEC 68-2-6 (1.5mm, 10 to 55Hz)
Shock	IEC 68-2-27 (30G)
Drop	IEC 68-2-32 (1m)

*Extended Recording Mode (XRM™)

This unique recording mode provides the opportunity to continuously record over long periods of time by reducing the stored samples of the oldest data and maintaining matching resolution for the newest data. Each time the memory fills up using XRM™ every other of the oldest stored samples is discarded making room for newer samples. This process continues until the recording is manually stopped.

CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2126.01	Simple Logger® II Model CL601 (1-Channel, TRMS Clamp-On, 600Aac)	\$484.00	\$72.00

Simple Logger® II TRMS Current Models L101, L102 & L111



Features

- Compatible standard current probes with voltage output and BNC connection (Models L101 & L102) - see chart on page 68 for compatible current probes
- Fused input (Model L111)
- Compatible with standard AC current probes with current output and banana plug connection (Model L111)
- 2 inputs (Model L102)
- 64 samples per cycle
- Programmable storage rates from 8 every second to 1 every day
- 3 user selectable storage modes
- Stores up to 240,000 measurements in non-volatile memory
- Powered by standard Alkaline batteries
- Lightweight, compact, fits anywhere
- 5 LED indicators quickly and clearly display logger status
- Includes DataView® software FREE for data storage, real-time waveform display, analysis & report generation
- Isolated USB communication cable included
- EN 61010-1; 50V CAT III

Applications (Models L101 & L111)

- Load profiling
- Fault current detection
- Intermittent problem detection
- Demand recording
- Neutral current monitoring
- Harmonic current recording using DataView® software
- Metering CT resizing
- Start-Stop time stamping

Applications (Model L102)

- Split phase load monitoring
- Neutral & ground current monitoring
- Intermittent problem detection
- Harmonic current monitoring using DataView® software
- Machine load monitoring
- Start-Stop time stamping

SPECIFICATIONS

MODELS	L101	L102	L111
ELECTRICAL			
Channels	One	Two	One
Input Connection	BNC	One BNC connector per channel	Two recessed banana jacks
Measurement Range	0 to 1V _{AC} (probe dependent)		0 to 1A _{AC} (probe dependent)
Resolution	0.1mV		0.1mA
Accuracy (50/60Hz)	0 to 10mV: unspecified 10 to 50mV: ±(0.5% of Reading + 1mV) 50 to 1000mV: ±(0.5% of Reading + 0.5mV)		0 to 10mA: unspecified 10 to 50mA: ±(0.5% of Reading + 1mA) 50 to 1000mA: ±(0.5% of Reading + 0.5mA)
Input Impedance	800kΩ	800kΩ	1Ω
Sample Rate	64 samples/cycle		
Storage Rate	Programmable from 8 every second to 1 every day		
Storage Modes	Start/Stop, FIFO and Extended Recording Mode (XRM™)		
Recording Length	15 minutes to 8 weeks, programmable using DataView®		
Memory	240,000 measurements (512KB) - The recorded data is stored in non-volatile memory and will be retained even if the battery is low or removed.		
Communication	USB 2.0 optically isolated		
Power Source	2 x 1.5V AA-cell Alkaline batteries (included)		
Battery Life	100 hours to >45 days (dependent on sample rate and recording length)		
MECHANICAL			
Dimensions	5.38 x 2.75 x 1.28" (136 x 70 x 32mm)		5.18 x 2.75 x 1.28" (132 x 70 x 32mm)
Max Conductor Size	Current probe dependent		
Weight (with battery)	6.4 oz (181g)		6.64 oz (188g)
Case	UL94-V0		
Vibration	IEC 68-2-6 (1.5mm, 10 to 55Hz)		
Shock	IEC 68-2-27 (30G)		
Drop	IEC 68-2-32 (1m)		

CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2126.02	Simple Logger® II Model L101 (1-Channel, TRMS 0 to 1V _{AC})	\$349.00	\$72.00
2126.03	Simple Logger® II Model L102 (2-Channel, TRMS 0 to 1V _{AC})	\$389.00	\$72.00
2126.04	Simple Logger® II Model L111 (1-Channel, TRMS 0 to 1A _{AC})	\$349.00	\$72.00



Simple Logger® II TRMS 600VAc/dc Model L261 ±850Vdc Model L481



SPECIFICATIONS

MODELS	L261	L481
ELECTRICAL		
Channels	One	
Input Connection	Two recessed 4mm safety banana jacks	
Measurement Range	0 to 600VAc/dc	-850 to ±850Vdc
Resolution	0.1V	
Accuracy (50/60Hz)	0 to 5V: unspecified 5 to 50V: ± (0.5% of Reading + 1V) 50 to 600V: ± (0.5% of Reading + 0.5V)	0 to 5V: unspecified 5 to 50V: ± (0.5% of Reading + 1V) 50 to 850V: ± (0.5% of Reading + 0.5V)
Input Impedance	40MΩ	
Sample Rate	64 samples/cycle	Maximum of 8 per second
Storage Rate	Programmable from 8 every second to 1 every day	
Storage Modes	Start/Stop, FIFO and Extended Recording Mode (XRM™)	
Recording Length	15 minutes to 8 weeks, programmable using DataView®	
Memory	240,000 measurements (512KB) - The recorded data is stored in non-volatile memory and will be retained even if the battery is low or removed.	
Communication	USB 2.0 optically isolated	
Power Source	2 x 1.5V AA-cell Alkaline batteries (included)	
Battery Life	100 hours to >45 days (dependent on sample rate and recording length)	
MECHANICAL		
Dimensions	4.94 x 2.75 x 1.28" (125 x 70 x 32mm)	
Weight (with battery)	6.4 oz (181g)	
Case	UL94-V0	
Vibration	IEC 68-2-6 (1.5mm, 10 to 55Hz)	
Shock	IEC 68-2-27 (30G)	
Drop	IEC 68-2-32 (1m)	

Features

- TRMS voltage recording up to 600VAc/dc (Model L261)
- Bipolar voltage recording up to ±850Vdc (Model L481)
- 64 samples per cycle (Model L261)
- Programmable storage rates from 8 every second to 1 every day
- 3 user selectable storage modes
- Stores up to 240,000 measurements in non-volatile memory
- Powered by standard Alkaline batteries
- Lightweight, compact, fits anywhere
- 5 LED indicators quickly and clearly display logger status
- Includes DataView® software FREE for data storage, real-time waveform display, analysis and report generation
- Isolated USB communication cable included
- EN 61010-1; 300V CAT IV; 600V CAT III

Applications (Model L261)

- Surge and Sag recording
- Long term supply monitoring
- Industrial, commercial, residential monitoring
- Monitor voltage harmonics
- Find intermittent voltage problems
- Machine monitoring

Applications (Model L481)

- Rail voltage monitoring
- Long term supply monitoring
- Find intermittent voltage problems
- Machine monitoring
- Windmill monitoring



Models L261 & L481 includes set of two color-coded 5 ft voltage leads and color-coded alligator clips (red/black)
Cat. #2140.62

CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2126.05	Simple Logger® II Model L261 (1-Channel, TRMS 600VAc/dc)	\$359.00	\$72.00
2126.25	Simple Logger® II Model L481 (1-Channel, ±850Vdc)	\$359.00	\$72.00

Simple Logger® II

4 to 20mA_{DC} Current Model L322

DC Voltage Model L432

Features

- 2 independent input channels
- -20 to +20mA_{DC} (Model L322)
- User-selectable ranges of ± 100mV; ± 1V and ± 10V_{DC} per channel (Model L432)
- Programmable storage rates from 8 every second to 1 every day
- 3 user selectable storage modes
- Stores up to 240,000 measurements in non-volatile memory
- Powered by standard Alkaline batteries
- Lightweight, compact, fits anywhere
- 5 LED indicators quickly and clearly display logger status
- Includes DataView® software FREE for data storage, real-time display, analysis and report generation
- Isolated USB communication cable included
- EN 61010-1; 50V CAT III

Applications (Model L322)

- Process control monitoring and troubleshooting
- Profile temperature, pressure, flow and other parameters directly
- General purpose DC current monitoring
- And many more

Applications (Model L432)

- Circuit design troubleshooting
- Sensor monitoring
- Battery testing
- Power supply profiling
- And many more



SPECIFICATIONS

MODELS	L322	L432
ELECTRICAL		
Channels	Two	
Input Connection	One 4-position removable screw-type terminal block	
Measurement Range	-20 to +20mA _{DC}	±100mV/1V/10V _{DC} (selectable through DataView® software)
Resolution	0.01mA	0.1mV - 1mV - 10mV
Accuracy (DC and 50/60Hz)		
Range 1	(0.25% of Reading +0.05mA)	±(0.5% of Reading +1mV)
Range 2	-	±(0.5% of Reading +1mV)
Range 3	-	±(0.5% of Reading +10mV)
Input Impedance	50Ω	100V/1V: 80kΩ 10V: 800kΩ

MODELS	L322	L432
ELECTRICAL		
Sample Rate	8 samples taken at storage interval	
Storage Rate	Programmable from 8 every second to 1 every day	
Storage Modes	Start/Stop, FIFO and Extended Recording Mode (XRM™)	
Recording Length	15 minutes to 8 weeks, programmable using DataView®	
Memory	240,000 measurements (512KB) The recorded data is stored in non-volatile memory and will be retained even if the battery is low or removed.	
Communication	USB 2.0 optically isolated	
Power Source	2 x 1.5V AA-cell Alkaline batteries (included)	
Battery Life	100 hours to >45 days (dependent on sample rate and recording length)	
MECHANICAL		
Dimensions	5.45 x 2.75 x 1.28" (136 x 70 x 32mm)	
Weight (with battery)	6.4 oz (181g)	
Case	UL94-V0	
Vibration	IEC 68-2-6 (1.5mm, 10 to 55Hz)	
Shock	IEC 68-2-27 (30G)	
Drop	IEC 68-2-32 (1m)	

CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2126.06	Simple Logger® II Model L322 (2-Channel, 4 to 20mA _{DC} Current Module)	\$349.00	\$72.00
2126.07	Simple Logger® II Model L432 (2-Channel, DC ±100mV/1V/10V _{DC})	\$349.00	\$72.00



Simple Logger® II 4-Channel Event Model L404



Features

- Four input channels
- Works with dry contact closure or 0-3 and 0-5Vdc logic levels
- Stores up to 50,000 events in non-volatile memory
- Powered by standard Alkaline batteries
- Lightweight, compact, fits anywhere
- 5 LED indicators quickly and clearly display logger status
- Includes DataView® software for data storage, real-time measurement display, analysis and report generation
- Isolated USB communication cable and batteries included
- EN 61010-1; 50V CAT III

Applications

- Determine machinery run/down times
- Determine event sequencing
- Count events and record
- Record event duration
- Accumulate rainfall data

SPECIFICATIONS	
MODEL	L404
ELECTRICAL	
Channels	Four
Input Connection	One 8-position removable screw-type terminal block
Voltage Range	0 to 5Vdc or contact closure
Input Impedance	<150kΩ
Sample Rate	Maximum of 8 per second
Storage Rate	Event triggered (maximum once every two sample periods)
Storage Mode	Event recording
Recording Length	15 minutes to 8 weeks, programmable using DataView®
Memory	50,000 events (512KB) The recorded data is stored in non-volatile memory & retained even if the battery is low or removed.
Communication	USB 2.0 optically isolated
Power Source	2 x 1.5V AA-cell Alkaline batteries
Battery Life	100 hours to >45 days (dependent on storage rate/recording length)
MECHANICAL	
Dimensions (without removable connector)	5.06 x 2.75 x 1.28" (129 x 70 x 32mm)
Weight (with battery)	6.4 oz (18g)
Case	UL94-V0
Vibration	IEC 68-2-6 (1.5mm, 10 to 55Hz)
Shock	IEC 68-2-27 (30G)
Drop	IEC 68-2-32 (1m)

CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2126.29	Simple Logger® II Model L404 (4-Channel, Event)	\$399.00	N/A

Simple Logger® II TRMS Voltage & Current Model L562



Features

- 2 input channels
- Voltage: 0 to 600V_{AC} TRMS
- Current: compatible with voltage output AC current probes with voltage outputs (shown on page 68)
- 64 samples per cycle
- Records Arms, Vrms & VA (VA displays in DataView® software)
- 3 user selectable storage modes
- Programmable storage rates from 8 every second to 1 every day
- Stores up to 240,000 measurements in non-volatile memory
- Powered by standard Alkaline batteries
- Lightweight, compact, fits anywhere
- 5 LED indicators quickly and clearly display logger status
- Includes DataView® software FREE for data storage, real-time waveform display, analysis and report generation
- EN 61010-1; 300V CAT IV; 600V CAT III with a safety rated current probe attached
- Isolated USB communication cable included

Applications

- Single phase power monitoring
- Residential, commercial, industrial, troubleshooting
- Find sags and surges
- Track energy usage
- Start-Stop time stamping



Model L562 includes set of two color-coded 5 ft voltage leads and color-coded alligator clips (red/black)
Cat. #2140.62

*The native measurement of the instrument is voltage. This voltage is scaled to display current corresponding to the users probe selection. This accuracy specification does not account for probe errors.

**A memory backup provides backup power while the batteries are being changed.

***Input level beyond this range may damage the instrument.

SPECIFICATIONS

MODEL	L562	
ELECTRICAL		
Channels	Two	
Connection	Current Channel	Voltage Channel
Input Connection	BNC	Two recessed banana jacks
Input Range*	0 to 1Vac (for use with current probes with a voltage output)	0 to 600Vac
Resolution	0.1mV	0.1V
Accuracy (50/60Hz)	0 to 10mV unspecified 10 to 50mV: ±(0.5% of Reading + 1mV) 50 to 1000mV: ±(0.5% of Reading + 0.5mV)	0 to 5V unspecified 5 to 50V: ±(0.5% of Reading + 1V) 50 to 600V: ±(0.5% of Reading + 0.5V)
Input Impedance	800kΩ	40MΩ
Maximum Input Voltage***	5Vrms or ± 7.07V peak	1.2 x 600V
Sample Rate	64 samples/cycle	
Storage Rate	Programmable from 8 every second to 1 every day	
Storage Modes	Stop when full, FIFO and Extended Recording Mode (XRM™)	
Recording Length	15 minutes to 8 weeks, programmable using DataView®	
Memory	240,000 measurement (512KB). The recorded data is stored in non-volatile memory and will be retained even if the battery is low or removed.	
Communication	USB 2.0 optically isolated	
Power Source**	2 x 1.5V AA-cell Alkaline batteries (included)	
Battery Life	100 hours to > 45 days (dependent on sample rate and recording length)	
MECHANICAL		
Dimensions	5.38 x 2.75 x 1.28" (136 x 70 x 32mm)	
Max Conductor Size	Current probe dependent	
Weight (with battery)	6.4 oz (181g)	
Case	UL94-V0	
Vibration	IEC 68-2-6 (1.5mm, 10 to 55Hz)	
Shock	IEC 68-2-27 (30G)	
Drop	IEC 68-2-32 (1m)	

CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2126.35	Simple Logger® II Model L562 (TRMS Voltage & Current Module)	\$389.00	\$72.00



Simple Logger® II Thermocouple Model L642



SPECIFICATIONS

MODEL	L642
ELECTRICAL	
Channels	Two
Input Connection	Two miniature, thermocouple connectors
Measurement Range:	°F (°C)
J	-346 to +2192 (-210 to +1200)
K	-328 to +2501 (-200 to +1372)
T	-328 to +752 (-200 to +400)
N	-328 to +2372 (-200 to +1300)
E	-238 to 1742 (-150 to +950)
R	32 to 3212 (0 to 1767)
S	32 to 3212 (0 to 1767)
Resolution	0.1° C/F < 1000° C/F; 1° ≥ 1000° C/F
Accuracy	±(0.1% to 0.2% of Reading + 0.6° to 1°) depending on the range and T/C type
Sample Rate	8 samples taken at storage interval
Storage Rate	Programmable from 5s to 1 per day
Storage Modes	Start/Stop, FIFO and Extended Recording Mode (XRM™)
Recording Length	15 minutes to 8 weeks, programmable using DataView®
Memory	240,000 measurements (512KB) The recorded data is stored in non-volatile memory and will be retained even if the battery is low or removed.
Communication	USB 2.0 optically isolated
Power Source	2 x 1.5V AA-cell Alkaline batteries (included)
Battery Life	100 hours to >45 days (dependent on sample rate and recording length)
MECHANICAL	
Dimensions	4.94 x 2.75 x 1.28" (125 x 70 x 32mm)
Weight (with battery)	7 oz (200g)
Case	UL94-V0
Vibration	IEC 68-2-6 (1.5mm, 10 to 55Hz)
Shock	IEC 68-2-27 (30G)
Drop	IEC 68-2-32 (1m)

CATALOG NO. DESCRIPTION

CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2126.08	Simple Logger® II Model L642 (Temperature Thermocouple Module)	\$389.00	\$72.00

Features

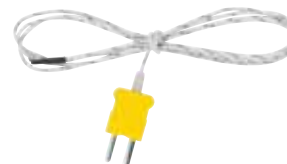
- 2 input channels
- User-selectable thermocouple types J, K, T, N, E, R, and S (not included)
- Programmable storage rates from 1 every 5 seconds to 1 every day
- 3 user selectable storage modes
- Stores up to 240,000 measurements in non-volatile memory
- Powered by standard Alkaline batteries
- Lightweight, compact, fits anywhere
- 5 LED indicators quickly and clearly display logger status
- Includes DataView® software FREE for data storage, real-time display, analysis and report generation
- Isolated USB communication cable included
- EN 61010-1; 50V CAT III

Applications

- HVAC monitoring
- Process monitoring
- Refrigeration monitoring
- And many more

Optional Thermocouple Sensors

Please consult AEMC® for recommendations on thermocouples. **Thermocouple sensors are not included.**



Thermocouple-flexible K type (1.2mm)
Cat. #2126.47



Thermocouple needle
Cat. #2126.46

Simple Logger® II Temperature/RH Model L702



NEW!



Features

- Monitors and records temperature and humidity
- 14° to 122°F (-10° to 50°); 5 to 85% RH
- Field replaceable sensor, no calibration required
- Includes built in Temp/RH sensor
- Programmable storage rates from once every 5 seconds to 1 every day
- 3 user selectable storage modes
- Stores up to 240,000 measurements in non-volatile memory
- Powered by standard Alkaline batteries for a period of 45 days or more
- Lightweight, compact, fits anywhere
- 5 LED indicators quickly and clearly display logger status
- Includes DataView® software FREE for data storage, real-time display, analysis and report generation
- Isolated USB communication cable included
- EN 61010-1; 50V CAT III

Applications

- Clean rooms
- Blood banks
- Humidors
- Wine cellars
- Greenhouses
- Paper mills
- General Office

SPECIFICATIONS

MODEL		L702
ELECTRICAL		
Channels	Two	
Input	Temperature Sensor	Humidity Sensor
Range	14° to 122°F (-10° to 50°C)	5 to 85% RH
Accuracy	± (1% of Reading + 1°F/C)	± (3% of Reading + 2cts)
Resolution	0.1°F/C	0.1% RH
Sample Rate	Minimum of 1 every 5 seconds	
Storage Rate	Programmable from once every 5s to 1 per day	
Storage Modes	Start/Stop, FIFO and Extended Recording Mode (XRM™)	
Recording Length	15 minutes to 8 weeks, programmable using DataView®	
Memory	240,000 measurements (512KB) Recorded data is stored in non-volatile memory and retained even if battery is low or removed.	
Communication	USB 2.0 optically isolated	
Power Source	2 x 1.5V AA-cell Alkaline batteries (included)	
Battery Life	100 hours to > 45 days (dependent on storage rate/recording length)	
MECHANICAL		
Dimensions	4.94 x 2.75 x 1.28" (136 x 70 x 32mm) w/o Sensor	
Weight (with battery)	6.4 oz (180g)	
Case	UL94-V0	
Vibration	IEC 68-2-6 (1.5mm, 10 to 55Hz)	
Shock	IEC 68-2-27 (30G)	
Drop	IEC 68-2-32 (1m)	

CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2126.09	Simple Logger® II Model L702 (2-Channel, Temp/RH Module)	\$399.00	N/A



Simple Logger® II Dual Channel MiniFlex® Model ML912



Features

- Includes two integral MiniFlex® flexible current probes that will measure from 0.5A to 1000A TRMS with 0.1A resolution
- Dual range 100/1000A user selectable per channel
- 64 samples per cycle
- Programmable storage rates from 8 every second to 1 every day
- 3 user selectable storage modes
- Stores up to 240,000 measurements in non-volatile memory
- Powered by standard Alkaline batteries for a period of 45 days or more
- Lightweight, compact, fits anywhere
- 5 LED indicators quickly and clearly display logger status
- Includes DataView® software FREE for data storage, real-time waveform display, analysis & report generation
- Isolated USB communication cable included
- EN 61010-1; 600V CAT IV, 1000V CAT III

Applications

- Single and Split phase load monitoring
- Neutral and ground current monitoring
- Intermittent problem detection
- Harmonic current monitoring using DataView® software
- Machine load monitoring
- Fault current detection
- Load profiling

SPECIFICATIONS	
MODEL	ML912
ELECTRICAL	
Channels	Two
Input	Captive MiniFlex® AC Current Flexible Sensors
Range	0.5 to 100Aac 5 to 1000Aac
Accuracy (50/60Hz)	0 to 1A unspecified 1 to 100A: ±(1% of Reading + 0.5A) 0 to 5A unspecified 5 to 1000A: ±(1% of Reading + 1A)
Resolution	0.1A
Sample Rate	64 samples/cycle
Storage Rate	Programmable from 8 every second to 1 every day
Storage Modes	Start/Stop, FIFO and Extended Recording Mode (XRM™)
Recording Length	15 minutes to 8 weeks, programmable using DataView®
Memory	240,000 measurement (512KB) The recorded data is stored in non-volatile memory and will be retained even if the battery is low or removed.

MODEL	ML912
ELECTRICAL	
Communication	USB 2.0 optically isolated
Power Source	2 x 1.5V AA-cell Alkaline batteries (included)
Battery Life	100 hrs to >45 days (dependent on storage rate/recording length)
MECHANICAL	
Dimensions	4.95 x 2.75 x 1.28" (136 x 70 x 32mm) w/o Sensor
Max Conductor Size	Sensor: 6" (152mm)/Cable: 6 ft (2m)
Weight (with battery)	8.67 oz (245g) with battery
Case	UL94-V0
Vibration	IEC 68-2-6 (1.5mm, 10 to 55Hz)
Shock	IEC 68-2-27 (30G)
Drop	IEC 68-2-32 (1m)

CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2126.37	Simple Logger® II Model ML912 (2-Channel, TRMS, MiniFlex®, 100/1000Aac)	\$699.00	\$72.00

DataView®

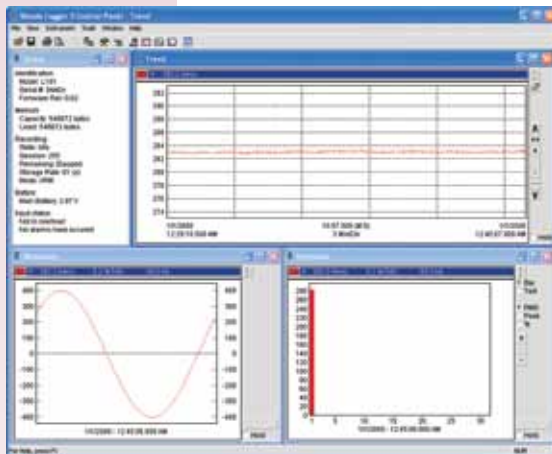
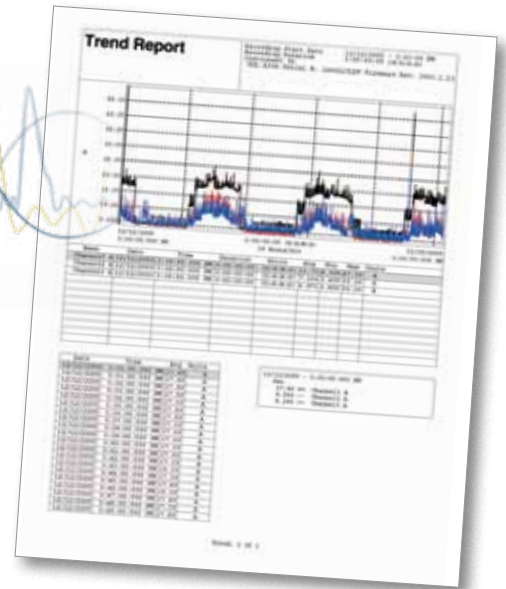
Data Analysis and Reporting Software for Data Loggers

Configure all data logger functions of the Simple Logger® II Models

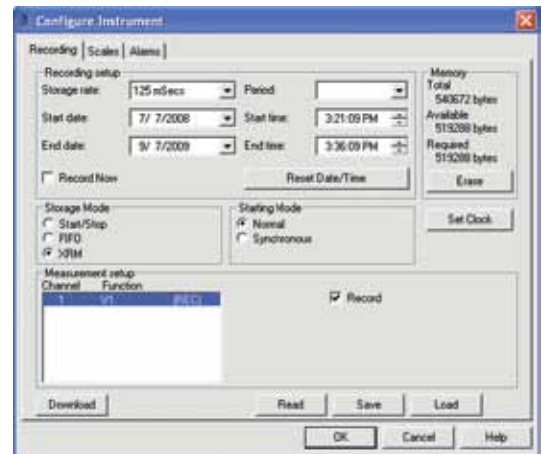
- Display and analyze real-time data on your PC
- Configure all data logger functions and parameters from your PC including sample rate, recording length, channel configuration and more
- Create and store a complete library of configurations that can be uploaded to the logger as needed
- Zoom in and out and pan through sections of the graph to analyze the data
- Download, display and analyze recorded data
- Display waveforms, trend graphs, harmonics (AC models) and text summaries
- Create custom views and reports
- Print reports using standard or custom templates you design
- Free software upgrades are available on our website www.aemc.com



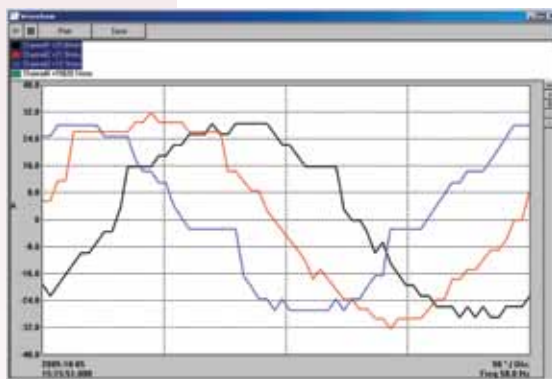
DataView® is included with all Simple Logger® II Models.



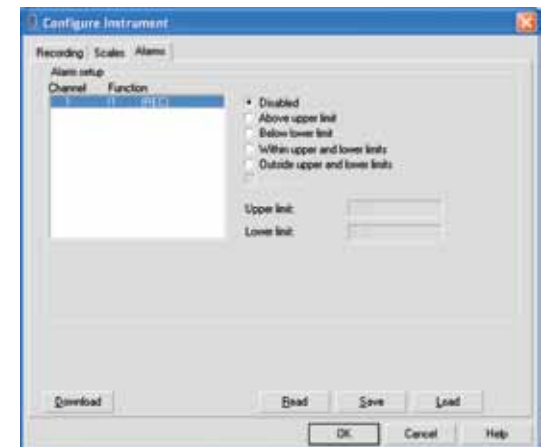
Real-time view of trend, waveform and status screens.



Quick and simple configuration of all functions and settings from one dialog box.



Real time display of all active inputs on computer through DataView® software.



Configure all alarm functions with straightforward selections.



SIMPLE LOGGER® II SELECTION PROBE CHART

AEMC MODEL NUMBER	AEMC CATALOG NUMBER	PROBE OUTPUT	PROBE RANGE	MAX RANGE FOR SLII	CABLE DIAMETER	BUS BAR SIZE	OUTPUT CONNECTION	USED WITH LOGGER MODEL	NOTES
SL261	1201.51	100mV/AAC/DC 10mV/AAC/DC	100mA to 10AAC/DC 1 to 100AAC/DC	10AAC 100AAC	0.46"	N/A	Lead w/BNC	L101 L102 L562	AC ONLY
MN261	2115.82	100mV/AAC 10mV/AAC	0.1 to 24AAC 0.5 to 240AAC	10AAC 100AAC	0.78"	N/A	Lead w/BNC	L101 L102 L562	—
MR461	1200.72	10mV/AAC/DC 1mV/AAC/DC	0.2 to 40AAC 0.5 to 400AAC 0.4 to 60Adc 0.5 to 600Adc	40AAC 400AAC	1.16"	1.2 X 0.4"	Lead w/BNC	L101 L102 L562	AC ONLY
MR561	1200.73	10mV/AAC/DC 1mV/AAC/DC	0.2 to 100AAC 0.5 to 1000AAC 0.4 to 150Adc 0.5 to 1500Adc	100AAC 1000AAC	1.5"	1.96 X 0.49"	Lead w/BNC	L101 L102 L562	AC ONLY
SR661	2113.49	100mV/AAC 10mV/AAC 1mV/AAC	0.1 to 12AAC 0.1 to 120AAC 1 to 1200AAC	10AAC 100AAC 1000AAC	2.05"	1.96 X 0.19"	Lead w/BNC	L101 L102 L562	—
JM861	2110.90	10mV/AAC 1mV/AAC 0.1mV/AAC	1 to 30AAC 1 to 300AAC 1 to 3000AAC	30AAC 300AAC 3000AAC	2.52"	1.97 X 5.31"	Lead w/BNC	L101 L102 L562	—
MF 300-6-2-10	2126.81	100mV/AAC 10mV/AAC	30AAC 300AAC	10AAC 100AAC	1.77"	2.25 X 3/4"	Sensor w/BNC	L101 L102 L562	—
300-24-2-1	2112.88	100mV/AAC 10mV/AAC	5 to 30A 5 to 300A	10A 100A	8"	N/A	Sensor w/Banana Plugs	L101 L102 L562	Must use adapter # 2118.46
1000-24-1-1	2112.39	1mV/AAC	5 to 1000A	1000A	8"	N/A	Sensor w/Banana Plugs	L101 L102 L562	Must use adapter # 2118.46
1000-24-2-1	2112.98	10mVAC 1mV/AAC	5 to 100A 5 to 1000A	100A 1000A	8"	N/A	Sensor w/Banana Plugs	L101 L102 L562	Must use adapter # 2118.46
1000-36-2-1	2113.00	10mVAC 1mV/AAC	5 to 100A 5 to 1000A	100A 1000A	11"	N/A	Sensor w/Banana Plugs	L101 L102 L562	Must use adapter # 2118.46
3000-24-1-1	2112.46	1mV/AAC	5 to 3000A	1000A	8"	N/A	Sensor w/Banana Plugs	L101 L102 L562	Must use adapter # 2118.46
3000-36-1-1	2112.48	1mV/AAC	5 to 3000A	1000A	11"	N/A	Sensor w/Banana Plugs	L101 L102 L562	Must use adapter # 2118.46
3000-24-2-1	2113.05	10mVAC 1mV/AAC	5 to 300A 5 to 3000A	100A 1000A	8"	N/A	Sensor w/Banana Plugs	L101 L102 L562	Must use adapter # 2118.46
3000-36-2-1	2112.00	10mVAC 1mV/AAC	5 to 300A 5 to 3000A	100A 1000A	11"	N/A	Sensor w/Banana Plugs	L101 L102 L562	Must use adapter # 2118.46
3000-48-2-1	2112.01	10mV/AAC 1mV/AAC	5 to 300A 5 to 3000A	100A 1000A	15"	N/A	Sensor w/Banana Plugs	L101 L102 L562	Must use adapter # 2118.46
6000-24-2-0.1	2113.19	1mV/AAC 0.1mV/AAC	5 to 600A 5 to 6000A	600A 6000A	8"	N/A	Sensor w/Banana Plugs	L101 L102 L562	Must use adapter # 2118.46
6000-36-2-0.1	2113.21	1mV/AAC 0.1mV/AAC	5 to 600A 5 to 6000A	600A 6000A	11"	N/A	Sensor w/Banana Plugs	L101 L102 L562	Must use adapter # 2118.46

AEMC MODEL NUMBER	AEMC CATALOG NUMBER	PROBE OUTPUT	PROBE RANGE	MAX RANGE FOR SLII	CABLE DIAMETER	BUS BAR SIZE	OUTPUT CONNECTION	USED WITH LOGGER MODEL	NOTES
30000-24-2-0.1	2113.33	1mV/AAC 0.1mV/AAC	5 to 3000A 5 to 30,000A	1000A 10000A	8"	N/A	Sensor w/Banana Plugs	L101 L102 L562	Must use adapter # 2118.46
MN03	2129.18	1mV/AAC	2 to 100AAC	100AAC	0.47"	N/A	Lead w/Banana Plug	L101 L102 L562	Must use adapter # 2118.46
MN114	2110.71	100mV/AAC	1mA to 10A	10AAC	0.47"	N/A	Lead w/Banana Plug	L101 L102 L562	Must use adapter # 2118.46
MN251	2115.77	1mV/AAC	0.5 to 240A	240AAC	0.78"	N/A	Lead w/Banana Plug	L101 L102 L562	Must use adapter # 2118.46
MN255	2115.81	100mV/AAC 10mV/AAC	0.1 to 24AAC 0.1 to 240AAC	10AAC 100AAC	0.78"	N/A	Lead w/Banana Plug	L101 L102 L562	Must use adapter # 2118.46
MN353	2116.27	10mV/AAC	0.1 to 150A	100AAC	0.78"	N/A	Lead w/Banana Plug	L101 L102 L562	Must use adapter # 2118.46
MN373	2116.28	1000mV/AAC 10mV/AAC	0.01 to 2.4AAC 0.1 to 200AAC	1AAC 100AAC	0.78"	N/A	Lead w/Banana Plug	L101 L102 L562	Must use adapter # 2118.46
MN375	2115.41	100mV/AAC	0.1 to 10A	10AAC	0.78"	N/A	Lead w/Banana Plug	L101 L102 L562	Must use adapter # 2118.46
SR752	2116.32	1mV/AAC	0.1 to 1000A	1000AAC	2.05"	1.96 X 0.19"	Lead w/Banana Plug	L101 L102 L562	Must use adapter # 2118.46
SR759	2116.33	1000mV/AAC 100mV/AAC 10mV/AAC 1mV/AAC	1mA to 1AAC 10mA to 10AAC 0.1 to 100AAC 1 to 1000AAC	1AAC 10AAC 100AAC 1000AAC	2.05"	1.96 X 0.19"	Lead w/Banana Plug	L101 L102 L562	Must use adapter # 2118.46
24-3001	2120.81	10mV/AAC 1mV/A	5 to 300Arms 50 to 3000Arms	100AAC 1000AAC	8"	N/A	Lead w/Banana Plug	L101 L102 L562	Must use adapter # 2118.46
MR411	1200.68	10mV/AAC 1mV/AAC	0.2 to 40A 0.5 to 400A	40AAC 400AAC	1.16"	1.2 X 0.4"	Lead w/Banana Plug	L101 L102 L562	AC ONLY Must use adapter # 2118.46
MR521	1200.69	10mV/AAC 1mV/AAC	0.2 to 100A 0.5 to 1000A	100AAC 1000AAC	1.5"	1.96 X 0.49"	Lead w/Banana Plug	L101 L102 L562	AC ONLY Must use adapter # 2118.46



Lightmeter Models CA811 & CA813



SPECIFICATIONS

MODELS	CA811	CA813*
Range	20fc, 200fc, 2000fc, 20kfc 20lux, 200lux, 2000lux, 20k lux	20fc, 200fc, 2000fc, 20kfc 20lux, 200lux, 2000lux, 20k lux, 200k lux
Display Resolution	0.01fc or 0.01lux	
Sensor	Silicon photodiode	
Spectral Response	CIE Photopic Curve	
Accuracy 2856K Light Source Common Light Source	±3% of Reading ± 10cts ±18% of Reading ± 2cts	±3% of Reading ± 10cts ±11% of Reading ± 2cts
Sample Rate	2.5 times per second, nominal	2.5 times per second, nominal
GENERAL		
Display	3½ digit liquid crystal display (LCD), 2000-count	
Operating Temperature	32° to 122°F (0° to 50°C), <80% RH	
Storage Temperature	-4° to 140°F (-20° to 60°C), 0 to 80% RH without battery	
Polarity	Automatic	
Power Source	One 9V Alkaline battery (included)	
Low Battery Indication	⊖ ⊕ is displayed when battery voltage is low	
Dimensions	6.81 x 2.38 x 1.5" (173 x 60.5 x 38mm)	
Weight	Approx. 7.55 oz (214g) including battery	Approx. 7.9 oz (224g) including battery

CATALOG NO. DESCRIPTION

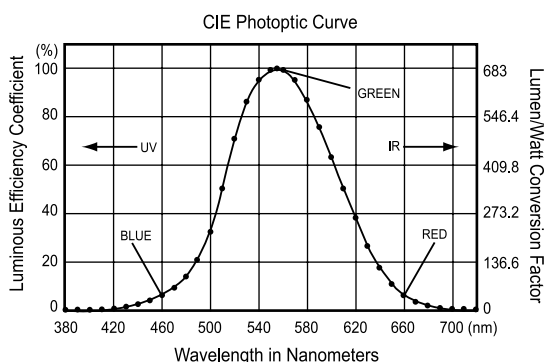
CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2121.20	Lightmeter Model CA811	\$119.00	\$450.00
2121.21	Lightmeter Model CA813	\$179.00	\$450.00

Features

- Easy one-hand operation
- Designed to measure a wide range of lighting types
- Removable sensor for remote reading
- Measures in footcandles (fc) or lux
- Cosine corrected
- Hold function
- Max function (Model CA811)
- Peak function (Model CA813)
- CIE photopic (human eye) response
- 2000-count backlit LCD
- Lightweight and compact
- Removable protective sensor cover
- Includes rugged, shockproof, protective, dirt resistant gray holster

Applications

- Testing for OSHA compliance in workplace, cleanroom and industrial settings
- Ambient testing for light-sensitive displays and archives in museums and art galleries



*Note: Model CA813 offers higher sensitivity (200klux) and has a better spectral response to common light sources. Model CA811 is used to measure incandescent lighting.

Sound Level Meter Model CA832

Features

- Easy one-hand operation
- Measures sound according to the sensitivity of the human ear
- Max function
- Three measurement ranges from 35 to 130dB
- Accuracy $\pm 1.5\text{dB}$ (ref. 94dB@1kHz)
- Two time weighting curves: S (slow) - 550ms and F (fast) - 55ms
- Two frequency weighting curves: A and C
- Auxiliary output for recording
- Tripod mountable
- 2000-count backlit LCD
- Lightweight and compact
- Includes rugged, shockproof, protective, dirt resistant gray holster


Applications

- Factories
- Schools, Libraries
- Airports
- Office environments & Studios
- Auditoriums
- Hospitals



Tripod mounting screw allows for mounting on a standard tripod stand. (Tripod not included)

Tripod mounting screw, auxiliary output plug and calibration screwdriver included.

SPECIFICATIONS	
MODEL	CA832
MEASUREMENTS	
Measurement Range	35 to 80dB 50 to 100dB 80 to 130dB
Measurement Rate	2.5 times per second
Dynamic Range	50db
Frequency Range	31.5 to 8000Hz
Accuracy	$\pm 1.5\text{dB}$ (ref. 94dB@1kHz)
Resolution	0.1dB
Precision	$\pm 2.0\text{dB}$
Display	2000-count
Sensor Type	0.5" electric (pre-polarized) condenser microphone True RMS measurement with independent frequency weighting
Applicable Standard	IEC 651 type 2/ANSI S 1.4 type 2/JIS C 1502
Auxiliary Output	DC output: 10mV/dB - 50 Ω AC output: 1.0Vrms - 600 Ω
Frequency Weighting	Curves A and C
Time Weighting	S (slow) and F (fast)
GENERAL	
Display	3½ digit liquid crystal display (LCD), 2000-count
Operating Temperature	32° to 122°F (0° to 50°C), 80% RH without condensation
Storage Temperature	-4° to 140°F (-20° to 60°C), 0 to 80% RH without battery
Power Source	One 9V Alkaline battery (included)
Low Battery Indication	 is displayed when battery voltage is low
Dimensions	9.33 x 2.38 x 1.5" (237 x 60.5 x 38mm)
Weight	8.11 oz (230g) including battery

CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2121.23	Sound Level Meter Model CA832	\$ 199.00	\$350.00



Thermo-Hygrometer Model CA846



SPECIFICATIONS	
MODEL	CA846
MEASUREMENTS — TEMPERATURE	
Measurement Range	-4° to 140°F or -20° to 60°C
Display Resolution	0.1°F or 0.1°C
Sensor	NTC Temperature Sensor
Accuracy	-4° to 32°F: ±2°F or -20° to 0°C: ±1°C 32° to 140°F: ±1°F or 0° to 60°C: ±0.5°C
MEASUREMENTS — RELATIVE HUMIDITY	
Measurement Range	0 to 100% RH
Display Resolution	0.1% RH
Sensor	Capacitive Humidity Sensor
Accuracy	±5.0%, 25°C, 10% to 90% RH ±10.0%, 25°C, 0% to 10% RH, 90% to 100% RH
GENERAL	
Display	3½ digit liquid crystal display (LCD), 2000-count
Operating Temperature	32° to 122°F (0° to 50°C), 80% RH
Storage Temperature	-4° to 140°F (-20° to 60°C), 0 to 80% RH without battery
Polarity	Automatic
Power Source	One 9V Alkaline battery (included)
Low Battery Indication	is displayed when battery voltage is low
Dimensions	6.81 x 2.38 x 1.5" (173 x 60.5 x 38mm)
Weight	Approx. 7 oz (197g) including battery

Features

- Easy one-hand operation
- Measures temperature in °F and °C
- Accurate NTC sensor
- Quick response RH sensor
- Max and Hold functions
- 2000-count backlit LCD
- Lightweight and compact
- Removable protective sensor cover
- Includes rugged, shockproof, protective, dirt resistant gray holster

Applications

- Greenhouses
- HVAC installation and maintenance
- Office environments
- Labs
- Environmental studies
- Weather monitoring
- Food distribution and storage
- Blood banks

CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2121.24	Thermo-Hygrometer Model CA846 (NTC)	\$159.00	\$350.00

Thermometer Model CA863



SPECIFICATIONS	
MODEL	CA863
MEASUREMENTS	
Input	Dual K thermocouple
Temperature Scale	Fahrenheit or Celsius user-selectable
Measurement Range	-58° to 1999°F or -50° to 1300°C
Display Resolution	1°F or 1°C, 0.1°F or 0.1°C
Sensor	K thermocouple Dual Input (included)
Accuracy (Instrument)	-58° to 1999°F: ±0.3% of Rdg ± 2°F -50° to 1000°C: ±0.3% of Rdg ± 1°C 1000° to 1300°C: ±0.5% of Rdg ± 1°C
Input Protection	24Vdc or 24Vrms
Sample Rate	2.5 times per second
Input Connector	Accepts two standard miniature K thermocouple plugs
GENERAL	
Display	3½ digit liquid crystal display (LCD), 2000-count
Operating Temperature	32° to 122°F (0° to 50°C), 80% RH
Storage Temperature	-4° to 140°F (-20° to 60°C), 0 to 80% RH without battery
Polarity	Automatic
Power Source	One 9V Alkaline battery (included)
Low Battery Indication	is displayed when battery voltage is low
Dimensions	6.81 x 2.38 x 1.5" (173 x 60.5 x 38mm)
Weight	Approx. 6.4 oz (181g) including battery

Features

- Easy one-hand operation
- Dual K thermocouple included
- Measures temperature in °F and °C
- 0.1° Resolution
- Max and Hold functions
- 2000-count backlit LCD
- Lightweight and compact
- Includes rugged, shockproof, protective, dirt resistant gray holster

Applications

- Process control monitoring and troubleshooting
- HVAC installation and maintenance
- Chemical processing
- Food processing
- Mold injecting and HVAC for temperature rise and fall
- Indoor/outdoor differential temperature measurements
- Plastics

CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2121.27	Thermometer Model CA863 (Dual K thermocouple)	\$99.00	\$78.00

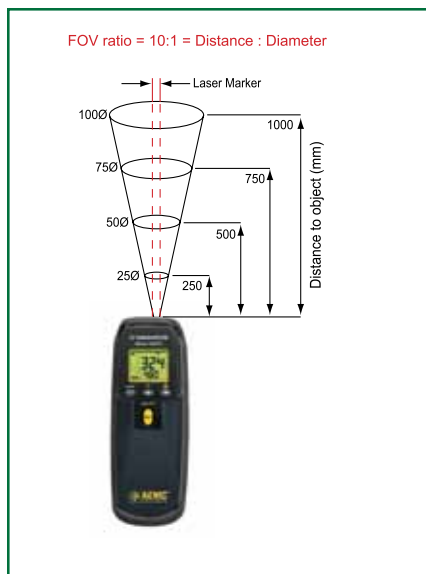
Infrared Thermometer Model CA876

Features

- Easy one-hand operation
- Non-contact infrared sensor
- Laser guide for precise aim
- Measures temperature in °F and °C
- High 1022°F/550°C measurement
- Adjustable emissivity 0.1 to 1.00
- Auto-Hold function
- 2000-count backlit LCD
- Lightweight and compact
- Removable protective laser cover
- Includes rugged, shockproof, protective, dirt resistant gray holster

Applications

- Electrical troubleshooting
- Food safety and processing
- Automotive repair and maintenance
- Marine maintenance and repairs
- Test faulty motor winding insulation
- Test overheated high voltage transformers
- Test terminals on circuit breaker panels
- Perform HVAC energy audits



K Thermocouple
included with CA876



SPECIFICATIONS

MODEL	CA876
MEASUREMENTS — INFRARED	
Temperature Range	-4° to 1022°F or -20° to 550°C
Display Resolution	1°F or 1°C
Accuracy	±2% of Reading or ± 6°F (3°C)
Response Time	One second
Emissivity	Adjustable 0.10 to 1.00
Sensor	Thermopile
Optical Lens	Fresnal Lens
Laser	<0.5mW (670nm)
MEASUREMENTS — K TYPE	
Temperature Range	-40° to 2000°F or -40° to 1350°C
Display Resolution	1°F or 1°C or 0.1°F or 0.1°C (Auto)
Sensor	K thermocouple (included)
Accuracy	-40° to 2000°F: ±0.1% of Reading ± 2°F -40° to 1350°C: ±0.1% of Reading ± 1°C
GENERAL	
Display	3½ digit liquid crystal display (LCD), 2000-count
Operating Temperature	32° to 122°F (0° to 50°C), 80% RH
Storage Temperature	-4° to 140°F (-20° to 60°C), 0 to 80% RH without battery
Polarity	Automatic
Power Source	One 9V Alkaline battery (included)
Low Battery Indication	is displayed when battery voltage is low
Dimensions	6.81 x 2.38 x 1.5" (173 x 60.5 x 38mm)
Weight	Approx. 9 oz (255g) including battery

CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2121.34	Infrared Thermometer Model CA876 (Laser, Var E, K Thermocouple)	\$179.00	—

Infrared Thermometer Model CA879



Features

- Easy one-hand operation
- Non-contact infrared sensor
- Laser guide for precise aim
- 12:1 Field of Vision Ratio
- Measures temperature in °F and °C
- Fixed 0.95 emissivity
- Auto-HOLD function
- 2000-count backlit LCD

Applications

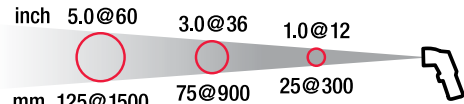
- Electrical troubleshooting
- Food safety and processing
- Automotive repair and maintenance
- Marine maintenance and repairs
- Test faulty motor winding insulation
- Test overheated high voltage transformers
- Test terminals on circuit breaker panels
- Perform HVAC energy audits

SPECIFICATIONS	
MODEL	CA879
ELECTRICAL	
Measuring Range	-58° to 1022°F (-50° to 550°C)
Resolution	0.1°F from -58° to 200°F, 1°F beyond this range 0.1°C from -50° to 200°C, 1°C beyond this range
Polarity	Automatic (minus only)
Accuracy	±1.5% of Reading ±4°F from -4° to +1022°F / ±9°F of -58° to -4°F ±1.5% of Reading ±2°C from -20° to +550°C / ±5°C of -50° to -20°C
Emissivity	Preset at 0.95
Spectral Response	6 to 14µm
Response Time	400ms
Laser Target	1mW (670nm type)
Power Source	One 9V Alkaline battery included (6LR61 or 6LF22)
MECHANICAL	
Dimensions	9.05 x 3.93 x 2.20" (230 x 100 x 56mm)
Weight	290g
ENVIRONMENTAL	
Operating: Temperature Humidity	32° to 122°F (0° to 50°C) 10 to 90% RH
Storage: Temperature Humidity	-4° to 140°F (-20° to 60°C) without battery < 80% RH
SAFETY	
Electromagnetic Compatibility	EN 50081-1 Ed. 1992: EN 55022 EN 50082-1 Ed. 1997: EN 55024

Field of Vision Ratio

Distance (D) to Spot Size (S)

D:S=12:1



-58.0 to 1022°F (-50.0 to 550°C)



Model CA879 includes soft carrying case and user manual.

CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2121.37	Infrared Thermometer Model CA879 (-58° to 1022°F)	\$199.00	-

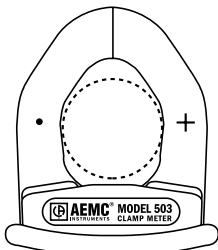
Clamp-On Meter Models 500, 502 & 503

Features

- Compact size - fits into your pocket
- 400AAC or 400AAC/DC current measurements
- 600VAC/DC volts measurements
- TRMS measurements (Model 502)
- Resistance measurements to 400Ω
- Continuity with beeper below 40Ω
- Frequency measurements from V and A (Model 502)
- Hold function to “freeze” readings
- Push-button for easy Abc zeroing (Model 503)
- Large, easy-to-read 4000-count display
- 42-segment analog bargraph
- Includes test leads and soft carrying pouch



Models 500, 502 and 503 include a pair of test leads, soft carrying pouch and user manual.



Jaw Opening: 1.1" (28mm)
Conductor Size:
one 500kcmil cable

SPECIFICATIONS

MODELS	500	502 TRMS	503
AC Current (Auto-Ranging)	0.05 to 400A	0.05 to 400Arms	0.05 to 400A
Resolution	0.1A	0.01A and 0.1A	0.01A and 0.1A
Accuracy	50 to 60Hz 60 to 500Hz	±2.8% of Reading ± 5cts	±1.9% of Reading ± 5cts ±2.5% of Reading ± 5cts
AC Voltage (Auto-Ranging)	0.5 to 600V	0.5 to 600Vrms	0.5 to 600V
Resolution	0.1V and 1V	0.1V and 1V	0.1V and 1V
Accuracy	50 to 60Hz 60 to 500Hz	±1.0% of Reading ± 5cts ±1.5% of Reading ± 5cts	±1.5% of Reading ± 5cts ±2.5% of Reading ± 10cts
Input Impedance	1MΩ	1MΩ	10MΩ
DC Current (Auto-Ranging)	–	–	0.10 to 400A
Resolution	–	–	0.01A and 0.1A
Accuracy	–	–	±2.5% of Reading ± 10cts
DC Voltage (Auto-Ranging)	–	0.2 to 600V	0.2 to 600V
Resolution	–	0.1V and 1V	0.1V and 1V
Accuracy	–	±1.0% of Reading ± 2cts	±1% of Reading ± 2cts
Input Impedance	–	1MΩ	10MΩ
Resistance	0.3 to 400Ω	0.2 to 400Ω	0.2 to 400Ω
Accuracy	±1.9% of Reading ± 3cts	±1% of Reading ± 2cts	±1% of Reading ± 2cts
Max Test Voltage	-1.6Vdc	1.5Vdc	1.5Vdc
Continuity	<35Ω	<40Ω	<40Ω
Max Test Voltage	1.5Vdc	1.5Vdc	1.5Vdc
Frequency (Auto-Ranging)			
CURRENT INPUT			
Range	20Hz to 4kHz >4kHz to 10kHz	1Hz Resolution 10Hz Resolution	–
Accuracy	–	±0.1% of Reading ± 1ct	–
Min Input Signal	–	2Arms	–
Input Impedance	–	1MΩ	–
Overload Protection	–	600Arms	–
VOLTAGE INPUT			
Range	10Hz to 4kHz >4kHz to 40kHz >40kHz to 400kHz	1Hz Resolution 10Hz Resolution 100Hz Resolution	–
Accuracy	–	±0.1% of Reading ± 1ct	–
Min Input Signal	4kHz 40kHz 400kHz	5Vrms 5Vrms 5Vrms	–
Input Impedance	–	1MΩ	–
Overload Protection	–	600Vrms	–
Power Source	Two 1.5V AAA batteries (included)		

CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2117.54	Clamp-On Meter Model 500 (AC, 400AAC, 600VAC, Ohms, Continuity)	\$ 69.00	\$68.00
2117.66	Clamp-On Meter Model 502 (TRMS, 400AAC, 600VAC/DC, Ohms, Continuity)	\$119.00	\$68.00
2117.22	Clamp-On Meter Model 503 (AC/DC, 400AAC/DC, 600VAC/DC, Ohms, Continuity)	\$149.00	\$68.00



Clamp-On Meter Models 511, 512 & 514



Features

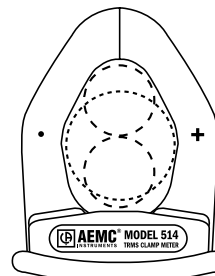
- Standard size, full function clamp-on meters
- 1000A_{AC} or 1000A_{AC/DC} current measurements
- 750V_{AC} or 1000V_{DC} volt measurements
- TRMS measurements (Models 512 & 514)
- Resistance measurements to 4000Ω
- Continuity with beeper below 40Ω
- Frequency measurements from V and A
- Diode test
- 1ms Peak function for fast capture of signals
- Hold function to “freeze” readings
- Push-button for easy A_{DC} zeroing
- Large, easy-to-read 4000-count display
- 42-segment analog bargraph
- Includes test leads and soft carrying pouch

SPECIFICATIONS

MODELS	511	512 TRMS	514 TRMS
AC Current (Auto-Ranging)	0.05 to 1000A	0.05 to 1000Arms	0.05 to 1000Arms
Resolution	0.01A, 0.1A and 1A	0.01A, 0.1A and 1A	0.01A, 0.1A and 1A
Accuracy	50 to 60Hz ±1.9% of Reading ± 5cts 60 to 500Hz ±1.9% of Reading ± 5cts	±1.9% of Reading ± 5cts ±1.9% of Reading ± 5cts	±1.9% of Reading ± 5cts ±2.5% of Reading ± 5cts
AC Voltage (Auto-Ranging)	0.5 to 750V	0.5 to 750Vrms	0.5 to 750Vrms
Resolution	0.1V and 1V	0.1V and 1V	0.1V and 1Vrms
Accuracy	60 to 500Hz ±1.2% of Reading ± 5cts	±1.2% of Reading ± 5cts	±1.2% of Reading ± 5cts
Input Impedance	10MΩ	10MΩ	10MΩ
DC Current (Auto-Ranging)	-	-	1A to 1000A
Resolution	-	-	0.01A, 0.1A and 1A
Accuracy	-	-	±2.5% of Reading ± 10cts
DC Voltage (Auto-Ranging)	0.2 to 1000V	0.2 to 1000V	0.2 to 1000V
Resolution	0.1V and 1V	0.1V and 1V	0.1V and 1Vrms
Accuracy	±0.75% of Reading ± 2cts	±0.75% of Reading ± 2cts	±1% of Reading ± 2cts
Input Impedance	10MΩ	10MΩ	10MΩ
Resistance	0.2 to 4000Ω	0.2 to 4000Ω	0.2 to 4000Ω
Accuracy	±1% of Reading ± 2cts	±1% of Reading ± 2cts	±1% of Reading ± 2cts
Max Test Voltage	3Vdc	3Vdc	3Vdc
Diode Test	0.6mA	0.6mA	0.6mA
Open Circuit Voltage	3Vdc	3Vdc	3Vdc
Continuity	<40Ω	<40Ω	<40Ω
Max Test Voltage	3Vdc	3Vdc	3Vdc
Frequency (Auto-Ranging)			
CURRENT INPUT			
Range	4kHz 10kHz	1Hz Resolution	1Hz Resolution 10Hz Resolution
Accuracy	20Hz to 10kHz ±0.1% of Reading ± 1ct	±0.1% of Reading ± 1ct	±0.1% of Reading ± 1ct
Min Input Signal	4kHz 10kHz	2Arms	2Arms 5Arms
VOLTAGE INPUT			
Range	4kHz 10kHz	1Hz Resolution 10Hz Resolution	1Hz Resolution 10Hz Resolution
Accuracy	10 to 10kHz ±0.1% of Reading ± 1ct	±0.1% of Reading ± 1ct	±0.1% of Reading ± 1ct
Min Input Signal	4kHz 10kHz	5Vrms	5Vrms 10Vrms
Power Source	9V Alkaline battery (included)		
ENVIRONMENTAL			
Operating Temperature	32° to 104°F (0° to 40°C) < 80% RH, non-condensing	32° to 104°F (0° to 40°C) < 80% RH, non-condensing	*-14° to 122°F (-25° to 50°C), 80% RH, non-condensing



Models 511, 512 and 514 include a pair of test leads, soft carrying pouch and user manual.



Jaw Opening: 1.575" (40mm)
Conductor Size: one 750kcmil cable or two 500kcmil cables

*Note: If the meter is to be used below 32°F (0°C), we suggest that the battery be replaced to ensure proper results.

CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2117.67	Clamp-On Meter Model 511 (AC, 1000A _{AC} , 750V _{AC} /1000V _{DC} , Ohms, Continuity, Hz)	\$149.00	\$94.00
2117.68	Clamp-On Meter Model 512 (TRMS, 1000A _{AC} , 750V _{AC} /1000V _{DC} , Ohms, Continuity, Hz)	\$165.00	\$94.00
2117.70	Clamp-On Meter Model 514 (AC/DC, TRMS, 1000A _{AC/DC} , 750V _{AC} /1000V _{DC} , Ohms, Continuity, Hz)	\$199.00	\$94.00

Clamp-On Meter Models 670 & 675

Dual display simultaneously measures and displays voltage and current!

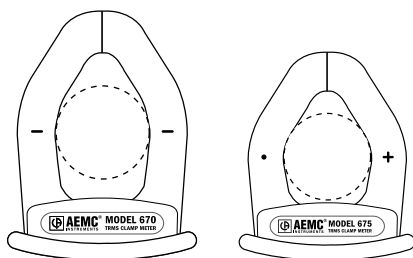


Features

- Dual display
- Standard size, full function clamp-on meter
- 1000AAC/DC current measurements (DC Current on Model 675 only)
- 1400VDC volt measurements
- TRMS measurements
- Resistance measurement to 10,000Ω
- Continuity with beeper below 35Ω
- Frequency measurements from V and A inputs
- 1ms Peak function for fast capture of signals
- Hold function to “freeze” readings
- Designed to measure Amps and Volts at the same time
- Push-button for easy ADC zeroing
- Large easy-to-read 9999-count backlit LCD display
- Includes test leads and soft carrying case



The 670 and 675 include meter, set of test leads (red/black with safety needle tips), K-type thermocouple, one 9V battery, soft carrying case and a user manual.



Model 670

Jaw Opening:
1.65" (42mm)
Conductor Size:
one 750kcmil cable
or two 350kcmil cables

Model 675

Jaw Opening:
1.58" (40mm)
Conductor Size:
one 500kcmil cable

*Note: If the meter is to be used below 32°F (0°C), we suggest that the battery be replaced to ensure proper results.

SPECIFICATIONS				
MODELS	670 TRMS		675 TRMS	
ELECTRICAL				
AC Current				
Measuring Range	0.00 to 99.99A	100 to 1000A	0.00 to 99.99A	100 to 1000A
Resolution	0.01A	0.1A	0.01A	0.1A
Accuracy	1.5% of Reading ± 5cts (50 to 60Hz) 2.0% of Reading ± 5cts (50 to 500Hz) 4.5% of Reading ± 5cts (500Hz to 3kHz)		1.5% of Reading ± 5cts (50 to 60Hz) 2.0% of Reading ± 5cts (50 to 500Hz) 4.5% of Reading ± 5cts (500Hz to 3kHz)	
DC Current				
Measuring Range	—		0.00 to 99.99A	100.0 to 999.9A
Resolution	—		0.01A	0.1A
Accuracy	—		1.2% of Reading ± 5cts	2.5% of Reading ± 5cts
AC Voltage				
Measuring Range	0.0 to 999.9V		0.0 to 999.9V	
Resolution	0.1V		0.1V	
Accuracy	1.0% of Reading ± 5cts (50 to 60Hz) 1.2% of Reading ± 5cts (50 to 500Hz) 2.5% of Reading ± 5cts (500Hz to 3kHz)		1.0% of Reading ± 5cts (50 to 60Hz) 1.2% of Reading ± 5cts (50 to 500Hz) 2.5% of Reading ± 5cts (500Hz to 3kHz)	
Input Resistance	1MΩ		1MΩ	
DC Voltage				
Measuring Range	0.0 to 999.9V	1000 to 1400V	0.0 to 999.9V	1000 to 1400V
Resolution	0.1V	1V	0.1V	1V
Accuracy	1% of Reading ± 2cts		1% of Reading ± 2cts	
Input Resistance	1MΩ		1MΩ	
Resistance-Ohms (Ω)				
Measuring Range	0.0 to 999.9Ω	1000 to 9999Ω	0.0 to 999.9Ω	1000 to 9999Ω
Resolution	0.1Ω	1Ω	0.1Ω	1Ω
Accuracy	1% of Reading ± 3cts, 3.3Vdc (Vmax)		1% of Reading ± 3cts, 3.3Vdc (Vmax)	
Continuity (•••••)				
Beeper Activation	< 35Ω		< 35Ω	
Accuracy	1% of Reading ± 3cts, 3.3Vdc (Vmax)		1% of Reading ± 3cts, 3.3Vdc (Vmax)	
Frequency (Hz)				
Function	A - Hz	V - Hz	A - Hz	V - Hz
Range	1000Hz	10,000Hz	1000Hz	10,000Hz
Resolution	0.1Hz	1Hz	0.1Hz	1Hz
Accuracy	1.0% of Reading ± 2cts		1.0% of Reading ± 2cts	
Temperature (°C/°F)				
Measuring Range	-40 to 999.5°C	1000 to 1200°C	-40 to 2192°F	-40 to 999.5°C
Resolution	0.5°C	1°C	1°F	0.5°C
GENERAL				
Power Supply	One 9V, NEDA 1604 (6F22) Alkaline battery (included)			
Battery Life	(no buzzer or backlight) 35 hours		(no buzzer or backlight) 30 hours	
MECHANICAL				
Digital Display	3 ¾ digits LCD dual display (max reading 9999)		3 ¾ digits LCD dual display (max reading 9999)	
Jaw Opening	1.65" (42mm)		1.58" (40mm)	
ENVIRONMENTAL				
Operating Temperature	*-14° to 122°F (-25 to 50°C), 80% RH, non-condensing		*-14° to 122°F (-25 to 50°C), 80% RH, non-condensing	

CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2117.49	Clamp-On Meter Model 670 (Dual Display, TRMS, AC Amps, AC/DC Volts, Ohms, Continuity, Frequency, & Temperature)	\$ 229.00	\$ 68.00
2117.50	Clamp-On Meter Model 675 (Dual Display, TRMS, AC/DC Amps & Volts, Ohms, Continuity, Frequency & Temperature)	\$ 289.00	\$ 68.00



100Aac/dc Low Current Clamp-On Meter Model CM605

**For Process
and Industrial
applications**



Features

- 10,000-count LCD Display - Excellent Resolution
- 100AAC/DC Ammeter with low 10A Range (1mA Resolution)
- Tapered Jaws for crowded wiring areas (Ø.60" - 15mm Jaw Opening)
- 600VAC/DC Voltmeter
- Analog Output in AAC/DC
- Auto-Ranging & A/Dc Zero Push-button
- Data HOLD & PEAK Functions
- Relative Function to Compare Two Measurements
- Ohm Range & Continuity Test with Beeper
- AUTO-OFF and Low Battery Indicator
- IEC/EN 61010 Safety Rated & CE Mark
- 600Vrms Overload Protection

SPECIFICATIONS

MODEL	CM605
ELECTRICAL	
AC Current	
Measurement Ranges	2 Ranges: 10A, 100A
Accuracy & Resolution	10A: 2.0% of Reading ± 10cts - 1mA Resolution 80A: 2.0% of Reading ± 10cts - 10mA Resolution > 80A: 3.5% of Reading ± 10cts - 10mA Resolution
Frequency Range	2 Ranges: 50 to 500Hz
DC Current (positive only)	
Measurement Ranges	2 Ranges: 10A, 100A
Accuracy & Resolution	10A: 2.5% of Reading ± 10cts - 1mA Resolution 80A: 2.5% of Reading ± 10cts - 10mA Resolution > 80A: 4.5% of Reading ± 10cts - 10mA Resolution
AC Volts	
Measurement Ranges	600Vrms
Accuracy & Resolution	1.5% of Reading ± 5cts - 100mV Resolution
Frequency	40 to 500Hz
Input Impedance	10MΩ, < 50pF
DC Volts (positive only)	
Measurement Ranges	600V
Accuracy & Resolution	1.0% of Reading ± 2cts - 100mV Resolution
Input Impedance	10MΩ
Resistance (Ohms)	
Measurement Ranges	10kΩ (9999Ω)
Accuracy & Resolution	1.0% of Reading ± 3cts - 1Ω Resolution
Test Voltage	< 3.0Vdc
Continuity	
Measurement Ranges	Buzzer < 100Ω ± 25Ω
Resolution	1Ω
Test Voltage	< 3.0Vdc
Analog Output	
Output	10mV/Aac & A/Dc through front banana jacks
Frequency	0 to 20kHz @ ± 3db
Output Impedance	3kΩ, < 50pF
Other Functions	
A/Dc Zero & Relative Function	One touch push button (ΔZERO Button) to Zero A/Dc, or other readings. Relative function also used in the other ranges to compare two measurements.
HOLD Function	Holds A & V measurements when pressed (HOLD button)
PEAK Function	Captures PEAK (1ms) V or A measurement when activated (PEAK Button)
Auto-Ranging	"AUTO" displayed on LCD
Over Range	"OL" displayed on LCD for all measurements
Auto-Off	Auto-Off after approx 10 minute with Over-Ride
Low Battery	Low Battery indication on LCD
MECHANICAL	
Max. Cable Diameter	Ø 0.45" (12mm)
Max. Jaw Opening	Ø 0.60" (15mm)
Power Source	Two 1.5V AAA (LR03) batteries (included)
Dimensions & Weight	7.95 x 2.76 x 1.33" (202 x 70 x 34mm) – 6.5 oz (180g)
Safety Standards	IEC/EN 61010-1 and 2-032 – 600V CAT II and 300V CAT III – Pollution Degree 2 Class 2 – Double or reinforced insulation, CE mark



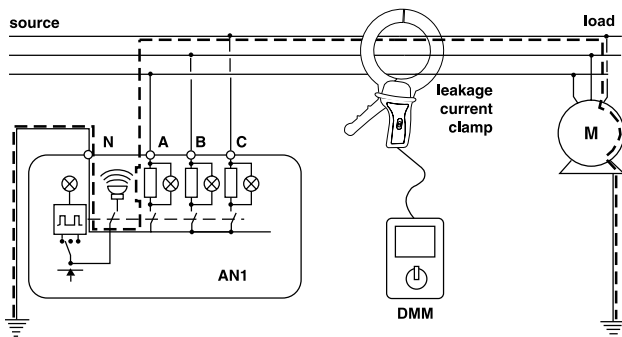
Model CM605 includes test leads, soft carrying case and user manual.

CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
7000.02	Clamp-On Meter Model CM605 (100AAC/DC, Low Current)	\$249.00	\$65.00

Artificial Neutral Model AN-1

Features

- Designed for ungrounded networks - provides intermittent path to ground for leakage current measurements
- Works from 30 to 600VAC
- Red LED phase voltage indicators
- Switch selectable ground fault cycling of 500mS or 2.3 seconds
- Buzzer alerts each momentary fault
- Battery operated
- Double insulated, fire retardant case
- Four color-coded 5 ft 1000V rated leads supplied with alligator clips
- Works with Model 2620 and other leakage current probes



SPECIFICATIONS	
MODEL	AN-1
ELECTRICAL	
Working Voltage	30 to 600V
Frequency	45 to 65Hz
Resistance Per Phase	3.9kΩ ± 5%
Relay Duty Time	Slow position: 500mS / Fast position: 2.3 seconds
Power Source	12V _{bcc} – Eight 1.5V AA batteries (included)
Power Consumption	180mA
Battery Life	Approx. 40 hours of use
MECHANICAL	
Dimensions	8.7 x 5.4 x 5.9" (220 x 136 x 150mm)
Weight	2.9 lbs (1.3kg)
Case	Fire resistant polycarbonate UL94 V0
ENVIRONMENTAL	
Reference Temperature	73.4° ± 5°F (23° ± 3°C)
Operating Temperature	32° to 122°F (0° to 50°C); 10 to 90% RH (non-condensing)
Storage Temperature	-40° to 158°F (-40° to 70°C); 10 to 90% RH (non-condensing)

CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
1971.01	Artificial Neutral Model AN-1	\$699.00	-
Accessories (Optional)			
2125.52	Leakage Current Probe Model 2620 (4A-1V/A, 400A-1mV/A output)	\$549.00	\$72.00



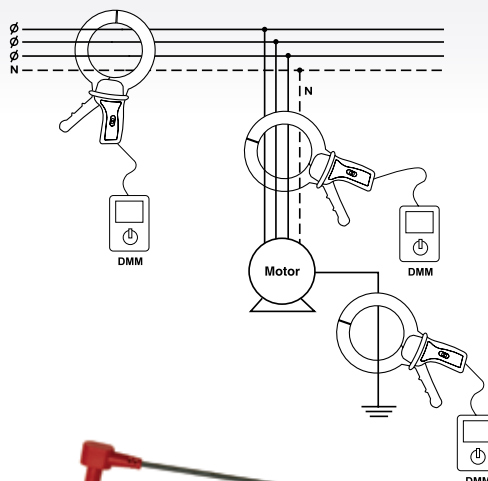
AC Leakage Current Probe Model 2620

Check for leakage and locate insulation breakdowns on live circuits

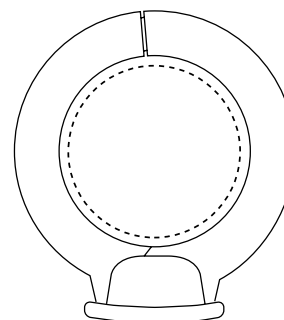


Features

- Very high sensitivity
- Differential or leakage current from 500µA
- Current up to 400A
- Two switch-selectable measurement ranges: 4AAC/400AAC
- Large inside jaw diameter allows use on large or multiple conductors
- Works with single-, dual- and three-phase systems
- Connect directly to DMMs on mV or V_{AC} range



Model 2620 includes double reinforced 5 ft (1.5m) leads with 4mm safety banana plugs



Jaw Opening: 4.4" (112mm)
Conductor Size: 4.4" (112mm)

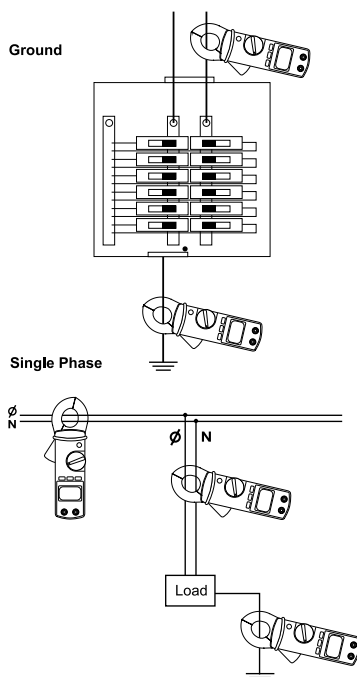
SPECIFICATIONS		
MODEL	2620	
ELECTRICAL		
	4A Range	400A Range
Current Range	500µA to 4A	500mA to 400A
Output Signal	1mV/mA (4V max)	1mV/A (400mV max)
Accuracy		
500µA to 10mA	3% of Reading ± 1mV	—
10mA to 100mA	0.5% of Reading ± 0.5mV	—
100mA to 4A	0.5% of Reading ± 0.5mV	—
500mA to 10A	—	0.5% of Reading ± 0.5mV
10A to 100A	—	0.35% of Reading ± 0.5mV
100A to 400A	—	0.35% of Reading ± 1mV
Phase Shift		
500µA to 10mA	<15°	—
10mA to 100mA	<10°	—
100mA to 4A	—	<1°
500mA to 10A	—	<0.6°
Load Impedance	1MΩ min	1MΩ min
Frequency Range	48 to 1000Hz	48 to 1000Hz
MECHANICAL		
Dimensions	11.22 x 6.89 x 1.77" (285 x 175 x 45mm)	
Weight	2.87 lbs (1300g)	

CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2125.52	AC Leakage Current Probe Model 2620 (4A-1V/A, 400A-1mV/A output)	\$549.00	\$72.00
Accessories (Optional)			
1971.01	Artificial Neutral Model AN-1	\$699.00	—

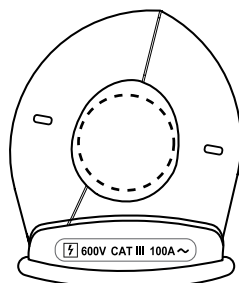
TRMS Clamp-On Leakage Current Meter Model 565

Features

- Check for leakage and locate insulation breakdowns on live circuits
- Measures leakage current down to 0.1mA with up to 10µA resolution
- Measures current up to 100Arms
- Measures up to 600V_{AC/DC}
- Measures Hz on either V or A inputs
- Measures Resistance and Continuity
- Hold feature freezes value
- Max feature keeps track of highest measured In-rush value
- Zero button ideal for measuring relative values
- Filter to isolate 50/60Hz fundamental from harmonics
- Compatible with VDE 0404
- Backlight display



Model 565 includes two color-coded 5 ft test leads, batteries, soft carrying case and user manual.



Jaw Opening: 1.10" (28mm)
Conductor Size: 1" (26mm)

SPECIFICATIONS

MODEL		565 TRMS	
mA AC Current (TRMS, Auto-Ranging)		0 to 600mA	
Resolution	60mA 600mA	0.01mA (10µA) 0.1mA (100µA)	
Accuracy	50 to 60Hz 50 to 500Hz 500Hz to 3kHz	1.2% of Reading ± 5cts 2.5% of Reading ± 5cts 3.5% of Reading ± 10cts	
AC Current (TRMS, Auto-Ranging)		10 to 100A	
Resolution	10A 100A	0.001A (1mA) 0.01A (10mA)	
Accuracy	50 to 60Hz 50 to 500Hz 500Hz to 3kHz	1.2% of Reading ± 5cts 2.5% of Reading ± 5cts 3.5% of Reading ± 10cts	
AC Voltage (TRMS)		0 to 600V	
Accuracy	50 to 60Hz 50 to 500Hz 500Hz to 3kHz	1.0% of Reading ± 5cts 1.2% of Reading ± 5cts 2.5% of Reading ± 10cts	
DC Voltage		0 to 600V	
Resolution		0.1V	
Accuracy		1.0% of Reading ± 3cts	
Resistance		0 to 1kΩ	
Accuracy		1.0% of Reading ± 3cts	
Continuity		Buzzer activates <35Ω (0 to 1kΩ)	
Frequency (Auto-Ranging)			
Function		A-Hz	V-Hz
Resolution	0 to 100Hz 100Hz to 1kHz	0.1Hz 1Hz	0.1Hz 1Hz
Sensitivity		10mArms min	5Vrms min
Accuracy		0.5% of Reading ± 2cts	
Filter		On (50/60Hz only); Off (Full frequency range)	
In-Rush		Max 100mS sample time	
Power Source		Two 1.5V AAA batteries (included)	

CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2117.56	Clamp-On Leakage Current Meter Model 565 (TRMS, 100A, 600V _{AC/DC} , Hz, Ohms, Continuity)	\$269.00	\$72.00



AC Current Probe Model SR759



SPECIFICATIONS	
MODEL	SR759
MEASUREMENTS	
Measurement Range	1mA to 1A _{AC} 10mA to 10A _{AC} 0.1 to 100A _{AC} 1 to 1000A _{AC}
Output Signal	1000mV _{AC} /A _{AC} (1V @ 1A) 100mV _{AC} /A _{AC} (1V @ 10A) 10mV _{AC} /A _{AC} (1V @ 100A) 1mV _{AC} /A _{AC} (1V @ 1000A)
MECHANICAL	
Maximum Conductor Size	2.05"Ø (52mm)
Maximum Bus Bar Size	One 1.95 x 0.19" (50 x 5mm)
Output Termination	5 ft (1.5m) Lead

Features

- Measurement range of 1mA to 1200AAC
- Large jaw opening accommodates up to two 500kcmil conductors
- Ergonomic design and easy operation
- Low phase shift for power measurements
- Available with mA or mV output signals
- Designed for DMMs, recorders, loggers, oscilloscopes, power and harmonic meters
- Output terminated with 4mm safety shrouded banana plugs on 5 ft (1.5m) leads
- EN 61010, 600V CAT III safety standard

CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2116.33	AC Current Probe Model SR759 (Lead – 1/10/100/1000A)	\$299.00	\$75.00

AC Current Probe Models MN103 & MN114



SPECIFICATIONS		
MODELS	MN103	MN114
MEASUREMENTS		
Measurement Range	1mA to 10A _{AC} 1A to 100A _{AC}	1mA to 10A _{AC}
Output Signal	1mV _{AC} /mA _{AC} (100mV @ 100A)	100mV _{AC} /A _{AC} (1V @ 10A)
MECHANICAL		
Maximum Conductor Size	0.47"Ø (12mm)	0.47"Ø (12mm)
Output Termination	5 ft (1.5m) Lead	5 ft (1.5m) Lead

Features

- Small, compact and durable AC probes
- "Clothes pin" shape makes them ideal for use in tight areas, such as breaker panels, controller panels, or outlets
- Measurements from 1mA to 100AAC (Model MN103)
- Measurements from 1mA to 10AAC (Model MN114)
- Excellent companion to all DMMs
- Permits very low AC current measurements

CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
1031.02	AC Current Probe Model MN103 (Lead – 1mV/mA – 10A max & 1mV/A – 100A max)	\$184.00	\$65.00
2110.71	AC Current Probe Model MN114 (Lead – 100mV/A – 10A max)	\$179.00	\$65.00

Handheld Oscilloscope Models OX7102^{III} & OX7104^{III} 100MHz

Features

- 5 complementary tools in a single instrument: Oscilloscope, FFT Analyzer, Multimeter/Wattmeter, Harmonic Analyzer on voltage/current/power and Recorder
- Sampling rate 2.5GS/s in one-shot mode and 100GS/s in ETS mode (repetitive signals)
- 2 or 4 isolated measurement channels (600V CAT III) and up to 8 traces on screen
- 2 or 4 independent TRMS digital multimeters (8000 counts, 200kHz)
- LCD touch screen and Windows-like menus on screen
- Probix “plug & play” input terminals and smart sensors
- Standard “real-time” FFT analysis and calculation functions on channels
- Multi-interface communication connectors: RS232, Centronics and Ethernet
- Memory depth of up to 50,000 points per channel (Oscilloscope and Recorder modes)
- Triggering on measurement thresholds in Oscilloscope and Multimeter modes
- NEW – Web Server (FTP server/client) with cursors and automatic measurements
- NEW – MiniFlex[®] sensors, powered by the instrument
- NEW – Power measurement option included for your power measurements
- NEW – Adapter for measuring up to 700VAC RMS 1000Vdc in meter mode



SPECIFICATIONS

MODELS	OX7102 ^{III}	OX7104 ^{III}
INTERFACE		
Screen Specifications	Color 5.7" LCD (115 x 86mm) 320 x 240 – CCFL backlighting	
Display Mode	Vectors with interpolation	
No. of Traces on Screen	Four traces and four references – split screen and full screen modes (tracing zone 110 x 74)	
Front Panel Control	32 direct shortcuts	
Screen Control	Touch screen – “Windows-like” menus and graphic commands	
VERTICAL		
Vertical Sensitivity	16 ranges from 2.5mV – 200V/div and up to 156µV/div in verticle zoom mode (12-bit converter) – Accuracy ± 1% of Reading	
Bandwidth	100MHz	
Channels	Two isolated channels	Four isolated channels
Accuracy	±0.1% of Reading	
Input Impedance	1MΩ ± 0.5%	
Max Input Voltage	600Vdc, 600Vrms, 850Vpk (DC + peak AC at 1kHz) without 10/1 probe 1000Vrms with 10/1 probe derating -20 dB/decade from 100kHz to 100MHz Zoom factor: from 1 to x 100	
Vertical Zoom		
HORIZONTAL		
Time Base Speed	35 ranges from 1ns/div to 200s/div	
Accuracy	accuracy ± 0.1% - Roll mode from 100 ms to 200 s/div	
Horizontal Zoom	x100 maximum	
DIGITAL MEMORY		
Max. Sampling Speed	100GS/s in ETS – 2.5GS/s in Single Shot Mode on each channel	
Vertical Resolution	12 bits	
Memory Capacity per Channel	“TRC” approx. 10kB, “TXT” approx. 20kB	
User Memory	2MB	
Other Modes	Envelope mode (Factors from 2 to 64)	
XY Mode	Between two from the four traces – math functions and cursors	
OTHER FUNCTIONS		
Autoset	Complete autoset < 3s with recognition of channels, Frequency >30Hz	
Trigger Mode	Automatic Triggered, Single shot, Auto Level 50%	
FT Analyzer & Math Functions	FT, +, -, x, / – Editor of mathematical functions	
Cursors	Two or three cursors: V and T simultaneous or Phase Resolution 12 bits, display four digits	
Power Source	Rechargeable 9V 3.8Ah battery (included)	
Battery Life	Four hour operation when fully charged	
Communication	Ethernet, RS-232, Web Server	



Model OX7104^{III} Kit

Handheld Oscilloscope Models OX7202^{III} & OX7204^{III} 200MHz

NEW!



3 YEAR WARRANTY

SAFETY 600V CAT III RATING

CE

Features

- 5 complementary tools in a single instrument: Oscilloscope, FFT Analyzer, Multimeter/Wattmeter, Harmonic Analyzer on voltage/current/power and Recorder
- Sampling rate 2.5GS/s in one-shot mode and 100GS/s in ETS mode (repetitive signals)
- 2 or 4 isolated measurement channels (600V CAT III) and up to 8 traces on screen
- 2 or 4 independent TRMS digital multimeters (8000 counts, 200kHz)
- LCD touch screen and Windows-like menus on screen
- Probix “plug & play” input terminals and smart sensors
- Standard “real-time” FFT analysis and calculation functions on channels
- Multi-interface communication connectors: RS232, Centronics and Ethernet
- Memory depth of up to 50,000 points per channel (Oscilloscope and Recorder modes)

SPECIFICATIONS

MODELS	OX7202 ^{III}	OX7204 ^{III}
INTERFACE		
Screen Specifications	Color 5.7" LCD (115 x 86mm) 320 x 240 – CCFL backlighting	
Display Mode	Vectors with interpolation	
No. of Traces on Screen	Four traces and four references – split screen and full screen modes (tracing zone 110 x 74)	
Front Panel Control	32 direct shortcuts	
Screen Control	Touch screen – “Windows-like” menus and graphic commands	
VERTICAL		
Vertical Sensitivity	16 ranges from 2.5mV – 200V/div and up to 156µV/div in verticle zoom mode (12-bit converter) – Accuracy ± 1% of Reading	
Bandwidth	200MHz	
Channels	Two isolated channels	Four isolated channels
Accuracy	±0.1% of Reading	
Input Impedance	1MΩ ± 0.5%	
Max Input Voltage	600Vdc, 600Vrms, 850Vpk (DC + peak AC at 1kHz) without 10/1 probe 1000Vrms with 10/1 probe derating -20 dB/decade from 100kHz to 200MHz	
Vertical Zoom	x5 maximum	
HORIZONTAL		
Time Base Speed	35 ranges from 1ns/div to 200s/div	
Accuracy	accuracy ± 0.1% - Roll mode from 100 ms to 200 s/div	
Horizontal Zoom	x100 maximum	
DIGITAL MEMORY		
Max. Sampling Speed	100GS/s in ETS – 2.5GS/s in Single Shot Mode on each channel	
Vertical Resolution	12 bits	
Memory Capacity per Channel	“TRC” approx. 10kB, “TXT” approx. 20kB	
User Memory	2MB	
Other Modes	Envelope mode (Factors from 2 to 64)	
XY Mode	Between two from the four traces – math functions and cursors	
OTHER FUNCTIONS		
Autoset	Complete autoset < 3s with recognition of channels, Frequency >30Hz	
Trigger Mode	Automatic Triggered, Single shot, Auto Level 50%	
FT Analyzer & Math Functions	FT, +, -, x, / – Editor of mathematical functions	
Cursors	Two or three cursors: V and T simultaneous or Phase Resolution 12 bits, display four digits	
Power Source	Rechargeable 9V 3.8Ah battery (included)	
Battery Life	Four hour operation when fully charged	
Communication	Ethernet, RS-232, Web Server	

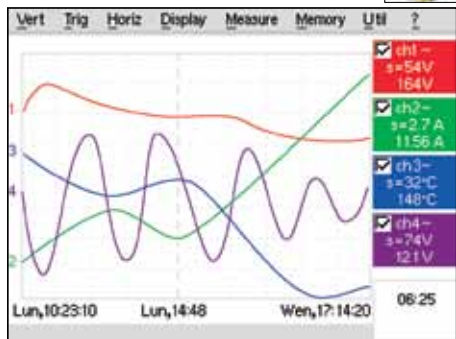
- Triggering on measurement thresholds in Oscilloscope and Multimeter modes
- NEW – Adapter for measuring up to 700Vac RMS 1000Vdc in meter mode
- NEW – Web Server (FTP server/client) with cursors and automatic measurements
- NEW – MiniFlex[®] sensors, powered by the instrument
- NEW – Power measurement option included for your power measurements



Model OX7202^{III} Kit

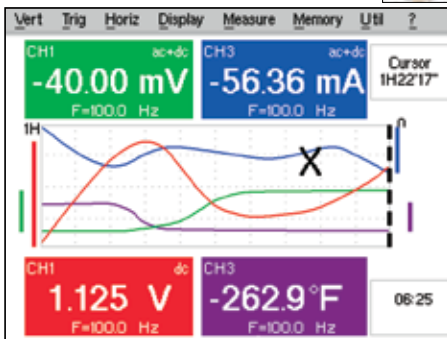
Four Tools in One!

Recorder



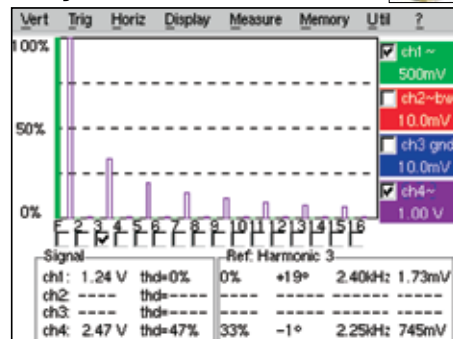
The OX^{III} Series supports a great variety of sensors (voltage, current, temperature, 0 to 10V, 4 to 20mA, etc) and displays them in their original physical scale and units.

Multimeter



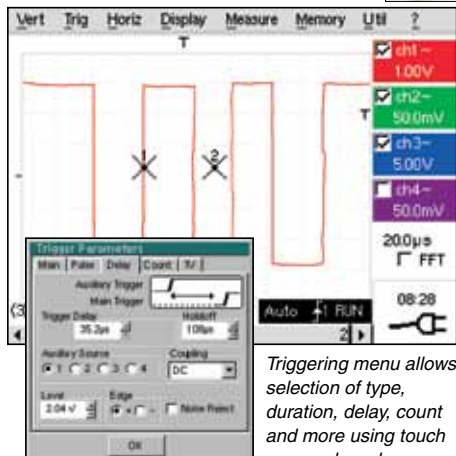
Automatic recording of the measured values are stored in memory on all active channels allowing review of periods lasting from five minutes to 24 hours.

Analyzer



Harmonic analysis results are displayed in bargraph form.

Oscilloscope



Triggering menu allows selection of type, duration, delay, count and more using touch screen drop-down menu.

Probe accessory options for Models OX7102^{III} & OX7104^{III}

AmpFlex[®] 0.5A to 3kA, 200kHz
Catalog #2124.91



MiniFlex[®] 0.5A to 300A, 3MHz
Catalog #2124.92



PROBIX PRHX5 50Ω Adapter
Catalog #2124.75



CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2124.58	Handheld Oscilloscope Model OX7102 ^{III} 100MHz	\$4,595.00	\$142.00
2124.59	Handheld Oscilloscope Model OX7202 ^{III} 200MHz	\$5,395.00	\$142.00
2124.67	Handheld Oscilloscope Model OX7104 ^{III} 100MHz	\$5,595.00	\$162.00
2124.68	Handheld Oscilloscope Model OX7204 ^{III} 200MHz	\$6,695.00	\$162.00
Accessories (Optional)			
2124.75	PROBIX PRHX5, 50Ω Adapter	\$ 109.00	-
2124.91	AmpFlex [®] 0.5A to 3kA, 200kHz for use with Oscilloscope OX Series	\$ 499.00	-
2124.92	MiniFlex [®] 0.5A to 300A, 3MHz for use with Oscilloscope OX Series	\$ 559.00	-

Current Measurement Probes

Five questions for selecting the proper Current Measurement Probe

- Do you need to measure AC or DC current or both?
- What is the maximum current you want to measure?
- What is the largest size of the conductor you need to clamp on to?
- Do you need a mV or mA output from the probe?
- What output termination is required (lead with BNC, lead with 4mm safety banana plugs or jacks to accept 4mm leads)?

DC/AC MicroProbes



- Measures extremely low level DC from 100 μ A
- Outputs signal proportional to total current (DC + AC)
- Low noise
- Ultra-compact size and non-contact clamp-on convenience
- Simple plug-in operation
- Designed for use with digital multimeters and oscilloscopes
- No range or mode (AC/DC) switching required
- CE Mark

Flexible Current Probes



- Models ranging from 30 to 30,000Arms
- Accuracy 1% of Reading
- TRMS measurements when connected to a TRMS instrument
- No core saturation or damage if overloaded
- Overrange LED for measurement circuitry
- EN 61010, 1000V CAT III, 600V CAT IV, Pollution Degree 2
- CE Mark

JM Series AC Current Probes



- Current range: up to 3000Aac (continuous cycle for the full temperature range)
- Output: 1mA/A to 100mVAc/Aac
- Designed for use on DMMs, power and harmonic meters, recorders of instruments with AC current ranges
- CE Mark

MD Series AC Current Probes



- 600A Range with mA or mV output
- Unique hook-shaped jaws that enable the user to “pry” into or “hook” onto cables
- Maximum conductor size is 2 x 500MCM
- Works as a traditional current transformer with ratio of 1000:1
- CE Mark

MN100 Series AC Current Probes



- Small, compact and very tough AC probes
- “Clothes pin” shape makes them ideal for use in tight areas, such as breaker panels, controller panels, or outlets
- Measurements from 1mA to 150Aac
- Excellent companions to all DMMs. Permits very low AC current measurements

MN200 & MN300 Series AC Current Probes



- Small, compact size
- Measurement range of 100mA to 240Aac
- Jaw opening accommodates conductors up to 250MCM
- Designed for DMMs, loggers, recorders and oscilloscopes
- 40Hz to 10kHz response
- Available with mA or mV output signals
- Available with jack outputs, integral leads with shrouded safety banana plugs or BNC terminated lead
- Designed to EN 61010, 600V CAT III safety standards
- CE Mark, UL approved

MR400 & MR500 Series AC/DC Current Probes



- Measurement range of 400Aac/600Adc (MR400 Series)
- Measurement range of 1000Aac/1500Adc (MR500 Series)
- Two distinct jaw shapes to be used for hooking or prying around the conductor
- Low phase shift for power measurements
- Designed for DMMs, recorders, oscilloscopes, power and harmonic meters
- EN 61010, 600V CAT III, 300V CAT IV, Pollution Degree 2
- CE Mark

SL Series AC/DC Current Probes



- Low AC and DC measurements
- 50mA to 120Aac/150Adc
- Unique design for probing in crowded wiring in industrial and automotive environments
- Hall effect sensor technology
- Use with DMMs, voltmeters and other voltage measuring instruments
- CE Mark

SR Series Current Probes



- Measurement range of 100mA to 1200Aac
- Large jaw opening accommodates up to two 500MCM conductors
- Ergonomic design and easy operation
- Low phase shift for power measurements
- Available with mA or mV output signals
- Designed for DMMs, recorders, loggers, oscilloscopes, power and harmonic meters
- Designed to EN 61010, 600V CAT III safety standards
- CE Mark, UL approved

Note: Product image size not proportionate.

Not all models are CE and UL approved; please consult factory.

Oscilloscope & BNC Terminated Probes



Model SL261



Model MN261



Model MR461



Model MR561



Model SR661



Model JM861

Model	Measurement Range		Output Signal Voltage	Phase Shift*	Maximum Conductor Size		Output Connection
	AC	DC			Ø Cable	Bus Bar	
SL261	100mA to 10A 1 to 100A	100mA to 10A 1 to 100A	100mV/AAC/DC 10mV/AAC/DC	<1.5°	0.46" (11.8mm)	N/A	Lead w/BNC
MN261	0.1 to 24A 0.5 to 240A	–	100mVAC/AAC 10mVAC/AAC	<2.5°	0.78" (19.8mm)	N/A	Lead w/BNC
MR461	0.2 to 40A 0.5 to 400A	0.4 to 60A 0.5 to 600A	10mV/AAC/DC 1mV/AAC/DC	<1.5°	One 1.18" (30mm) Two 0.95" (24mm) 2 x 500kcmil	Two 1.2 x 0.4" (31.5 x 10mm)	Lead w/BNC
MR561	0.2 to 100A 0.5 to 1000A	0.4 to 150A 0.5 to 1500A	10mV/AAC/DC 1mV/AAC/DC	<1.5°	One 1.5" (39mm) Two 0.98" (25mm)	One 1.96 x 0.49" (50 x 12.5mm) Two 1.96 x 0.19" (50 x 5mm)	Lead w/BNC
SR661	0.1 to 12A 0.1 to 120A 1 to 1200A	–	100mVAC/AAC 10mVAC/AAC 1mVAC/AAC	<1°	2.05" (52mm)	1.96 x 0.19" (50 x 5mm)	Lead w/BNC
JM861	1 to 30A 1 to 300A 1 to 3000A	–	10mVAC/AAC 1mVAC/AAC 0.1mVAC/AAC	<1°	2.52" (64mm) 2.52 x 3.94" (64 x 100mm)	1.97 x 5.31" (50 x 135mm)	Lead w/BNC





*Phase shift indicated at maximum rating. Not all models are UL approved; please consult factory.

CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
1201.51	AC/DC Current Probe Model SL261 (10A-100mV/A, 100A-10mV/A, BNC)	\$449.00	\$94.00
2115.82	AC Current Probe Model MN261 (24A-100mV/A, 240A-10mV/A, BNC)	\$179.00	\$65.00
1200.72	AC Current Probe Model MR461 (60A-10mV/A, 600A-1mV/A, BNC)	\$359.00	\$65.00
1200.73	AC Current Probe Model MR561 (150A-10mV/A, 1500-1mV/A, BNC)	\$399.00	\$65.00
2113.49	AC Current Probe Model SR661 (10A-100mV/A, 100A-10mV/A, 1000A-1mV/A, BNC)	\$299.00	\$75.00
2110.90	AC Current Probe Model JM861 (30A-10mV/A, 300A-1mV/A, 3000A-0.1mV/A, BNC)	\$495.00	\$98.00



General Purpose Probes



Series	Model	Ratio	Measurement Range		Output Signal		Phase Shift*	Maximum Conductor Size		Output Connection	Catalog No.	Price**		
			AC	DC	Current	Voltage		Ø Cable	Bus Bar					
	MN01	–	2 to 150A	–	1mAac/Aac	–	N/A	0.47" (12mm)	N/A	Lead	2129.17	\$79.00		
	MN02	1000:1	50mA to 100A 50mA to 90A	–	1mA/A	–	N/A	0.39" (10mm)	N/A	Lead	2129.20	\$109.00		
	MN03	–	2 to 100A	–	–	1mV/A	N/A	0.47" (12mm)	N/A	Lead	2129.18	\$89.00		
	MN05	–	5mAac to 10Aac 1 to 100Aac	–	–	1mVac/mAac 1mVac/Aac	N/A			Lead	2129.19	\$99.00		
	MN103	–	1mA to 10A 1 to 100A	–	–	1mVac/mAac 1mVac/Aac	N/A			Lead	1031.02	\$184.00		
	MN106	1000:1	2 to 150A	–	1mAac/Aac	–	<10°			Lead	1031.17	\$159.00		
	MN114	–	1mA to 10A	–	–	100mVac/Aac	<8°			Lead	2110.71	\$179.00		
	MN185	1000:1	50mA to 150A	–	1mAac/Aac	–	<3.5°			Jack	100.185	\$124.00		
	MN213	1000:1	0.5 to 240A	–	1mAac/Aac*	–	<2.5°			0.78" (19.8mm)	N/A	Lead	2115.75	\$119.00
	MN251	–	0.5 to 240A	–	–	1mVac/Aac	<2.5°					Lead	2115.77	\$139.00
	MN253	–	0.5 to 240A	–	–	10mVac/Aac	<2.5°	Lead	2115.79			\$139.00		
	MN255	–	0.1 to 24A 0.1 to 240A	–	–	100mVac/Aac 10mVac/Aac	<2.5°	Lead	2115.81			\$149.00		
	MN291	–	0.5 to 240A	–	–	100mVdc/Aac	N/A	Lead	2115.84			\$129.00		
	MN307	–	10mA to 12A	–	–	100mV/Aac	<2.5°	0.78" (19.8mm)	N/A	Lead	2116.23	\$179.00		
	MN312	1000:1	0.1 to 200A	–	1mAac/Aac	–	<2.5°			Jack	2116.24	\$159.00		
	MN313	1000:1	0.1 to 200A	–	1mAac/Aac	–	<2.5°			Lead	2116.25	\$169.00		
	MN352	–	0.1 to 150A	–	–	10mV/Aac	<2.5°			Jack	2116.26	\$169.00		
	MN353	–	0.1 to 150A	–	–	10mV/Aac	<2.5°			Lead	2116.27	\$189.00		
	MN373	–	0.01 to 2.4A 0.1 to 200A	–	–	1000mV/Aac 10mV/Aac	<3°			Lead	2116.28	\$199.00		
	MN375	–	0.1 to 10A	–	–	100mV/Aac	<1.5°			Lead	2115.41	\$219.00		
		SL206	–	10mA to 1.5A 50mA to 60A	10mA to 2A 50mA to 80A	–	1mV/mAac/dc 10mV/Aac/dc			<1°	0.46" (11.8mm)	N/A	Lead	1201.45
	MD301	1000:1	2 to 500A	–	–	1mVdc/Aac	N/A	1.18" (30mm) 2 x 500kcmil	2.48 x 0.20" (63 x 5mm)	Lead	1201.07	\$175.00		
	MD304	100:1	1 to 600A	–	10mAac/Aac	–	<3°			Lead	1201.37	\$269.00		
	MD305	1000:1	1 to 600A	–	1mAac/Aac	–	<1°			Lead	1201.36	\$259.00		



*Phase shift indicated at maximum rating

**Consult factory for NIST Calibration price

Note: Only Models MN103, MN106, MN114 & MN185 are not CE. MN200 & MN300 series probes are UL approved.



General Purpose Probes

Series	Model	Ratio	Measurement Range		Output Signal		Phase Shift**	Maximum Conductor Size		Output Connection	Catalog No.	Price***
			AC	DC	Current	Voltage		Ø Cable	Bus Bar			
	SR600	1000:1	0.1 to 1000A	–	1mAac/Aac	–	<0.5°	2.05" (52mm)	1.96 x 0.19" (50 x 5mm)	Jack	2113.42	\$159.00
	SR601	1000:1	0.1 to 1000A	–	1mAac/Aac*	–	<0.5°			Jack	2113.43	\$179.00
	SR604	1000:1	0.1 to 1000A	–	1mAac/Aac*	–	<0.5°			Lead	2113.44	\$189.00
	SR632	1000:5	0.1 to 1000A	–	5mAac/Aac*	–	<1°			Lead	2114.79	\$239.00
	SR634	250:5 500:5 1000:5	1 to 250A 1 to 500A 1 to 1000A	–	20mAac/Aac 10mAac/Aac 5mAac/Aac*	–	<1°			Jack	2113.48	\$249.00
	SR651	–	0.1 to 1000A	–	–	1mVac/Aac	<0.5°			Jack	2113.45	\$179.00
	SR701	1000:1	1mA to 1000A	–	1mAac/Aac*	–	<0.5°			Jack	2116.29	\$229.00
	SR704	1000:1	1mA to 1000A	–	1mAac/Aac*	–	<0.5°			Lead	2116.30	\$239.00
	SR752	–	0.1 to 1000A	–	–	1mVac/Aac	<0.7°			Lead	2116.32	\$299.00
	SR759	–	1mA to 1A 10mA to 10A 0.1 to 100A 1 to 1000A	–	–	1000mVac/Aac 100mVac/Aac 10mVac/Aac 1mVac/Aac	<1°			Lead	2116.33	\$299.00
	JM810A	2000:2	1 to 2000A	–	1mAac/Aac	–	<0.5°	2.52" (64mm)	1.97 x 5.31" (50 x 135mm) 2.52 x 3.94" (64 x 100mm)	Lead	2110.80	\$474.00
	JM813	3000:3	1 to 2400A	–	1mAac/Aac	–	<0.5°			Jack	2110.93	\$474.00
	JM830A	3000:1	1 to 2400A	–	.33mAac/Aac	–	<0.5°			Lead	2110.83	\$474.00
	JM850A	1000:1 2000:1 3000:1	1 to 1000A 1 to 2000A 1 to 2400A	–	1mAac/Aac .5mAac/Aac .33mAac/Aac	–	<0.5°			Jack	2110.87	\$495.00
	JM865A	1000:5 2000:5 3000:5	1 to 1000A 1 to 2000A 1 to 2400A	–	5mAac/Aac 2.5mAac/Aac 1.67mAac/Aac	–	<0.5°			Jack	2110.88	\$495.00

*Diode Protection for open secondary (Output)
 **Phase shift indicated at maximum rating
 ***Consult factory for NIST Calibration price
 Note: SR series probes are UL approved.

Output Terminations



Lead with BNC:
 Insulated 6.5 ft (2m) coaxial cable with insulated BNC connector rated 600Vrms



Jacks:
 Two standard safety banana jacks (4mm)



Leads:
 Double/reinforced 5 ft (1.5m) lead with 4mm safety banana plug



Shrouded Banana Plugs:
 Two 4mm safety banana plugs; standard 3/4" (19mm) spacing

High Frequency Oscilloscope Compatible MiniFlex® Probe



1MHz
Frequency
Response



Model MF 300-6-2-10-HF (6" probe)



Features

- Measures from 0.5Arms to 300Arms
- Accuracy 1% of Reading \pm 0.3A
- TRMS measurements when connected to a TRMS instrument
- No core saturation or damage if overloaded
- 9V battery for typical 140 hour continuous operation
- 1MHz frequency response
- Low phase shift for power measurements
- Insensitive to DC, measures only AC component on DC + AC signals
- Excellent linearity
- Lightweight
- Sensor is resistant to oils and aliphatic hydrocarbons
- Perfect accessory for all oscilloscopes

SPECIFICATIONS

MODELS	MF 300-6-2-10-HF	MF 300-10-2-10-HF
ELECTRICAL		
Range	30/300A	
Signal Output	100mV/10mV/A	
Frequency Range	5 to 1MHz @ -3db	
Influence Of Conductor Positioning	1.5% typical, 3% max	
Influence Of Conductor Positioning In Sensor Against Handle	4% typical, 6% max	
External Conductor Influence	35dB to 40dB on contact	
Power Source	9V Alkaline battery (6LF22)	
MECHANICAL		
Sensor Diameter	5mm \varnothing	
Sensor Length	6" (152mm)	10" (250mm)
Max Conductor Size	1.77" (45mm)	2.95" (70mm)
Connection Cable Length	6.5 ft (2m)	
Drop Test	Per IEC 68-2-32	
Vibration	Per IEC 68-2-6	
Mechanical Shock	Per IEC 68-2-27	
Weatherproofing	IP 50	
ENVIRONMENTAL		
Operating Temperature Range	14° to 131°F (-10° to +55°C)	
Storage Temperature Range	-40° to 158°F (-40° to +70°C)	
Altitude	Operating: 0 to 2000m, working voltage derating above; Non-operating: 0 to 12,000m	
SAFETY		
Safety Rating	EN 61010, 1000V CAT III; 600V CAT IV	



Model MF 300-10-2-10-HF (10" probe)

CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2126.83	MiniFlex® Flexible AC Current Probe Model MF 300-6-2-10-HF	\$569.00	-
2126.84	MiniFlex® Flexible AC Current Probe Model MF 300-10-2-10-HF	\$599.00	-

MiniFlex® Flexible Current Probe for General Use

Features

- Measures from 0.5Arms to 3000Arms
- Accuracy 1% of Reading ± 0.25A
- TRMS measurements when connected to a TRMS instrument
- No core saturation or damage if overloaded
- Overrange LED for measurement circuitry
- 20kHz frequency response
- Low phase shift for power measurements
- Insensitive to DC, measures only AC component on DC + AC signals
- Excellent linearity
- 9V Alkaline battery, provides typical 150 hours of continuous operation
- EN 61010; 1000V CAT III; 600V CAT IV



Model MF 300-6-2-10 (6" probe)



Model MF 3000-10-2-1 (10" probe)

SPECIFICATIONS

MODELS	MF 300-6-2-10	MF 3000-10-2-1
ELECTRICAL		
Range	30/300A	300/3000A
Signal Output	100mV/10mV/A	10mV/1mV/A
Frequency Range	10 to 20kHz with current derating	
Influence Of Conductor Positioning	1.5% typical, 3% max	
Influence Of Conductor Positioning In Sensor Against Handle	4% typical, 5% max	
External Conductor Influence	35dB to 40dB on contact	
Power Source	9V Alkaline battery (included)	
MECHANICAL		
Sensor Diameter	5mm Ø (vs 12.5 for AmpFlex®)	
Sensor Length	6" (152mm)	10" (250mm)
Max Conductor Size	1.77" (45mm)	2.95" (74.9mm)
Connection Cable Length	6.5 ft (2m)	
Drop Test	Per IEC 68-2-32	
Vibration	Per IEC 68-2-6	
Mechanical Shock	Per IEC 68-2-27	
Weatherproofing	IP 45 (EN60529)	
ENVIRONMENTAL		
Operating Temperature Range	14° to 131°F (10° to +55°C)	
Storage Temperature Range	-40° to 158°F (-40° to +70°C)	
Altitude	Operating: 0 to 2000m, working voltage derating above; Non-operating: 0 to 12,000m	
SAFETY		
Safety Rating	EN 61010, 1000V CAT III; 600V CAT IV; Pollution Degree II	

CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2126.81	MiniFlex® Flexible Current Probe Model MF 300-6-2-10	\$369.00	\$94.00
2126.82	MiniFlex® Flexible Current Probe Model MF 3000-10-2-1	\$389.00	\$94.00
Accessories (Optional)			
2119.94	Adapter – BNC (Female) to 4mm Banana (Male)	\$ 12.95	–



AmpFlex® Flexible Current Probes



Banana (female) – BNC (male) (XM-BB)
Catalog #2118.46 (optional)



Model	Measurement Range	Output	Sensor Length inches (mm*)	Max Conductor Size inches (mm*)	Catalog No.	Price**
300-24-2-10	30/300A	100/10mV/A	24 (610)	8 (190)	2112.88	\$329.00
1000-24-1-1	1000A	1mV/A	24 (610)	8 (190)	2112.39	\$309.00
1000-24-2-1	100/1000A	10/1mV/A	24 (610)	8 (190)	2112.98	\$329.00
1000-36-2-1	100/1000A	10/1mV/A	36 (910)	11 (290)	2113.00	\$389.00
3000-24-2-0.3	300/3000A	3.3/0.3mV/A	24 (610)	8 (190)	2114.87	\$359.00
3000-24-1-1	3000A	1mV/A	24 (610)	8 (190)	2112.46	\$339.00
3000-36-1-1	3000A	1mV/A	36 (910)	11 (290)	2112.48	\$379.00
3000-24-2-1	300/3000A	10/1mV/A	24 (610)	8 (190)	2113.05	\$349.00
3000-36-2-1	300/3000A	10/1mV/A	36 (910)	11 (290)	2112.00	\$405.00
3000-48-2-1	300/3000A	10/1mV/A	48 (1220)	15 (390)	2112.01	\$455.00
6000-36-2-0.1	600/6000A	1/0.1mV/A	36 (910)	11 (290)	2113.21	\$519.00
30000-24-2-0.1	3000/30,000A	1/0.1mV/A	24 (610)	8 (190)	2113.33	\$689.00

*Dimensions rounded off **Note:** Output is safety shrouded 4mm male banana plug

**Consult factory for NIST Calibration prices

Consult factory for special offers and ranges/lengths not shown here.

Features

- Models ranging from 30 to 30,000Arms
- Accuracy 1% of Reading
- TRMS measurements when connected to a TRMS instrument
- No core saturation or damage if overloaded
- Overrange LED for measurement circuitry
- Waterproof sensor
- 9V Alkaline battery, provides typical 150 hours of continuous operation (battery included)
- Shape Memory for custom pre-shaping of sensor before use (no drooping)
- Very high frequency response
- Low phase shift for power measurements of <math><1.3^\circ</math>, 0.7° typical
- Insensitive to DC, measures only AC component on DC + AC signals
- Excellent linearity
- Lightweight
- EN 61010, 1000V CAT III, 600V CAT IV, Pollution Degree 2

FlexProbe® Flexible Current Probe Model 24-3001



Banana (female) – BNC (male) (XM-BB)
Catalog #2118.46 (optional)



SPECIFICATIONS	
MODEL	24-3001
ELECTRICAL	
Current Range	300/3000A _{AC}
Output Signal	mV output (4000mV peak max)
Three Position Slide Switch	10mV/A 1mV/A ON/OFF
Power Source	9V Alkaline battery (included)
MECHANICAL	
Maximum Conductor Size	7.6" (193mm)
Sensor Length	24" ± 1" (610mm ± 25.4mm)
Cable Length	6.5 ft (2m)
Output Connection	Double insulated 14" (355mm) lead with safety banana plugs

Features

- 24" flexible sensor fits around conductors up to 7.6" in diameter
- Dual measurement ranges of 300A and 3000AAC
- Read amperage directly on DMM display
- mV output directly proportional to the AC current measured
- Output is 10mV/A on 300A range and 1mV/A on 3000A range
- Accuracy of 1% of Reading ± 500mA
- 4% influence of conductor position in jaw
- Up to 150 hours of battery life
- Dual banana plug termination for direct input into DMMs
- Flashing LED low battery indicator
- 9V Alkaline battery, provides typical 150 hours of continuous operation (battery included)
- EN 61010, 1000V CAT III, 600V CAT IV, Pollution Degree 2

CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2120.81	FlexProbe® Model 24-3001 (300/3000A _{AC} , 24", 10mV/A/1mV/A, Lead)	\$279.00	\$61.00
Accessories (Optional)			
2118.46	Adapter – Banana (Female) – BNC (Male) (XM-BB)	\$ 39.50	–

Features

- MR400 Series has a measurement range of 400AAC/600ADC
- MR500 Series has a measurement range of 1000AAC/1500ADC
- Two distinct jaw shapes to be used for hooking or prying around the conductor
- Low phase shift for power measurements
- Designed for DMMs, recorders, oscilloscopes, power and harmonic meters
- EN 61010, 600V CAT III, 300V CAT IV, Pollution Degree 2

AC/DC Current Probe MR400 & MR500 Series

SPECIFICATIONS		
MODELS	MR411	MR521
Measurement Range AC	0.2 to 40A 0.5 to 400A	0.2 to 100A 0.5 to 1000A
Measurement Range DC	0.4 to 60A 0.5 to 600A	0.4 to 150A 0.5 to 1500A
Output Signal Voltage (mV) <small>(AC in AC, DC in DC)</small>	10mV/A 1mV/A	10mV/A 1mV/A
Maximum Conductor Size Ø Cable	One 1.18" (30mm) Two 0.95" (24mm) Two x 500kcmil	One 1.5" (39mm) Two 0.98" (25mm)
Bus Bar	Two 1.2 x 0.4" (31.5 x 10mm)	Two 1.96 x 0.19" (50 x 5mm)
Output Connection	Lead with safety banana plug	Lead with safety banana plug
Power Source	One 9V Alkaline battery (included)	



CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
1200.68	AC/DC Current Probe Model MR411 (Lead – 10mV/A – 60A max & 1mV/A – 600A max)	\$349.00	\$65.00
1200.69	AC/DC Current Probe Model MR521 (Lead – 10mV/A – 150A max & 1mV/A 1500A – max)	\$369.00	\$65.00

Features

- Measures extremely low level DC from 100µA
- Outputs signal proportional to total current (DC + AC)
- Low noise
- Ultra-compact size and non-contact clamp-on convenience
- Simple plug-in operation
- Designed for use with digital multimeters and oscilloscopes
- Accurate display of waveforms
- No range or mode (AC/DC) switching required
- Red LED indicates momentary or continuous overload
- Green LED indicates power and battery condition

DC/AC MicroProbe Models K100 & K110

SPECIFICATIONS		
MODELS	K100	K110
Current Range	0 to ± 4.5A _{DC} 0 to 3Arms	0 to ± 450mA _{DC} 0 to 300Arms
Output (Vout)	1mV/mA	10mV/mA
Resolution	DC: 50µA typical, AC: 100µA typical	DC: 50µA typical, AC: 100µA typical
Accuracy	DC: ±1% of Reading ± 200µA, AC: ±2% of Reading, ± 200µA	DC: ±0.5% of Reading ± 150µA, AC: ±0.8% of Reading, ± 200µA
Output Noise	<100µV, DC to 3kHz	<100µV, DC to 3kHz
Frequency Response	DC to 2kHz (@ -3dB sine)	DC to 1.5kHz (@ -3dB sine)
Power Source	One 9V Alkaline battery (included)	
Battery Life	20 hours	



Model K100



CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
1200.67	DC/AC MicroProbe Model K100 (1mV/mA – 4.5A max)	\$619.00	\$65.00
2111.73	DC/AC MicroProbe Model K110 (10mV/mA – 450mA max)	\$659.00	\$65.00



DC Power Supply Models AX502 & AX503



Optional lead set includes two color-coded leads, one ground lead (stripped), two alligator clips and two grip probes.
Catalog #2117.78



SPECIFICATIONS		
MODELS	AX502	AX503
Number of Outputs	2	3
VOLTAGE		
Output 1 & 2	0 to 30Vdc	0 to 30Vdc
Output 3 (No display)	–	2.7 to 5.5Vdc
Display Resolution	100mV	100mV
Basic Accuracy	±0.5% of Reading ± 1ct	±0.5% of Reading ± 1ct
Residual Ripple	±1mVrms	±1mVrms
LINE REGULATION		
±10% Line Voltage	±0.03% of Reading ± 2mV	
LOAD REGULATION		
0 to 2.5A	±0.02% of Reading ± 5mV	
0 to 5A	–	±0.2% Reading ±10mV
CURRENT		
Output 1 & 2	0 to 2.5A	0 to 2.5A
Output 3	–	5A max (no adjustment)
Resolution	10mA	10mA
Basic Accuracy	±0.5% of Reading ± 1ct	±0.5% of Reading ± 1ct
Limit Indicator	LED, Outputs 1 and 2	LED, Outputs 1, 2 and 3
Short-circuit Protection	Electronic current limitation with voltage shutdown	
Overheating Protection	Thermal protection	
OUTPUT COUPLING		
Tracking	Output 1: Master/Output 2: Slave Proportional Slave Tracking (0 to 100% of Master)	
Series Mode	0 to 60Vdc/0 to 2.5A	
Parallel Mode	0 to 30Vdc/0 to 5A	

Features

- Single and Dual 0 to 30Vdc/ 0 to 2.5A outputs
- 5.5V/5A output (Model AX503)
- Series and Parallel operation permit 0 to 60V or 0 to 5A output
- Low noise (<1mV Ripple) and stable linear technology for clean output
- High efficiency toroidal transformers: no fan and low electromagnetic emissions
- Active protection against overloads, short circuits and overheating
- Unique variable tracking mode for Master/Slave operation: Slave or Master track proportionally to the original setting
- Simultaneous display of Voltage and Current
- Highly visible Green (V) and Red (A) LED displays
- Compact design for bench tops
- Designed to EN 61010-1 safety standards

Decade Box Models BR07 & BC05



SPECIFICATIONS							
DECADE	1	2	3	4	5	6	7
BR07	1 to 10Ω; Max current: 700mA	10 to 100Ω; Max current: 200mA	100Ω to 1kΩ; Max current: 70mA	1 to 10kΩ; Max current: 20mA	10 to 100kΩ; Max current: 7mA	100kΩ to 1MΩ; Max current: 1mA	1 to 10MΩ; Max current: 0.1mA
BC05	0.1 to 1nF	1 to 10nF	10 to 100nF	100nF to 1μF	1 to 10μF	–	–
MODELS		BR07			BC05		
Accuracy	1%			3% (low residual capacitance)			
Residual Capacitance	–			25pF (approx.)			
Max Operating Voltage	–			300Vdc, 230Vac (50Hz)			

Features

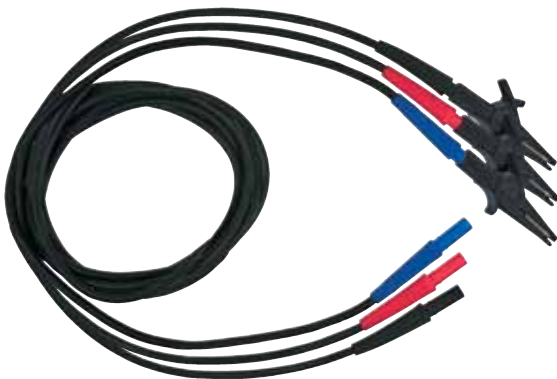
- Capacitance and Resistance Decade Boxes
- Rotary switch selector
- Stop position to prevent accidental switching from 10 to 0
- Male ground (earth) terminal with safety jack
- Outputs on Ø 4mm safety terminals
- Ground jumper lead EN 61010-2-031, 150V CAT II, 50V CAT III, Pollution Degree 2
- Resistance ranges are 1Ω to 11.11111MΩ for BR07 and 0.1nF to 11.111μF for BC05

CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2130.06	DC Power Supply Model AX502 (Dual outputs, 0 to 2.5A; 0 to 30Vdc)	\$775.00	\$72.00
2130.07	DC Power Supply Model AX503 (Triple outputs, two 0 to 2.5A; 0 to 30Vdc; 5A; 2.7 to 5.5Vdc)	\$875.00	\$72.00
2131.25	Resistance Decade Box Model BR07 (x1Ω, x10Ω, x100Ω, x1kΩ, x10kΩ, x100kΩ, x1MΩ, 1%)	\$180.00	\$98.00
2131.26	Capacitance Decade Box Model BC05 (x0, 1nF, x1nF, x10nF, x100nF, x1knF, 3%)	\$192.00	\$98.00
Accessories (Optional)			
2117.78	Set of 3, (2 Color-coded Safety Leads, 1 Ground Lead, 2 Color-coded Alligator Clips and 2 Color-coded Grip Probes) for Power Supply Models AX501-AX503	\$ 99.95	–
2131.35	Lead – Replacement, 6 ft. Safety Lead, 4mm Female to Female for use with Decade Boxes	\$ 14.95	–

Phase and Motor Rotation Tester Models 6608 & 6609

Features

- Indication of live phase presence or phase absence
- Determination of a motor's rotation direction with or without contact (Model 6609)
- Automatic testing as soon as the instrument is connected
- Terminals and cables identified by color-coding to simplify connection
- Phase rotation indicators (Model 6608)
- Phase and motor rotation indicators (Model 6609)
- Color-coded leads (red, black, blue) and alligator clips (black)
- Simple operation
- Line supplied - no battery needed (Model 6608)
- 600V CAT III rated



Each model includes a carrying case, 3 test leads (4 ft), 3 alligator clips and a user manual

SPECIFICATIONS

MODELS	6608	6609
ELECTRICAL		
Operating Voltage	40 to 850Vac between phases	With leads connected: 40 to 600Vac between phases Without leads connected: 120 to 400Vac between phases
Frequency Range	15 to 400Hz	
Power Supply	Self-powered via the measurement inputs	9V Alkaline battery (included)
Electrical Safety	600V CAT III	
MECHANICAL		
Dimensions	5.1 x 2.7 x 1.3" (130 x 69 x 32mm)	
Weight	4.5 oz (130g)	6 oz (170g)
ENVIRONMENTAL		
Operating Temperature	32° to 104°F (0° to 40°C)	
Storage Temperature	-4° to 122°F (-20° to 50°C); RH < 80%	
SAFETY		
Safety Ratings	IEC 61010-1, DIN VDE 0411; IEC 61557-7, DIN VDE 0413-7; Tightness: IP 40 (as per IEC 60529 Ed.92)	

CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2121.10	Phase Rotation Meter Model 6608	\$69.00	-
2121.11	Phase & Motor Rotation Meter Model 6609	\$99.00	-



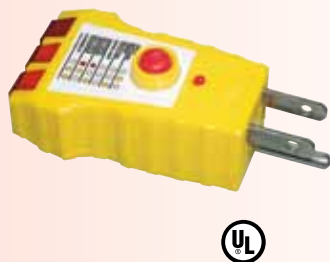
Outlet Tester Model OT-2

Features

- Detects faulty wiring in three-wire receptacles
- Detects open grounds and neutrals
- Detects reversed hot/ground connections
- Simply plug in and watch red and amber indicators
- For use on 100 to 125VAC

Application

- Test GFCI for proper operation
- 120V - three-wire US



AC Line Splitter Model ALS-1

For use with Clamp-On Meters & Multimeters using Current Probes

Features

- Avoids splitting lines - makes reading current easy
- Increases sensitivity of clamp-on current probes and clamp-on meters ten times in X10 mode
- Direct reading X1 mode
- Voltmeter input jacks
- Integral ground conductor
- Facilitates reading current draw of device plugged into it
- Facilitates reading current draw through extension cords
- 120V, 15A capacity



AC Voltage Detector Model NC-1



SPECIFICATIONS

MODEL	NC-1
Voltage Sensitivity	100 to 240VAC
Frequency	50/60Hz
Detection Distance	<5mm
Over Voltage	600V CAT III
Battery	2 x 1.5V AAA Alkaline (included)
Safety	For indoor use and in accordance with over voltage 600V CAT III, Pollution Degree 2

CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2121.03	Outlet/GFCI Tester Model OT-2 (110V US)	\$ 7.95	-
2121.05	AC Line Splitter Model ALS-1	\$14.95	-
2121.09	Non-Contact AC Voltage Detector Model NC-1	\$ 9.95	-

Non-Contact AC High Voltage Detector Model 275HVD

Features

- Non-contact high voltage detector
- Wide range of detection; 80V to 275kV; one instrument fits all applications
- Eight switch-selectable voltage sensitivity ranges
- Lightweight, minimizes sway at the end of long hot sticks
- Audible and visual indication of live voltage
- Self-test ensures that all system functions and indicators are working properly by energizing the complete system
- Designed for use with hot sticks incorporating a shotgun adapter



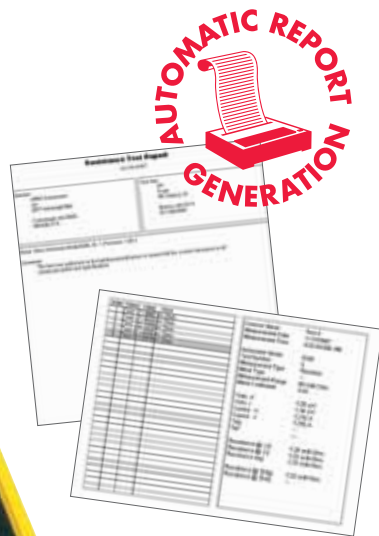
Model 275HVD includes three C cell batteries, shotgun adapter, a hard carrying case and user manual.

SPECIFICATIONS

MODEL	275HVD
ELECTRICAL	
Detection Frequency	45 to 70Hz
Ranges	240V, 2kV, 6kV, 11kV, 22kV, 33kV, 132kV, 275kV
Detection	Selection range is detected at approximately 10" (25cm) from the voltage Greater detection distances can be obtained at lower voltage positions
Power Source	Three 1.5V C cell batteries (included)
Low Battery Indication	—
MECHANICAL	
Self Test	User selectable
Indicators	Bright red LED and audible buzzer
ENVIRONMENTAL	
Operating Temperature	5° to 130°F (-15° to 55°C)
Storage Temperature	-4° to 150°F (-20° to 65°C)
Humidity	0 to 93% RH @ 104°F (40°C)

CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2131.12	Non-Contact High Voltage Detector Model 275HVD (240V to 275kV) Manual self-test	\$359.00	—

10A Micro-Ohmmeter Model 6240



DataView® is included with the Model 6240



Features

- Reliable low resistance measurements
- Four-terminal Kelvin resistance measurement eliminates test lead resistance
- 10A test current at up to 4000 $\mu\Omega$
- 0.25% basic accuracy
- 1 $\mu\Omega$ resolution
- Direct reading, easy to operate
- Six selectable resistance ranges
- Reverse polarity switch
- Overload and input fuse protection
- Manufactured to international safety and environmental standards
- Automatic decimal point and zeroing
- Large terminals accept banana plugs and spaded lugs
- Rechargeable NiMH battery with internal charger (110/220V)
- Large multifunctional backlit display
- Includes isolated USB cable and power cord
- Includes DataView® software for data storage, real-time display, analysis and report generation and user manual

SPECIFICATIONS

MODEL	6240					
Range	4000 $\mu\Omega$	40m Ω	400m Ω	4000m Ω	40 Ω	400 Ω
Accuracy	0.25% of Reading \pm 2cts	0.25% of Reading \pm 2cts	0.25% of Reading \pm 2cts	0.25% of Reading \pm 2cts	0.25% of Reading \pm 2cts	0.25% of Reading \pm 2cts
Resolution	1 $\mu\Omega$	10 $\mu\Omega$	0.1m Ω	1m Ω	10m Ω	100m Ω
Test Current	10A	1A	1A	100mA	10mA	10mA
Memory	Stores up to 99 test results					
Power Source	Rechargeable 6V, 8.5Ah NiMH battery pack (included)					



Kelvin clips, set of two, (10A – Hippo) 10 ft Catalog #1017.84 (10A – Hippo) 20 ft Catalog #2118.70



Kelvin probes, set of two (1A – spring loaded) 10 ft Catalog #2118.73 (1A – spring loaded) 20 ft Catalog #2118.74



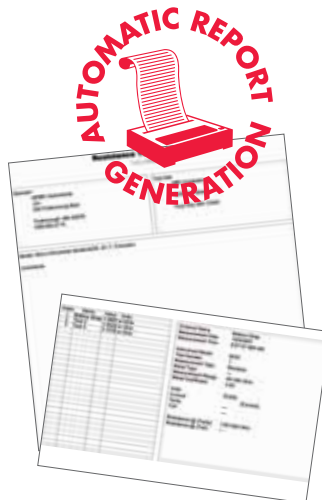
Kelvin clips, set of two, (1-10A) 10 ft Catalog #2118.79 Kelvin clips, set of two, (1-10A) 20 ft Catalog #2118.80

CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2129.80	10A Micro-Ohmmeter Model 6240 (includes one set of 10A Kelvin clips – Catalog #1017.84)	\$2,795.00	\$96.00
Accessories (Optional)			
1017.84	Kelvin Clips (10A – Hippo), set of two, 10 ft	\$ 199.00	–
2118.70	Kelvin Clips (10A – Hippo), set of two, 20 ft	\$ 229.00	–
2118.79	Kelvin Clips (1-10A), set of two, 10 ft	\$ 99.00	–
2118.80	Kelvin Clips (1-10A), set of two, 20 ft	\$ 149.00	–
2118.73	Kelvin Probes (1A – spring loaded), set of two, 10 ft	\$ 99.00	–
2118.74	Kelvin Probes (1A – spring loaded), set of two, 20 ft	\$ 149.00	–

10A Micro-Ohmmeter Model 6250

Features

- Measure from 100 $\mu\Omega$ (0.1 $\mu\Omega$ resolution) to 2500.0 Ω
- Test current selection of 1mA, 10mA, 100mA, 1A and 10A
- RTD temperature probe to check tested sample (optional)
- Selectable metal types
- Automatic and manual temperature correction
- Two programmable alarm set points
- Stores up to 1500 test results
- Selectable Inductive or Resistive test modes
- Automatic multiple test mode (multiple tests without pressing the test button)
- Large multi-line electroluminescent display
- Local or remote test setup and control
- Internal rechargeable batteries - conduct up to 5000 10A tests
- Rugged, double insulated waterproof case
- Includes RS-232 serial cable and AC line cord
- Includes DataView[®] software for data storage, real-time display, analysis and report generation and user manual



DataView[®] is included with the Model 6250



Kelvin clips, set of two, (1-10A) 10 ft
Catalog #2118.79
Kelvin clips, set of two, (1-10A) 20 ft
Catalog #2118.80



Kelvin probes, set of two, spring loaded (1A) 10 ft Catalog #2118.73 (1A) 20 ft Catalog #2118.74



Kelvin clips, set of two, (10A – Hippo) 10 ft are included with Model 6250 Catalog #1017.84



RTD Temperature Probe with 7 ft extension cable Catalog #2129.96

SPECIFICATIONS

MODEL	6250						
Range	5.0000m Ω	25.000m Ω	250.00m Ω	2500.0m Ω	25.000 Ω	250.00 Ω	2500.0 Ω
Accuracy	0.05% of Reading + 1 $\mu\Omega$	0.05% of Reading + 3 $\mu\Omega$	0.05% of Reading + 30 $\mu\Omega$	0.05% of Reading + 0.3m Ω	0.05% of Reading + 3m Ω	0.05% of Reading + 30m Ω	0.05% of Reading + 300m Ω
Resolution	0.1 $\mu\Omega$	1 $\mu\Omega$	10 $\mu\Omega$	0.1m Ω	1m Ω	10m Ω	100m Ω
Test Current	10A	10A	10A	1A	100mA	10mA	1mA
Measurement Mode	Selectable: Inductive (continuous test), Resistive (instantaneous test) or Auto (multiple tests)						
Metal Type Alpha	Selectable: Copper, Aluminum or Other Metal Programmable from 000.00 to 99.99						
Alarms	Two – programmable set points from 0.0 to 2500.0 Ω						
Memory	Stores up to 1500 test results; Data in memory can be reviewed on the instrument display, on a PC or via direct printout						
Power Source	Rechargeable 6V, 8.5Ah NiMH battery pack (included)						
Battery Life	Approximately 5000 10A tests						

CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2129.81	10A Micro-Ohmmeter Model 6250 (includes one set of 10A Kelvin clips – Catalog #1017.84)	\$3,695.00	\$142.00
Accessories (Optional)			
1017.84	Kelvin Clips (10A – Hippo), set of two, 10 ft	\$ 199.00	–
2129.95	RTD Temperature Probe (plug into faceplate for ambient temperature)	\$ 169.00	–
2129.96	RTD Temperature Probe with 7 ft extension cable	\$ 289.00	–
2118.79	Kelvin Clips (1-10A), set of two, 10 ft	\$ 99.00	–
2118.80	Kelvin Clips (1-10A), set of two, 20 ft	\$ 149.00	–
2118.73	Kelvin Probes (1A – spring loaded), set of two, 10 ft	\$ 99.00	–
2118.74	Kelvin Probes (1A – spring loaded), set of two, 20 ft	\$ 149.00	–



Digital Transformer Ratiometer DTR® Model 8510



DataView® is included with Model 8510



Features

- Measures power transformers, VT/PTs and current transformer CT turns ratios
- Displays turn ratio, excitation current, winding polarity and % deviation from the nameplate values
- Universal voltage (90-240V supply, 50-60Hz) via external smart/fast battery charger; complete charge in less than 4 hours
- Internal NiMH battery packs provide up to 10 hours of continuous operation
- Tests performed by exciting the primary and reading the secondary; provides safer conditions for the operator
- Display warns of incorrect lead connection, reverse polarity, open and short circuits
- Easy connection and test setup; no calibration or balancing required
- Large dual display with adjustable contrast ensures clearer visibility in any lighting environment day or night
- Low battery indicator
- Includes 15 foot lead set and soft carrying bag
- Stores up to 10,000 test results in internal memory
- USB port facilitates configuring the instrument and downloading test results
- Includes DataView® analysis software for programming, downloading, storing and report generation of test data
- EN 61010-1; 50V CAT IV

SPECIFICATIONS

MODEL	DTR® 8510
VT/PT Ratio Range	Auto-Ranging 0.8000:1 to 8000:1
CT Ratio Range	Auto-Ranging 0.8000 to 1000.0
Accuracy*	Ratio <10 to 1: ±0.2% of Reading Ratio 0 to 1000 to 1: ±0.1% of Reading Ratio >1000 to 1: ±0.2% of Reading Ratio 5000 to 8000.0: ±0.50% of Reading
Excitation Signal	VT/PT Mode: 32Vrms maximum CT Mode: 0 to 1A Auto Level, 0.1 to 5Vrms max.
Excitation Current Display	Range: 0 to 1000mA; Accuracy: ±2% of Reading ± 2mA
Excitation Frequency	70Hz
Measurement Method	In accordance with ANSI/IEEE C57.12.90-2006
Display	LCD 16 character, 2 line, large format, LED backlight, day/night visible
Languages Supported	English, Spanish, French, Italian, German, Portuguese
Communication	Optically isolated USB 2.0
Data Storage	Stores up to 10,000 complete measurements
Power Source	Rechargeable 12V NiMH battery (included)
External Charger	90/240V, 50/60Hz (smart charger)
Battery Life	Up to 10 hours continuous operation; May not be used while recharging; Low battery LEP/LCD indication
Charging Time	<4 hours

*23°C ± 5°C, 50 to 70% RH, full battery charge, no external fields or noise.

CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2136.50	Digital Transformer Ratiometer DTR® Model 8510	\$ 2,995.00	\$120.00
Accessories (Optional)			
2136.76	Lead-Set of 2, 30 ft for use with DTR® Models 8500 & 8510	\$ 465.00	-
2136.77	Lead-Replacement set of 2, 15 ft for use with DTR® Models 8500 & 8510	\$ 365.00	-



The Chauvin Arnoux Group is a worldwide company organized into activity-based divisions around its traditional areas of expertise, brands include:

metrix *Multimetrix*®

Portable Test & Measurement instruments for electrical and environmental parameters (CHAUVIN ARNOUX, METRIX & MULTIMETRIX brandnames):

Whatever your application, on site or in the laboratory, the Test & Measurement division can provide professional electricians and electronic engineers with hand-held instruments from the Chauvin Arnoux and Metrix brands. Multimetrix® offers an economical product line of clamp-on meters, power supplies and digital multimeters that you can purchase online through the AEMC® Storefront at www.aemc.com



Power Measurement & Control instruments (ENERDIS & RADIO-CONTROLE brandnames) for measurement, metering and supervision of electrical networks:

ENERDIS is an acknowledged expert in energy management. Today, ENERDIS is also a key player in the field of electrical network quality analysis and service. ENERDIS service: Quality (ISO 9001:2009/12).



Thermosensors and temperature measurement, control and supervisory instruments:

Pyro-Contrôle provides temperature measurement, control and calibration solutions for the most demanding process industry requirements, serving industry partners in the chemical, nuclear, metallurgy, glass-making and semiconductor industries. Pyro-Contrôle has implemented a rigorous (ISO 9001:2009/12) certified Quality Assurance system.

The following pages detail some of the products available from the group. The complete line can be seen on the web at www.aemc.com.

PC Oscilloscope Model MTX 162

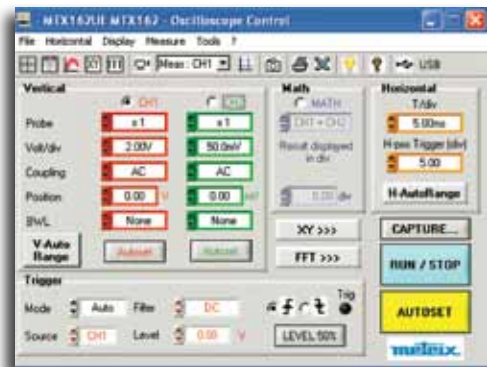
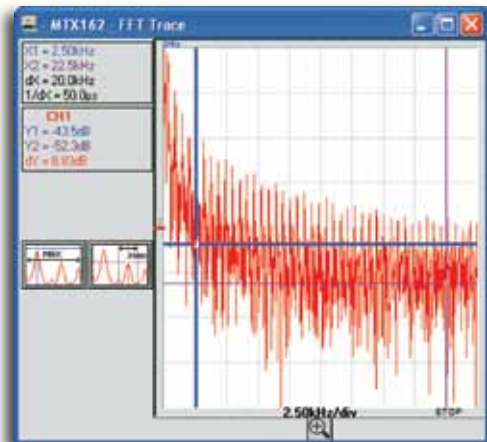


SPECIFICATIONS

MODEL	MTX 162
INTERFACE	
Screen Specifications	Color PC screen (min. resolution: 1024 x 768)
Display Mode	8 x 10 div.- Multi-windowing (control panel, trace, zoom, FFT, etc.)
Traces on Screen	4 traces + 4 references
Screen Control	"Windows-like" & online help – all commands available via mouse
VERTICAL	
Vertical Sensitivity	5mV to 100V/div
Bandwidth	60MHz (bandwidth limiter: 15MHz, 1.5MHz or 5kHz)
Channels	2 channels, class 1, common ground
HORIZONTAL	
Time Base Speed	32 ranges from 5ns to 100s/div
TRIGGER	
Mode	Auto, Triggered, One-shot ROLL, auto-level at 50%
Source	CH1, CH2, Mains
Type	Rising or falling edge, adjustable pretriggering from 0 to 100%
DIGITAL MEMORY	
Max. Sampling Speed	Repetitive = 20GS/s One-shot = 50MS/s
Vertical Resolution	8 bits
Memory Capacity	Depth = 50,000 points – storage capacity depends on PC configuration used
SPO (SMART PERSISTENCE OSCILLOSCOPE)	
Duration of Persistence	Analog remanent mode
MEASUREMENT PROCESSING	
FFT Analyzer/ MATH Functions	FFT, +, -, x, /
Manual Cursors	dv, dt, 1/dt, phase – cursors linked or unlinked to trace
Automatic Measurements	2 or 19 measurements out of 19 + automatic phase On-any type of curve Markers and limits
RECORDER MODE	
Duration/Sampling	Dedicated ROLL mode from 2s to 33min

Features

- 2-channel/60MHz
- Oscilloscope with FFT and recorder
- Sampling rate 50MS/s in one-shot mode and 20GS/s in ETS mode
- Detects 10ns transients
- 8-bit A/D converter
- Vertical sensitivities of 250µV-100V/div (300V CAT II)
- Advanced trigger modes and SPO (Smart Persistence Oscilloscope) analysis
- Stackable with direct PC connection via USB or Ethernet
- PC advantages:
 - Large screen with high resolution and multi-windowing
 - Unlimited storage capacity
 - Windows environment (printing, standard files, etc.)
 - Local or remote Ethernet universal communication
 - PC operating software and LabWindows/LabView drivers



CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2150.14	PC Scope Module Model MTX 162UE (2-channel, 60MHz)	\$1,245.00	–
2150.15	PC Scope Module Model MTX 162UEW (2-channel, WiFi, 60MHz)	\$1,595.00	–

Features

- 2 & 4-channel models/150MHz
- Oscilloscope with FFT, harmonic analyzer and recorder
- Sampling rate 200MS/s in one-shot mode and 100GS/s in ETS mode
- Detects 10ns transients
- 10-bit A/D converter
- Vertical sensitivities of 250 μ V-100V/div (300V CAT II)
- Advanced trigger modes and SPO (Smart Persistence Oscilloscope) analysis
- Stackable with direct PC connection via USB or Ethernet
- PC advantages:
 - Large screen with high resolution and multi-windowing
 - Unlimited storage capacity
 - Windows environment (printing, standard files, etc.)
 - Local or remote Ethernet universal communication
 - PC operating software and LabWindows/LabView drivers



The MTX 1052-PC, MTX 1054-PC and MTX 162 can be connected directly to a PC via a USB or Ethernet interface with PC software. WiFi versions allow wireless Ethernet communication.

PC Oscilloscope Models MTX 1052 & MTX 1054



SPECIFICATIONS

MODELS	MTX 1052 / MTX 1054*
INTERFACE	
Screen Specifications	Color PC screen (min. resolution: 1024 x 768)
Display Mode	8 x 10 div.- Multi-windowing (control panel, trace, zoom, FFT, etc.)
Traces on Screen	4 traces + 4 references
Screen Control	"Windows-like" & online help – all commands available via mouse
VERTICAL	
Vertical Sensitivity	2.5mV – 100V/div, up to 250 μ V/div with vertical expansion
Bandwidth	150MHz (bandwidth limiter: 15MHz, 1.5MHz or 5kHz)
Channels	2 or 4 channels, class 1, common ground
HORIZONTAL	
Time Base Speed	35 ranges from 1ns to 200s/div
TRIGGER	
Mode	Auto, Triggered, One-shot ROLL, auto-level at 50%
Source	CH1, CH2, EXT, Mains or CH1 to CH4, Mains*
Type	Edge, Pulse Width or Delay (40ns - 10.5s), counting (2 - 16,384 events), TV (525 = NTSC, 625 = PAL/SECAM), Pre-trigger adjustable from 0 to 100%, Hold-off (40ns - 10.5s)
DIGITAL MEMORY	
Max. Sampling Speed	Repetitive = 100GS/s One-shot = 200MS/s
Vertical Resolution	10 bits (9 bits used)
Memory Capacity	Depth = 50,000 points – storage capacity depends on PC configuration used
SPO (SMART PERSISTENCE OSCILLOSCOPE)	
Duration of Persistence	100ms, 200ms, 500ms, 1s, 2s, 5s, 10s and infinite
Performance	Acquisition rate 50 kwaveforms/s/channel, no. of samples acquired: 19MS/s/channel
MEASUREMENT PROCESSING	
FFT Analyzer/ MATH Functions	FFT (calculation over 2,048 points), +, -, x, / – "Made-to-measure" function editor
Manual Cursors	dv, dt, 1/dt, phase – cursors linked or unlinked to trace
Automatic Measurements	2 or 19 measurements out of 19 + automatic phase On-any type of curve Markers and limits
RECORDER MODE	
Duration/Sampling	Duration: 2s to 31 days / Sampling interval: 40 μ s to 53.57s
HARMONIC ANALYZER	
Analysis Range	Fundamental from 40Hz to 1kHz + 31 orders on 1 to 4 channels
Processing	Total RMS value, THD and selected order (%F, phase, frequency, Vrms)

CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2150.10	PC Scope Module Model MTX 1052B-PC (2-channel, 150MHz)	\$1,675.00	–
2150.11	PC Scope Module Model MTX 1052BW-PC (2-channel, WiFi, 150MHz)	\$2,075.00	–
2150.12	PC Scope Module Model MTX 1054B-PC (4-channel, 150MHz)	\$2,375.00	–
2150.13	PC Scope Module Model MTX 1054BW-PC (4-channel, WiFi, 150MHz)	\$2,975.00	–

Intrinsically Safe Digital Multimeter Model MX 57EX



**An intrinsically safe
multimeter for use
in dangerous or
explosive atmospheres**

- IECEx
- ATEX



Features

- TRMS measurements
- LCI 07: 0010X
- Safety rating: IEC 61010-1: 2001
- Agency Approval: IECEx LC107.0010 X, LCIE 02 ATEX 6005 X, Ex II 2 G D or Ex I M2, Ex ib I, Ex ib IIC T5 or T4 or T3, Ex ibD 21 T
- Logic signal measurement and ADP input
- Min/Max/Avg functions
- Bargraph with zoom (x5) and center zero
- Rugged design - IP67 rating
- Protection by 500mA intrinsic safety fuse for the current range
- Includes test leads

SPECIFICATIONS

MODEL	MX 57EX IECEx TRMS											
AC Current	500µA		5mA		50mA		500mA					
Resolution	10nA		100nA		1µA		10µA					
Bandwidth	DC to 5kHz		DC to 5kHz		DC to 5kHz		DC to 5kHz					
Accuracy	±0.75% of Reading ± 30cts		±0.6% of Reading ± 30cts		±0.6% of Reading ± 30cts		±0.7% of Reading ± 30cts					
Protection	600Vrms		600Vrms		600Vrms		600Vrms					
AC Voltage	500mV		5V		50V		500V*		1000V*			
Resolution	10µV		100µV		1mV		10mV		100mV			
Bandwidth	40Hz to 1kHz		1kHz to 4kHz		4kHz to 10kHz		10kHz to 30kHz		30kHz to 50kHz			
Accuracy	±0.3% of Reading ± 30cts		1% of Reading ± 30cts		±2% of Reading ± 30cts		±2% of Reading ± 30cts		±3% of Reading ± 30cts			
Input Impedance	11MΩ		11MΩ		10MΩ		10MΩ		10MΩ			
Protection	1100Vpk		1100Vpk		1100Vpk		1100Vpk		1100Vpk			
DC Current	500µA		5mA		50mA		500mA					
Resolution	10nA		100nA		1µA		10µA					
Accuracy	±0.2% of Reading ± 5cts		±0.2% of Reading ± 2cts		±0.05% of Reading ± 2cts		±0.2% of Reading ± 2cts					
Protection	600Vrms		600Vrms		600Vrms		600Vrms					
DC Voltage	500mV		5V		50V		500V*		1000V*			
Resolution	10µV		100µV		1mV		10mV		100mV			
Accuracy	±0.025% of Reading ± 2cts		±0.025% of Reading ± 2cts		±0.025% of Reading ± 2cts		±0.025% of Reading ± 2cts		±0.2% of Reading ± 2cts			
Input Impedance	11MΩ		11MΩ		10MΩ		10MΩ		10MΩ			
Protection	1100Vpk		1100Vpk		1100Vpk		1100Vpk		1100Vpk			
Resistance	500Ω		5kΩ		50kΩ		500kΩ		5MΩ		50MΩ	
Resolution	10mΩ		100mΩ		1Ω		10Ω		100Ω		1kΩ	
Accuracy	±0.07% of Reading ± 5cts		±0.07% of Reading ± 2cts		±0.07% of Reading ± 2cts		±0.07% of Reading ± 2cts		±0.3% of Reading ± 2cts		±1% of Reading ± 2cts	
Max Open-Circuit Voltage	7V		7V		7V		7V		7V		7V	
Protection	600V		600V		600V		600V		600V		600V	
Continuity	10 to 20Ω											
Response Time	1ms											
Diode Test	0 to 2V											
Test Current	1mA ± 20%											
Capacitance	50nF to 50mF											
Accuracy	1% of Reading ± 2cts											
Frequency	0.62Hz to 500kHz											
Accuracy	0.03% of Reading ± 2cts											
Temperature	Range (User selectable in °F or °C)											
	-328° to 1472°F (-200° to 800°C)											
Sensor	PT100/PT1000											
Digital Display	50,000-count											
Analog Bargraph	One 9V Alkaline battery (included)											
Power Source	34-segment											
Safety Rating	NF EN 50014, EN 50014: 1992; NF EN 50020, EN 50020: 1994											
Agency Approval	Agency Approval: IECEx LC107.0010 X, LCIE 02 ATEX 6005 X, Ex II 2 G D or Ex I M2, Ex ib I, Ex ib IIC T5 or T4 or T3, Ex ibD 21 T											

*Operating voltages are limited to 60V peak value or currents to 500mA for intrinsically safe operation

CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2130.66	DMM Model MX 57EX IECEx (Intrinsically Safe, 50,000-count, TRMS, 0.025% Accuracy)	\$895.00	\$98.00

Features

- Large graphic LCD display, bilingual menus (English/French)
- New LED backlighting for easier reading in dark areas and lower power consumption
- Four 100,000-count digital displays, bargraph and graphic measurement log
- Basic accuracy 0.02%, specified bandwidth 200kHz
- 8-key “virtual” measurement selector with “one-handed” direct access
- Frequency measurements up to 2MHz, durations, duty cycle, counting of events
- Temperature measurements with Pt 100 or Pt 1000 probes and J or K thermocouples
- Storage of 6500 measurements with date and time (up to 4 simultaneous parameters)
- USB or Bluetooth communication
- 50% – faster battery recharging with wall plug power pack

Digital Multimeters Models MTX 3281B-COMCM, MTX 3282B-COMCM & MTX 3283B-COMCM



SPECIFICATIONS

MODELS	MTX 3281B-COMCM	MTX 3282B-COMCM	MTX 3283B-COMCM
ELECTRICAL			
Display	Multidirectional graphic LCD (58 x 58mm) - Adjustable contrast - LED backlighting, Graphic resolution 160 x 160 - 100,000-count digital display, Main display + bargraph + (graphic or selection of 3 secondary displays)		
Measurement Connections	3 measurement terminals (V, A, COM) - Automatic detection and selection of VAC+DC or IAC+DC		
Controls	Virtual measurement selector with 8 “one-handed” direct access keys - “Favorite function” key		
Languages	Languages (English, French) - Configuration menu & browser - On-line help		
DC, AC and AC+DC Voltages	5 Automatic or Manual Ranges from 100.000mV to 1000.00V		
DC Basic Accuracy	0.1% of Reading + 8cts	0.03% of Reading + 8cts	0.02% of Reading + 8cts
AC and AC+DC Basic Accuracy	0.7% of Reading + 40cts	0.3% of Reading + 40cts	0.3% of Reading + 40cts
Specified Bandwidth	DC at 50kHz	DC at 100kHz	DC at 200kHz
DC, AC and AC+DC Currents	6 Automatic or Manual Ranges from 1000.00µA to 20.000A (max. 30s)		
DC Basic Accuracy	0.08% of Reading + 8cts	0.08% of Reading + 8cts	0.08% of Reading + 8cts
AC and AC+DC Basic Accuracy	1.0% of Reading + 30cts	0.3% of Reading + 30cts	0.3% of Reading + 30cts
Specified Bandwidth	DC at 20kHz	DC at 50kHz	DC at 50kHz
Frequency & Period	7 Automatic or Manual Ranges from 10.0000Hz to 2.0000MHz – Basic Accuracy 0.02% of Reading + 8cts		
Duty Cycle	Rated range 5 to 95 % - Resolution 0.01%		
Positive and Negative Pulses	Counting of up to 99,999 pulses, measurement of duration from 100µs to 12.5s		
Elapsed Time	Graph of events with zoom and measurement cursors: Relative mode (1) or Date/Time		
Resistance & Continuity	6 Automatic or Manual Ranges from 1000.00Ω to 50.000MΩ		
Basic Accuracy	0.1% of Reading + 8cts	0.07% of Reading + 8cts	0.07% of Reading + 8cts
Audible Continuity Detection	Range 1000.00Ω - response time 5ms		
Diode Test	0 to 2.6000V – Accuracy 2% of Reading + 30cts – Measurement Current Approx. 1mA		
Capacitance	Automatic or Manual Ranges from 10.00nF to 10.00mF – 1% of Reading + 5cts - Measurement Time < 2s (for C < 100µF)		
V Peak > 250µs and Crest Factor	Valid for one-off or periodic phenomena		
Measurement in dBm	Resolution 0.01dBm - Adjustable reference from 1Ω to 10,000Ω		
Resistive Power U²/R or R x I²	Resolution 100µW - Adjustable reference from 1Ω to 10,000Ω		
GENERAL			
Communication (depending on model)	USB adapter - Bluetooth wireless link		
EMC/Safety	Emissions and immunity as per NF EN 61326-1, 1998 / IEC 61010, 2001 - 600V CAT IV or 1000V CAT III		
Power Supply/Battery Life	3 LR6 batteries or AA NiMH rechargeable batteries / approx. 80h (LR6 batteries) or 65h (NiMH rechargeable batteries) depending on use		
Mains Power Supply	Multi-voltage switching power supply, 100-240V ± 10%, 50-60Hz, 0.3A Full charge time 7 hours 30min (2600mAh rechargeable batteries)		
Casing	ABS V0 – Dimensions when closed (H/W/D): 1.73 x 3.35 x 7.09" (44 x 85 x 180mm) - Weight: 400g - Protection rating IP51		

CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2125.74	DMM Model MTX 3281B-COMCM (TRMS, 100,000-count, Graphical, Communication)	\$499.00	\$98.00
2125.75	DMM Model MTX 3282B-COMCM (TRMS, 100,000-count, Graphical, Communication, Auto, Auto Peak)	\$599.00	\$98.00
2125.76	DMM Model MTX 3283B-COMCM (TRMS, 100,000-count, Graphical, Communication, Auto, Auto Peak, Rel)	\$699.00	\$98.00
2125.79	DMM Model MTX 3283B-BTCOMCM (TRMS, 100,000-count, Bluetooth, Graphical, Communication, Auto, Auto Peak, Rel)	\$889.00	\$98.00

Tachometers

Models CA1725 & CA1727



**Universal
tachometers
that you can
count on!**



Features

- Measurements up to 100,000 rpm
- Multiple of functions and automatic routines for data acquisition and storage: measurement of rotational speed, linear speed, count, frequency and period
- Extensive programming possibilities
- Digital display with analog bargraph
- USB interface for processing results on a PC (Model CA1727)
- Includes TachoGraph software on CD-ROM (Model CA1727)
Download memory only
- Stores up to 4000 measurements results

SPECIFICATIONS	
MODELS	CA1725 & CA1727
MEASUREMENTS	
Rotational Speed Function	Range: 6 to 100,000rpm Resolution: 0.0006 to 6rpm depending on range Accuracy: 1×10^{-4} of Reading ± 6 counts
Linear Speed Function	Range: 0.1 to 10,000m/min or ft/min Resolution: 0.0006 to 6m/min depending on range Accuracy: 1×10^{-4} of Reading ± 1 increment
Frequency Function	Range: 0.1 to 10,000Hz Resolution: 0.0004 to 0.4Hz depending on range Accuracy: 4×10^{-5} of Reading ± 4 counts
Period Function	Range: 0.1 to 10,000ms Resolution: 0.0003 to 0.3ms depending on range Accuracy: 1×10^{-4} of Reading ± 5 counts
Duty Cycle Function	Range: 10 to 10,000% Resolution: 0.1 to 1% depending on range Accuracy: 0.1% of scale from 0.2 to 50Hz • 0.2% of scale from 50 to 125Hz • 1% of scale otherwise
Count function	Range: 0 to 99,999 events; Accuracy: ± 1 event (Model CA1727)
GENERAL	
Power Source	9V battery Alkaline (included)
Battery life	250 x 5 min measurements with optical sensor; 600 x 5 min measurements with external sensor
Data Storage	4000 measurements (Model CA1727)
Dimensions	8.5 X 2.83" (216 x 72 x 47mm)
Weight	8.8 oz (250g)
Weatherproofing	IP 51
Environment	Storage: -4 to +158°F (-20 to +70°C) 95% RH; Operation: 32 to 131°F (0 to 55°C) 90% RH
SENSOR	
Optical	Reflective area: 10 to 90% of the target area. Measurement distance: 1 to 50cm. The maximum distance is given for a reflective adhesive strip with a minimum area of 10cm ² . Measurement angle: $\pm 15^\circ$ in relation to the perpendicular of the reflective surface.
Mechanical	Mechanical adapter: End-fittings: elastomer with a durometer hardness of 80 Pressure on moving part: between 2 and 40N; Maximum speed: 10,000rpm Service life: approx. 1000 hours at 3000rpm with a pressure of 20N. Conical end-fitting accessory: Minimum diameter of measurement shaft: 5mm Cylindrical end-fitting accessory: Speed measurements on shafts with a diameter greater than 5mm or flat-ended shafts End-fitting accessory with wheel; Wheel diameter: 30.183mm; Wheel development: 10cm \pm 0.1mm



Each model includes hard case, FRB F connector, 9V battery, a set of 15 reflective strips, user manual, USB cable & TachoGraph software on CD-ROM (CA1727 only), and quick start-up guide.

CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
1748.10	Tachometer Model CA1725	\$499.00	\$94.00
1748.30	Tachometer Model CA1727	\$599.00	\$94.00
1749.02	Mechanical accessories kit	\$108.80	-

Professional High Performance TRMS Clamp-On Meter Models F05, F07 & F09

Features

- Hand-held size, ultra practical and ergonomic
- True RMS measurement through fast sampling - accurate on non-linear waveforms
- 4kHz Bandwidth
- 3.5 Crest Factor @ 600Arms and 900Vrms
- Peak function captures 500µs signals
- Measure Inrush Current on 0.5, 1, 2.5, 5 and 10 cycles (15 to 70Hz)
- Min/Max for automatic capture of extreme values on 100ms samples
- Measure V, A, Ohms, kW, PF, VAR, VA, Hz, Phase Rotation, Temperature, AC + DC (model dependent)
- Temperature measurement up to 1832°F (1000°C) via standard K thermocouple (model dependent)
- Continuity at programmable buzzer threshold from 1 to 400Ω (model dependent)
- Selectable V-Live™ function (buzzer) warns of live circuit
- Designed for use with variable frequency drives (F05)
- Battery life displays directly in hours at the push of a button (Models F05, F07 and F09)
- Automatically detects AC or DC and is auto-ranging
- Automatic DC current zeroing
- Backlit LCD
- EN 61010-1, EN 61010-2-032, 600V CAT III
- Includes test leads and soft carrying case

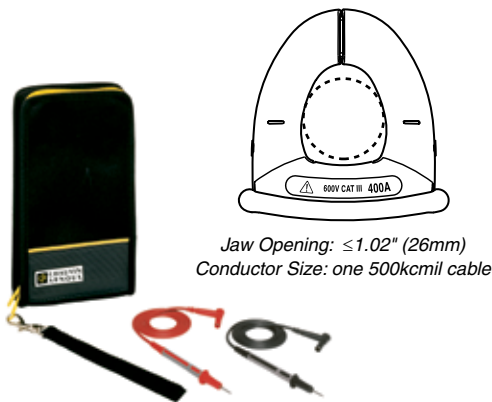


SPECIFICATIONS

MODELS	F05 TRMS	F07 TRMS	F09 TRMS
AC Current (Auto-Ranging)	0.2 to 400A	0.2 to 400A	0.2 to 400A
AC Voltage (Auto-Ranging)	0.2 to 600V	0.2 to 600V	0.2 to 600V
DC Current (Auto-Ranging)	0.2 to 400A	0.2 to 400A	0.2 to 400A
DC Voltage (Auto-Ranging)	0.2 to 600V	0.2 to 600V	0.2 to 600V
AC + DC Current (Auto-Ranging)	-	0.2 to 400Arms	0.2 to 400Arms
AC + DC Voltage (Auto-Ranging)	-	600Vrms	600Vrms
Resistance	40kΩ	40kΩ	40kΩ
Diode Test	Yes	Yes	Yes
Continuity (Beeper)	Yes (w/adjustable threshold)	Yes (w/adjustable threshold)	Yes (w/adjustable threshold)
Frequency	20kHz	20kHz	20kHz
Power (W, VA, VAR)	240kW	-	5W to 240kW
Power Factor	-1.00 to 1.00	-	-1.00 to 1.00
Phase Rotation	Yes	-	Yes
Temperature (int or ext)	-	-50° to 1832°F (-10° to 1000°C)	-
Adapter (AC/DC)	-	0 to 4000mV	-
Min/Max/Peak	Yes	Yes	Yes
Hold	Yes	Yes	Yes
Inrush Current	0.5 to 10 cycles selectable	0.5 to 10 cycles selectable	0.5 to 10 cycles selectable
V-Live™ Hazardous Voltage Indicators ⁽¹⁾	45Vp	45Vp	45Vp
Auto-Off	Yes	Yes	Yes
Backlight	Yes	Yes	Yes
Battery Indicator ⁽²⁾	Yes	Yes	Yes
Buzzer for Overrange	Yes	Yes	Yes
Power Source	One 9V Alkaline battery (included)		

⁽¹⁾Indicates voltage higher than instrument rating

⁽²⁾Remaining time expressed in hours on Models F05 and F07



Models F05, F07 and F09 include test leads, soft carrying case and user manual.

CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2129.53	Clamp-On Meter Model F05 (TRMS, 400AAC/DC, 600VAC/DC, Hz, Power (kW), Phase Rotation, Ohms, Continuity)	\$299.00	\$61.00
2129.54	Clamp-On Meter Model F07 (TRMS, 400AAC/DC, 600VAC/DC, Hz, Ohms, Continuity, Temperature)	\$269.00	\$61.00
2129.50	Clamp-On Meter Model F09 (TRMS, 400AAC/DC, 600VAC/DC, Hz, Power (kW), Phase Rotation, Ohms, Continuity)	\$339.00	\$61.00

Multi-Function Installation Tester Model C.A 6116



Features

- Installation testing according to the international standards (IEC 60364-6, NF C 15-100, VDE 100, XP C 16-600, etc.)
- Fast operation and simple access to measurement functions and results
- User-friendly with its large 5.7" backlit graphic screen
- Excellent measurement stability, especially in industrial environments that are affected by disturbances
- Simple, reliable connections
- Onscreen contextual help for each function
- Suitable for all types of neutral systems
- Customized, hierarchical storage of measurement results
- Safety rating 600V CAT III

SPECIFICATIONS

MODEL	C.A 6116
TECHNICAL	
Insulation	
Rated Voltage	50/100/250/500/1000V _{ac}
Range/Resolution/Accuracy	0.01 to 2GΩ/1kΩ to 1MΩ±(5% of measurement + 3cts)
Ground Resistance	
Range/Resolution/Accuracy (3-Point Testing)	0.50 to 4kΩ/0.01Ω to 1Ω±(2% of measurement + 2cts)
Others	Auxiliary rod resistance measurement (up to 40kΩ)
Installation Voltage/Frequency (with power on)	90 to 550V/15.3 to 17.5Hz - 45 to 65Hz
High-Current Mode with Tripping (1-Point Testing)	
	Test current: 5A
Range/Resolution/Accuracy	0.10Ω to 3,999Ω/0.01 to 1Ω±(5% of measurement + 2cts)
Mode without Tripping	Test current: 6mA – 9mA – 12mA (by default)
Test Current	6mA – 9mA – 12mA (by default)
Range/Resolution/Accuracy	0.20Ω to 3,999Ω/0.01 to 1Ω±(5% of measurement + 3cts)
1-Point Selective Ground Testing	
Range/Resolution/Accuracy	0.20Ω to 3,999Ω/0.01 to 1Ω±(10% of measurement + 10cts)
RCDs/GFCIs	
Installation Voltage/Frequency	90V to 550V/15.3Hz to 17.5Hz/45Hz to 65Hz
I _{Δn}	10/30/100/300/500/650/1000mA or variable - Test in step and pulse modes
No-Trip Test	at ½I _{Δn} – Duration: 1000ms or 2000ms
Tripping Time Measurement	at ½I _{Δn} /2I _{Δn} (selective)/5I _{Δn}
Step Mode	0.3I _{Δn} to 1.06I _{Δn} in steps of 3.3% I _{Δn}
Continuity	
Test Voltage/I Rated	9.5V _{ac} /I > 200mA up to 39.99Ω and 12mA up to 399.9kΩ with buzzer
Range/Resolution/Accuracy	0Ω to 399.9kΩ/0.01 to 100Ω±(1.5% of measurement + 2cts)
Loop Impedance (Zi and Zs)	
High-Current Mode with Tripping	Test current: 5A
Range/Resolution/Accuracy	0.1 to 4000Ω/0.01 to 1Ω±(10% of measurement + 5cts)
NO TRIP Mode (Zs only)	Test current: 6mA – 9mA – 12mA (by default)
Range/Resolution/Accuracy	0.2 to 4000Ω/0.01 to 1Ω±(10% of measurement + 5cts)
Calculation of Short-Circuit Current	0.1A to 40kA
Other	Measurement of the resistive and inductive components of the impedances Zs and Zi
Current	
	5mA to 19.99A (MN77 clamp)/5mA to 19.99A (C177 clamp)/20mA to 200A (C177A clamp). Current measurement from 1mA available with MN77 & C177 by connecting voltage on the product
Voltage	
	0 to 550V _{ac/dc}
Frequency	
	DC/15.3 to 500Hz
Active Power	
	0 to 110kW single-phase - 0 to 330kW three-phase; Simultaneous display of voltage and current waveforms
Harmonics	
	Voltage and current harmonics/0 to 50 th /THD
Phase Rotation	
	20 to 550V _{ac}
Safety Ratings	
	IEC 61557/IEC 61010, 600V CAT III



Model C.A 6116 includes USB cable, three-pin/line voltage lead, three-pin lead / 3 safety leads, 3 test probes (Ø 4mm), 3 crocodile clips, 2 straight/right angle safety leads (3m), remote-control probe, line voltage power pack, DataView® software, 5 safety connectors wrist strap, 4-point strap for extra comfort, carrying bag and operating manuals (multi-lingual)

MODEL	C.A 6116
GENERAL	
Display	Large 5.7" backlit graphic screen, 320 x 240 counts
Communication	Via USB for data transfer and report creation
Power Supply	Rechargeable battery
Dimensions & Weight	11.02 x 7.48 x 5.04" (280 x 190 x 128mm) 5.29 lbs (2.4kg)

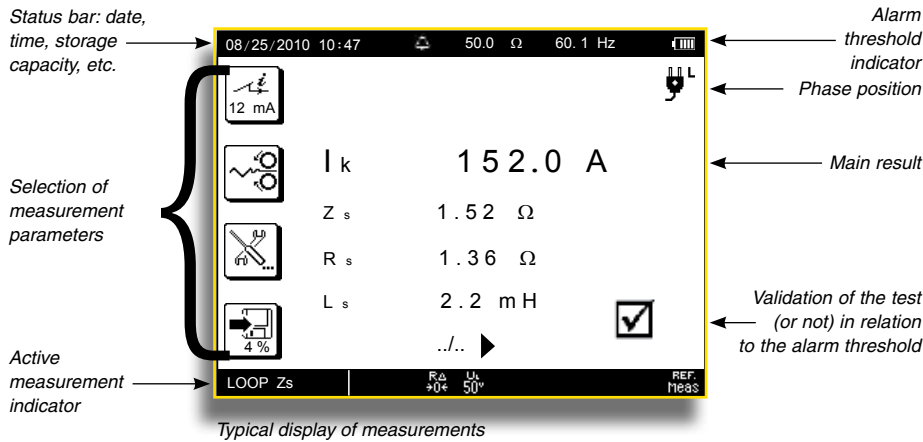
CATALOG NO.	DESCRIPTION	PRICE	NIST CALIBRATION
2138.01	Multi-Function Installation Tester Model C.A 6116	\$ 2,695.00	–

DataView®

Data Analysis and Reporting Software

Model C.A 6116 Display

The display allows you to view all the essential results at a glance



Typical display of measurements

Measurement Performance

- Continuity
- Insulation
- Grounding resistance
- 3 ft. grounding resistance
- Grounding resistance measurement with system energized (Ra)
- Selective grounding resistance measurement with system energized (Ra Sel.)
- Line impedance (Zi)
- Loop impedance (Zs)
- Ground fault device test
- Power & harmonics

Configure all installation testing functions of the Model C.A 6116

The measurements made with the Model C.A 6116 can also be processed with the DataView® multi-product expert processing software.

DataView® automatically recognizes the instrument when it is connected to the PC and opens the corresponding menu.

The menu, in tree form, offers users direct access to the data recorded in the instrument, its configuration, etc.

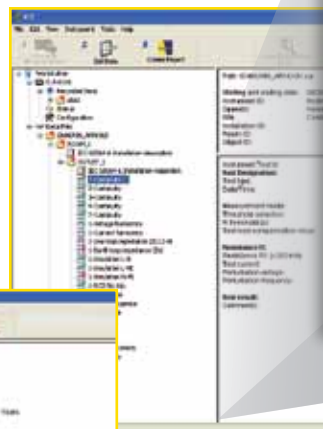
DataView® includes a large number of report templates for quick printing in full compliance with the applicable standards.

Users can also create their own templates, as required.



DataView® software

Instrument Test Id:	1-Continuity	
Test Designation:	Continuity	
Test type:	Continuity	
Date/Time:	08/25/2010 10:50:50	
Measurement mode:	+200 mA	
Threshold selection:	Instrument ID:	
R threshold (≥):	2.00	Ω
Test lead compensation value:	0.02	Ω
Resistance R:	1.19	Ω
Resistance R1 (+200 mA):	1.19	Ω
Test current:	206.3	mA
Perturbation voltage:	0.0	V
Perturbation frequency:	---	Hz
Test result:	Pass	
Comments:		



On the left-hand side of the screen, the menu presents the tree structure of the data present in the product and measurement campaigns, clearly identified (customer, location, type of measurements, etc.).
The part displayed as a zoom corresponds to the test carried out. It indicates the result of the main measurement. Whatever the test, the result (in this case, Pass) is displayed clearly.



Production of a report according to the IEC 60364-6 standard

CATALOG CROSS REFERENCE INDEX

Cat. No.	Model No.	Page No.	Cat. No.	Model No.	Page No.	Cat. No.	Model No.	Page No.	Cat. No.	Model No.	Page No.
100.185	AC Current Probe Model MN185	68	2113.19	AmpFlex® Model 6000-24-2-0.1	72	2117.30	Megohmmeter Model 1040 Field Kit	2	2121.10	Phase Rotation Meter Model 6608	75
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