

FOX I/O System

Innovative System Expands OCS I/O Capabilities

Fiber Optic Expansion I/O System (FOX) is an innovative bus extension that greatly expands the number of standard SmartStack^{**} I/O that can be used with the Operator Control Station (OCS), as well as adding a variety of architecture options. SmartStack I/O are rugged, stackable I/O modules for the OCS. By stacking SmartStack modules on bases connected to the OCS by plastic fiber, you can add up to 20 SmartStack I/O modules. And the FOX Bases can be distributed and DIN-rail mounted to reduce installation cost.

SmartStack FOX is not a remote I/O system, but a high speed (8MHz) bus extension. It is based on inexpensive plastic fiber technology that has been used in the consumer electronics industry for years. Plastic fiber is much more rugged than glass fiber, supporting bend radiuses as small as one inch.



Increases I/O Capacity

Each FOX Base can support up to 4 SmartStack modules. Bases are connected to the OCS and to each other through fiber optic connections. There are two types of bases: Standard and Base/Hub. Standard Bases accommodate up to 4 SmartStack modules with no expansion. With a Base/Hub, you can add 4 SmartStack modules and expand to other bases. You can have a maximum of 5 FOX Base/Hubs, and they can support up to 20 I/O modules. If you mount a FOX100 SmartStack Expansion Module on an OCS110, OCS210, or OCS250, you can have up to 23 SmartStack modules (3 modules and the FOX100 on the OCS plus 20 modules using the FOX I/O System).

More Installation Options

SmartStack FOX supports a variety of architectures, offering greater flexibility in I/O layout. These include Star, Daisy-chain, or Combination. Each SmartStack FOX cable segment can be up to 10m in length, with no Base/Hub located more than three segments (3x10m) from the OCS. Standard SmartStack FOX cables are offered in 0.5m, 1.0m, 2.0m, 5.0m, and 10m lengths.

Features & Benefits:

- Has Highly Noise Immune Bus Extension
- Supports up to 20 SmartStack Modules
- Allows SmartStack I/O to be mounted remotely from OCS
- Uses inexpensive plastic fiber technology



Note: Maximum three segments to last base

High Noise Immunity

More I/O Capacity

Remote Mounting





Distributed Control

Ethernet TCP/IP or $CsCAN^{TM}$



Specifications

SmartStack FOX Cables

Technology Plastic Fiber Connection Type Toslink 2mm (0.078 in) Cable Diameter Minimum Bend Radius 25mm (I in) 10m (32.8 ft) Maximum Distance per Segment Maximum Distance from OCS 30m (98.4 ft) 0.5m, 1.0m, 2.0m, 5m, 10m Available Standard Lengths (m) Available Standard Lengths (ft) 1.6 ft, 3.3 ft, 6.6 ft, 16.4 ft, 32.8 ft

SmartStack FOX Bases

Addressing Method

Base/Hub

3-position DIP Switch

Incoming Bus Connections
One Toslink Pair
One Toslink Pair
Outgoing Bus Connections
None
Four Toslink Pairs
Relative Humidity
5% to 95% Non-condensing
Operating Temperature
0 to 60 degrees Celsius
Electrical Connections
Screw-clamp, Removable (3-position)
Diagnostic LEDs
FIBER OK, RUN, POWER

Compatibility

OCS Controllers Supported All Color-Touch OCS (Standard)
OCS110, OCS210, and OCS250
(requires optional FOX100 Module)

Part Number Description HE800FOX104 SmartStack FOX Standard Base HE800FOX404 SmartStack FOX Base/Hub HE800FOX100 SmartStack FOX Module (required for OCS110, OCS210, OCS250, and RCS250) HE800CBF000 SmartStack FOX Cable Pair, 0.5 or 0.6m length HE800CBF001 SmartStack FOX Cable Pair, I.0m length HE800CBF002 SmartStack FOX Cable Pair, 2.0m length HF800CBF005 SmartStack FOX Cable Pair, 5.0m length HE800CBF010 SmartStack FOX Cable Pair, 10.0m length

Note: Two 2.0m fiber optic cables included with Color-Touch OCS models. Order cable separately for other OCS models. Expansion cables ordered separately.

Many I/O Options

Innovative Technology

Variety of Architectures





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