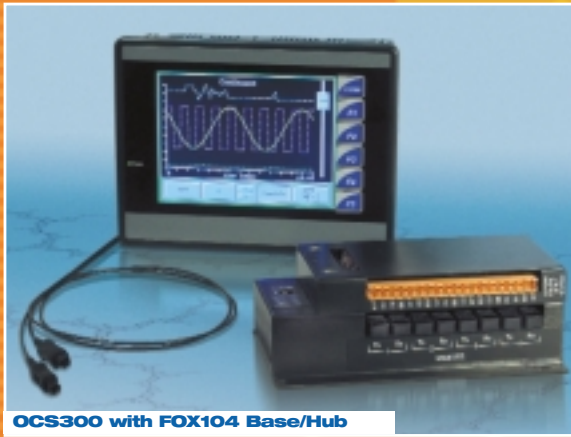


# FOX I/O System



## Innovative System Expands OCS I/O Capabilities

SmartStack I/O offers rugged, cost effective I/O with a multitude of I/O models for the Operator Control Station Product Family. SmartStack Fiber Optic Expansion I/O, an innovative new bus extension system, greatly expands the number of I/O modules supported, while adding installation options as well. SmartStack FOX uses standard SmartStack I/O modules, but increases the number of local I/O modules supported from 4 to 20. It also allows SmartStack I/O to be backplate or DIN rail mounted, a convenient option for installations with a larger I/O count.

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 25mm.

### Expanded I/O

SmartStack FOX Bases support up to 4 standard I/O modules. They are connected to the OCS and to each other through a fiber optic bus connection. There are two Base types; Standard Bases offer a single fiber connection pair (Incoming). Base/Hubs feature the incoming connection, plus four additional pairs (Outgoing). A maximum of five SmartStack FOX Bases/Hubs are allowed and they will support up to 20 I/O modules.

### Flexible Architecture

SmartStack FOX supports a variety of architectures, offering great 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 30m from the OCS. Standard SmartStack FOX cables are offered with 0.5m, 1.0m, 2.0m, 5.0m, and 10m lengths.

### Features & Benefits:

- 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
- Plastic/Glass Converter available for distances up to 1500m

**High Noise Immunity**

**Increased I/O Capacity**

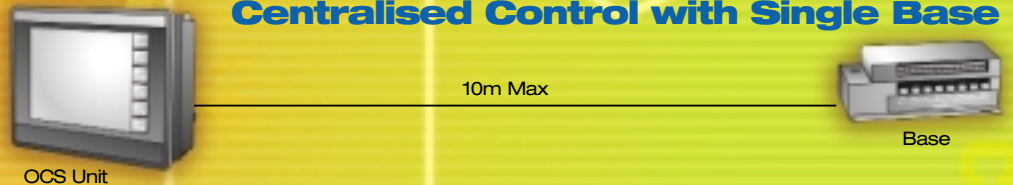
**Remote Mounting**

**Plastic Fibre Optic Bus**

**Hubs**

**Bases**

### Centralised Control with Single Base

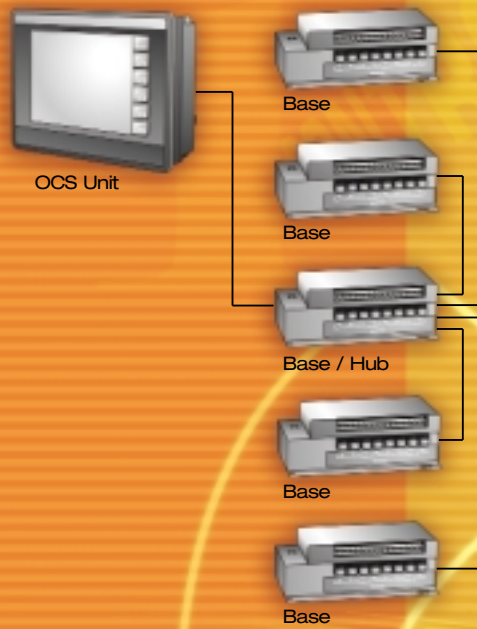


### Centralised Control with Distributed I/O

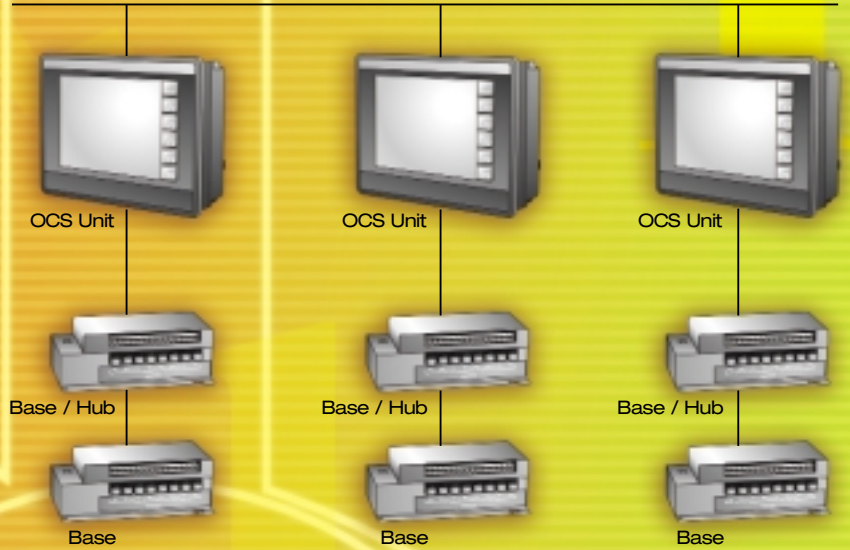


# FOX I/O System

## Centralised Control and I/O



## Distributed Control - Ethernet TCP/IP or CsCAN



## Many I/O Options

## Innovative Technology

## Variety of Architectures

### SmartStack FOX Cables

Technology	Plastic Fiber
Connection Type	Toslink
Cable Diameter	2mm (0.078")
Minimum Bend Radius	25mm (1 inch)
Maximum Distance per Segment	10m (32.8 ft)
Maximum Distance from OCS	30m (98.4 ft)
Available Standard Lengths (m)	0.5m, 1.0m, 2.0m, 5m, 10m
Available Standard Lengths (ft)	1.6ft, 3.3ft, 6.6ft, 16.4ft, 32.8ft

### SmartStack FOX Bases

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

### Bus/Hub

One Toslink Pair
Four Toslink Pairs

### Compatibility

Supported Controllers	All Colour-Touch OCS (Standard) OCS110, OCS210, and OCS250 (requires optional FOX100 Module)
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### Part Number

### Description

HE800FOX104	SmartStack FOX Standard Base
HE800FOX404	SmartStack FOX Base/Hub
HE800FOX100	SmartStack FOX Module (required for OCS110/OCS210/OCS250)
HE800CBF000	SmartStack FOX Cable Pair, 0.5 or 0.6m length
HE800CBF001	SmartStack FOX Cable Pair, 1.0m length
HE800CBF002	SmartStack FOX Cable Pair, 2.0m length
HE800CBF005	SmartStack FOX Cable Pair, 5.0m length
HE800CBF010	SmartStack FOX Cable Pair, 10.0m length
HE800SFX100	SmartStack FOX Media Converter. Converts one pair from Plastic Fiber (Toslink) to Glass Fiber (ST). Two required to remotely locate Base up to 1500m.

\*Two 2.0m cables included with OCS. Expansion cables ordered separately.



Fox Base with SmartStacks

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