



# Colour-Touch OCS300

## New Colour-Touch OCS300 Series

The OCS300 series adds Colour-Touchscreen capability to the OCS product line and introduces a new I/O system that expands the number of I/O by allowing SmartStack I/O to be mounted remotely from the display.

The OCS (Operator Control Station™) combines a logic controller, operator interface, network and I/O in a highly integrated package. The OCS reduces installation cost, development time, and hardware with its simplistic design. The OCS300 adds Colour-Touchscreen capability to the OCS product line that already includes a family of text and graphic displays. Its dual-processor design offers high-speed performance for both control and operator interface functionality, unlike competitive units that must sacrifice one or the other.

The operator interface featured on the OCS300 series is a quarter VGA (320x240) colour LCD display (STN or TFT), with a resistive 5.7" touchscreen and one dedicated and five configurable function buttons. This combination offers the advantages of both a touchscreen and a function key based unit.

The OCS300 series is programmed with the Windows® based Cscape programming software. Cscape combines ladder logic programming along with the graphical operator interface development system.

## New I/O System Offers Expansion and Remote Mounting

The OCS300 series will accommodate up to 20 SmartStack modules through an innovative local I/O expansion system, and there are over 40 SmartStack I/O modules to select from.

The SmartStack modules can be safely mounted a short distance from the display using expansion bases and inexpensive dual fiber optic cables. The OCS300's plastic fiber optic cables not only keep the cost of the unit down, but also make it easier for the OEM or end user to obtain additional cables, as they can be found in most consumer hardware and electronics stores.

All SmartStack modules can be safely mounted 10 metres from the OCS300 display using this expansion system and dual plastic fiber optic cables. With this new I/O system, the OCS300 can support over 1,000 I/O.

## Features & Benefits:

- Dual processors, one for logic and one for screen update, result in a high performance package (0.7mS/K logic scan time) - improved performance over conventional systems.
- Five configurable function keys and touchscreen capability
- 320x240 pixel graphics with STN (passive) or TFT (active) 5.7" LCD display.
- Up to 20 SmartStack modules and I/O can be remotely mounted from the display.
- SmartStack I/O is supported through a Toslink Plastic Fiber Optic Connection. Up to 5 Fiber-linked I/O bases are supported. Each base supports up to 4 SmartStack modules.
- I/O may be remotely mounted from the Display/Controller, up to 10m per segment or 30m total.
- Fully compatible with Cscape programming software. Cscape is a 32-bit Windows application which configures all system elements of control, I/O, graphics, and networking.

**Powerful  
Controller**

**High  
Performance  
Graphical  
Display**

**Single  
Programming  
Software**

**OPC Server**

**Dual  
Processors**

**Remote  
Mounting  
I/O System**

# Colour-Touch OCS300 Horner Operator Control Station

Many I/O  
Options

Integrated  
Fieldbus  
Network

Optional  
Ethernet  
Communication

3 Serial Ports

## Specifications

### Display

Type	320x240 pixel LCD with backlight. TFT and STN models available
Screen dimensions	117mm W x 88mm H (4.6" x 3.5")

### Controller

Logic Scan Time	0.7mS/K of Logic
Memory	32K Register 256K Ladder 2M Display
I/O Models Available	40+ SmartStack I/O Modules
Maximum I/O	2048 Digital Inputs 2048 Digital Outputs 512 Analog Inputs 512 Analog Outputs
Instructions	Contacts, Coils, Timers, Counters, Math, PID with Auto-tuning option, Serial Read/Write, Floating Point Math, Motion Commands, Data Conversions, Data Moves, Scaling, Modem Commands, Subroutines, and more

### Graphics Supported

User tools	- Editable Graphics - Pilot Lights - Trending - Data Display
Formats	- Animated Bit Maps - Bar Graphs - Symbol Library - Editable Fonts - Drawing Tools - Pushbuttons - Selectors - Alarms - Sliders
Number of Pages	300 screens (50 data fields per screen)

### User Keys and Touchscreen

Function Keys	5 (plus System Key)
Touchscreen	Resistive Analog 1024W x 1024H
Life	Greater than 1 million operations

### Communications

Serial Ports	(2) RS-232/RS-485 (RJ-45) (1) RS-232/RS-422 (DB-25)
Network Ports	(1) CAN (DeviceNet slave or CsCAN peer)
Protocols Supported	Serial ports - CsCAN, Modbus Master, Modbus Slave, and ASCII Read and Write, Modem CAN port - CsCAN (up to 253 drops) or DeviceNet Slave (Explicit Messaging, Polled Connection, Polled Snooping)
Communication Options	On-board Ethernet 10BaseT (optional) supports TCP/IP with EGD, SRTP and Modbus TCP
Expansion I/O	Toslink Plastic Fiber Pair, 10m per segment, 30m max

### DC Power Source

Primary Power	24VDC (+/-10%), 450mA at 24vdc, Inrush Current 2A for 3mS.
CAN Power Range	12-25VDC @ 75mA maximum
I/O Power	10-30vdc, 1.0A max at 24vdc

### Dimensions

OCS	
Outside Dimensions	183mm W x 139mm H x 76mm D (7.2" x 5.5" x 3")
Cut Out	174mm W x 131mm H (6.9" x 5.16")
I/O Base	168.3mm W x 1089mm H x 381mm D (6.625" x 4.25" x 1.5") Add 20.3mm (0.8") per SmartStack module

### Environmental Conditions

Operating Temperature	0 to +50 Degrees C
Humidity	5% to 95% non-condensing
IP / NEMA Rating	IP65 / 12, 4, 4X
Agency Approvals	CE, UL & C-UL; Class I, Div. II

### Part Number Description

HE500OCS300*	Colour-Touch OCS with STN Display
HE500OCS301*	Colour-Touch OCS with STN Display and onboard Ethernet 10BaseT
HE500OCS350*	Colour-Touch OCS with TFT Display
HE500OCS351*	Colour-Touch OCS with TFT Display and onboard Ethernet 10BaseT
HE800FOX104	Expansion I/O Base. Supports 4 SmartStack I/O Modules
HE800FOX404	Expansion Base/Hub. Supports 4 SmartStack I/O Modules plus 4 additional I/O Bases

\*Two 2.0m cables included with Display. For systems with more than one FOX base, order cables separately.

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Fox Base with SmartStacks