

# Graphical OCS250



## The complete controller...

The OCS250 (Operator Control Station) combines a powerful logic controller, operator interface, network and I/O in a tightly integrated package. The OCS250 reduces installation cost, development time and hardware with its simplistic design.

The OCS250 is programmed with the Windows based Cscape™ software package. Cscape combines ladder logic programming along with the graphical operator interface development system. This combination reduces development time and increases productivity.

The OCS250 will accommodate up to 4 SmartStack™ modules. There are over 35 different types of SmartStack I/O modules to select from. The display is an adjustable-backlit LCD that supports four integrated Windows® True-Type Fonts and up to 240 x 128 pixel graphics.

**Powerful  
controller**

**High  
performance  
Graphical  
display**

**Free ladder  
programming  
software**

**Free OPC  
Server**

**All in one  
product**

**Horner APG...  
Your Strongest  
Link To  
Productivity**

## OCS250 Product Features & Benefits:

- Integrated Controller, Operator Interface, Communications and I/O - **Reduced hardware.**
- High performance dual processors, one for the logic and one for the OI screen updates. The result is a high performance package (0.7ms/K Boolean logic scan time) - **Improved performance over conventional systems.**
- 8 screen softkeys, 10 re-legendable function keys with user-controlled LEDs, navigational keys and numeric keypad - **Custom flexibility.**
- 240 x 128 pixel graphics with backlit LCD display - **Easy Viewing.**
- 128K of ladder, 64K registers, and 256K screen memory - **Lots of control capacity.**
- Built-in communications ports include (1) CAN port, (CsCAN or DeviceNet Slave); (1) RS-232 port, for programming, Modbus Master/Slave or serial read or write commands; and (1) RS-232/485 port for Modbus Master/Slave or serial read or write commands.

Applications include:

- Barcode Readers
- Intelligent scales
- Pagers
- RTU
- SCADA
- Modems
- Peer to Peer Network
- Wide variety of I/O and intelligent modules.
- Over 35 different types of I/O modules to choose from: Discrete, Analog, Communications and Motion

## OCS250 Application Benefits:

**Process Control**

- Key features such as trending, animation, bar graphs and meters make the OCS250 ideal for process applications
- Floating Point Math, PID, PID with AutoTuning and scaling are just a few of the instructions that enable the programmer to easily control complex applications such as extruders, blending and batching.
- Analog, Thermocouple, RTD and other SmartStack modules reduce the requirements for costly transducers.

**Discrete Manufacturing**

- The dual processor enables the OCS250 function keys to react as quickly as traditional pushbuttons and switches, therefore reducing hardware and wiring cost.
- A wide range of motion applications can be solved with the high performance of both the High Speed Counter (500 Khz inputs) and the Stepper module. Applications such as cut to length, pick and place, pipe bending, high speed labelling machines, precision grinding, and much more can be easily controlled using the OCS solution.
- The built-in CAN network enables users to select either DeviceNet Slave or CsCAN. CsCAN network provides a single point of connection for programming, monitoring and troubleshooting. In addition, CsCAN network supports peer-to-peer, datagrams and global data for up to 253 devices.

# HE5000CS250 Horner Operator Control Station

**Extensive I/O  
Options**

**Integrated  
Fieldbus  
Network**

**Optional  
Ethernet  
Communication**

**Multiple Serial  
Ports**

**Over 100  
Communication  
protocols**

**SMS  
Messaging**

**All in one  
Product**

## Specifications

### Display

Type	240 x 128 pixels graphic LCD with backlight
Screen dimensions	75mm high x 130mm wide
Characters per page	16 x 40 characters per page
Faceplate	Faceplate made of Autotex polyester by Autotype

### Controller

Logic Scan Time	0.7msec/K of boolean logic
Memory	- 128K for ladder logic/documentation - 256K for screen memory - 64K for registers
Maximum I/O	Discrete - Physical - 288 I/O, Internal - 2048 I/O Analog - Physical - 48 I/O, Internal - 512 I/O
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
I/O Support	Support up to four SmartStack modules
Real Time Clock Support	Battery backed

### Graphics Supported

User tools Formats	- Editable Graphics - Pilot Lights - Trending - Data Display - Animated Bit Maps - Bar Graphs - Symbol Library - Editable Fonts - Drawing Tools - Pushbuttons - Selectors
Number of Pages	200 and supports 20 data fields per page
Number of Text Tables	200 (20 items per table)

### User Keys and LED's

User and System Keys	10 user (re-legendable) function keys, 8 softkeys, ESC, Enter, (4) directional keys and numeric keypad
LED's	10 user programmable LED's, one each per programmable key

### Communications

Built-in Ports	(1) Primary Port RS-232 (DB-9), (1) Secondary Port RS-232 (DB-9) or RS-485 (terminal connection) and (1) CAN port for networking
Protocols supported	Serial ports - CsCAN, Modbus Master, Modbus Slave, and ASCII Read and Write CAN port - CsCAN (up to 253 drops) or DeviceNet Slave (Explicit Messaging, Polled Connection, Polled Snooping)
Communications Speeds	Serial ports - 9600 baud standard (300 to 115,200 optional) CAN port - 125Kbaud to 1 Meg (supports Fiber Optics)
Communication Option	Ethernet 10baseT, 10Mbps SmartStack Module (HE800ETN100) supports TCP/IP with Ethernet Global Data

### DC Power Source

Primary Power	Range: 10 to 30VDC, Input Current: 350mA @ 24VDC, Inrush Current: 800mA @ 24VDC for 50mSec.
CAN Power Range	12-25VDC @ 75mA maximum

### Dimensions

Outside Dimensions	200mm (7.88 inches) High x 282mm (11.13 inches) wide x 50.39mm (1.98 inches) deep (without I/O)
Cut Out SmartStack I/O Module	155.58mm (6.13 inches) high x 257.18mm (10.13 inches) wide 78.6mm (3.09 inches) high x 142.7mm (5.62 inches) wide x 20.3mm (0.80 inches) deep

### Environmental Conditions

Operating Temperature	0 to +50 Degrees C
Humidity	5% to 95% non-condensing
IP / NEMA Rating	IP65 / NEMA 4/12
Agency Approvals	CE Approved UL, C-UL pending

### Part Number Description

HE5000CS250	Operator Control Station with graphical display that supports up to 4 SmartStack I/O modules
HE5000SW232	Cscape programming software, RS-232 cable and manuals. (Release 4.5 or greater)



Windows is a registered trademark of Microsoft Corporation. Cscape, SmartStack, and CsCAN are trademarks of Horner APG, LLC. DeviceNet is a trademark of Open DeviceNet Vendor Association. Autotex is a registered trademark of Autotype.

## From Europe

Horner APG (Europe)  
Phone : +353 21 4321266  
Fax : +353 21 4321826  
E-mail : sales@horner-apg.com

## From the UK

Horner APG (Europe)  
Phone : 0870 8435363  
Fax : 0870 8449798  
www.horner-apg.com

