OCS

XLe Graphical OCS

*A Compact
All-in-One
Control Solution
with Controller,
Graphics,
Built-in I/O,
Networking
and Removable
Mass Storage
for Industrial
Applications*

HORNER
APG
20 Years of Innovation

New Low-Cost Compact "All-in-One" Controller

Introducing the XLe Operator Control Station (OCS), an "all-in-one" controller small enough to fit in the palm of your hand (only 3.75" square). Starting at only $295, these devices include a Graphical Operator Interface, Built-in I/O, Networking and Removable Mass Data Storage. OCS is a robust, reliable control product that combines a traditional controller (programmed with ladder logic) with an operator interface, I/O and networking into an integrated, all-in-one unit using a single industry-recognized software package called Cscape™.
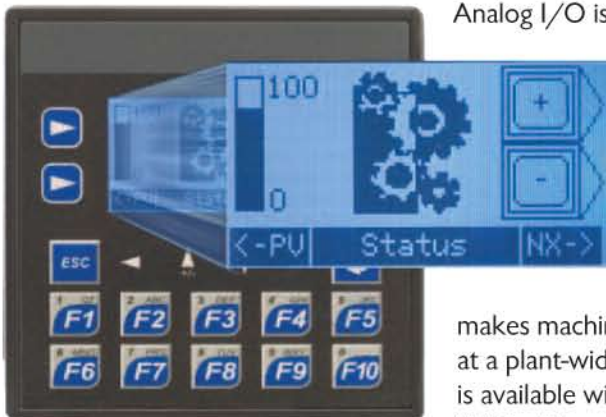
First with Removable MicroSD™ Memory

The XLe is the first industrial product to include support for the latest standard in Removable Mass Storage. This dime-sized memory, to date only found on video-enabled cellular phones, is available in densities ranging from 128MB to 1GB. This is ideal for storing process data, machine recipes, and application files. Users can easily update their XLe application program through this memory device — allowing logic and screen updates to be made in a single step with transportable media.

An industry-first! The XLe can store data or easily upload programs via MicroSD™ memory card.

Built-in I/O and Networking

The four available XLe models with built-in I/O include digital, analog, and high speed I/O. For machine control, the high speed I/O can provide totalizing, frequency measurement, PWM generation and pulse outputs. The available Universal Analog I/O is ideal for process control applications with high-resolution inputs which can be configured for Thermocouple, RTD, 4-20mA, +/-100mV, and 0-10V signals. The XLe memory structure supports over 5000 I/O. The XLe also has field installable communications options. An internal 10/100MBit Ethernet card makes machine data and XLe programming accessible at a plant-wide or world-wide basis. In addition, the XLe is available with an internal 57.6k telephone modem card. While Ethernet and modem are optional, dual RS-232/RS-485 serial ports and an integrated CAN-based network (CsCAN™) are standard.

With one single FREE software program, Cscape™, you can easily program, debug and display graphics on the 128 x 64 backlit LCD.

Benefits

- ■ More compact and affordable than separate PLC and Operator Interfaces

- ■ Best of Class Graphics display for better process visualization and machine indication

- ■ Built-in I/O with removable terminal blocks with silkscreening for easy wiring

- ■ Removable mass data storage (MicroSD™) in an entry level product

- ■ Two serial ports and downloadable protocols interface with almost any PLC or Drive

- ■ Ethernet and Telephone Modem options cards for Plant and Remote Connectivity

Two Mounting Options Standard: on a DIN rail or in a Panel (less than 4" H x 4" W x 2.5" D)

Applications

As a compact, powerful controller – the XLe can be used in literally thousands of applications. From OEM machine control to machine monitoring in a plant environment, the XLe can be instrumental in keeping you or your customer's automation activities running smoothly. Future expansion is not a concern, because XLe is part of the wide ranging OCS product line — programmable throughout with a single FREE software package, Cscape™. The XLe is designed with an attractive, generic look so it will fit in with most panel or console designs – you can even have your company's logo added to the overlay or specify a custom keypad altogether.

Temperature Control

With built-in RTD and Thermocouple available, along with auto-tune PID, the XLe can perform advanced temperature control and much more on any machine.

Packaging

The XLe's compact size, affordable price, and fast response make it a natural for packaging machinery of all types.

Agriculture

A small rugged package, 12Vdc compatibility, and removable mass storage are ideal for the agricultural environment.
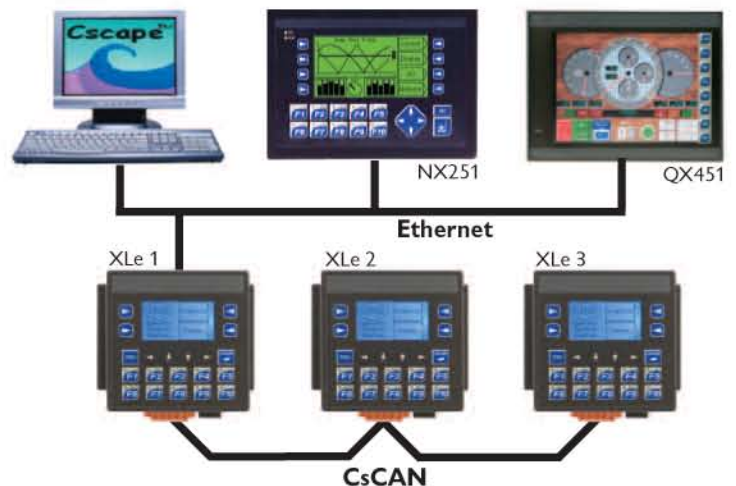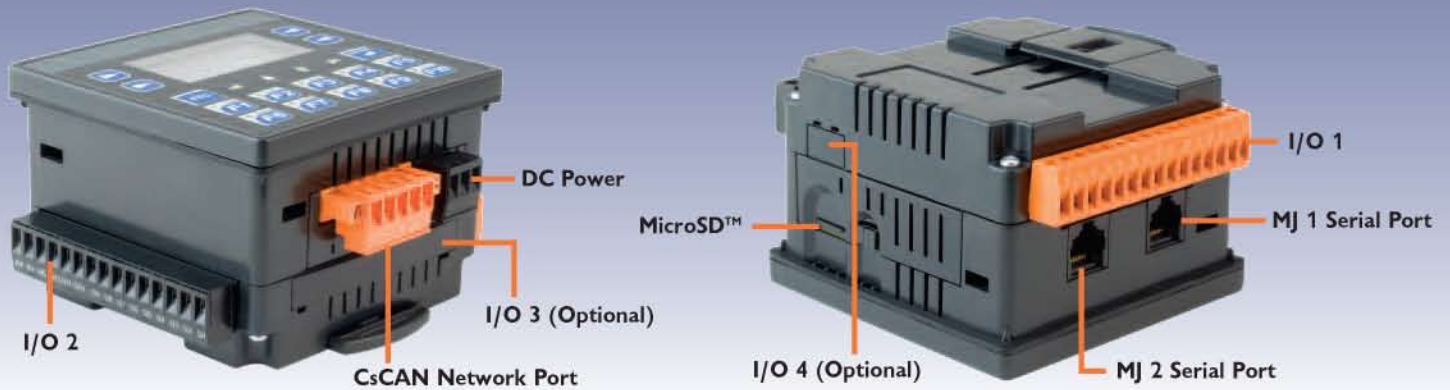
Water Treatment

The XLe offers the perfect I/O mix, size, and communications capability for Pump Control, Tank Monitoring and Remote Telemetry in general.

Connectivity

I/O Expansion. XLe I/O expansion is not limited to its Built-in I/O. SmartStix I/O is high-speed and can be local or highly distributed. RTU/Modbus based I/O is a cost effective means of adding specialty or a mix of I/O types.

Architecture. The XLe supports CsCAN high-speed networking as standard, and Ethernet networking as a field-installable option. Single-point-of-connect allows seamless communications between the computer and any controller. In the diagram below, XLe 2 and XLe 3 are accessed by the PC over Ethernet and CsCAN through XLe 1.

RS-485

Modbus I/O

CsCAN

SmartStix I/O

Cscape

NX251

QX451

Ethernet

XLe 1   XLe 2   XLe 3

CsCAN

DC Power
I/O 3 (Optional)
I/O 2
CsCAN Network Port

MicroSD™
I/O 1
MJ 1 Serial Port
I/O 4 (Optional)
MJ 2 Serial Port

Ordering Information

Part Number	Description
HE-XE102	12 DC In (4 HSC), 6 Relay Out, 4 Analog In
HE-XE103	12 DC In (4 HSC), 12 DC Out (2 PWM), 2 Analog In
HE-XE104	24 DC In (4 HSC), 16 DC Out (2 PWM), 2 Analog In
HE-XE105	12 DC In (4 HSC), 12 DC Out (2 PWM), 2 Universal Analog In (T/C, RTD, mV, mA, V) & 2 Analog Out (mA, V)
HE-XEC	Field Installable 10/100 Ethernet Option
HE-XMC	Field Installable 14.4K Telephone Modem Option
HE-MC1	Removable Memory Card 256MB or larger

Specifications

Display

Graphics/Text	Yes/Yes
Pixels	128 X 64
Display Technology	Backlit LCD
Character Height	Adjustable

Keypad Touchscreen

Total Keys	20
Function Keys	10
Numeric Keys	Shared
OEM Faceplate Availability	Yes

Controller

Ladder Logic Memory	256KB
Logic Scan Rate	1.2 mS/K
Memory Card Slot	Yes (up to 1GB)
Local Comment Storage	Yes
Floating Point Support	Yes
AutoTune PID Capable	Yes

I/O Support

Built-In I/O	Yes
SmartStack I/O Support	Yes via CsCAN
SmartStix I/O Support	Yes via CsCAN
FOX Expansion I/O Support	No

Serial Communications

Total Active Ports	2
RS-232 Ports / RS-485 Ports	Yes/Yes
PLC/Drive Protocols	Yes
RTU/Modbus Master/Slave	Yes
Serial ASCII In/Out	Yes

Networking

Integrated CsCAN Network	Yes
Maximum CsCAN Distance	6000 feet
Programming Over Network	Yes
Peer-to-Peer Messaging	Yes
DeviceNet/PROFIBUS Master	No

Ethernet/Internet

Ethernet Support	Optional
Telephone Modem Support	Optional

General Specifications

Height (in/mm)	3.7" (95.1)
Width (in/mm)	3.7" (95.1)
Depth (in/mm)	2.5" (63.9)
Weight (oz/kg)	12.5 (.354)
Environmental	0 to 50°
Washdown	NEMA 4X Equivalent

Horner is dedicated to saving you both time and money by providing the industry's widest range of all-in-one controllers