THE INDUSTRY LEADER IN ALL-IN-ONE CONTROLS



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INDUSTRY LEADING ALL-IN-ONE CONTROLLER

For years, the Horner XL Series has enjoyed a reputation as the most highly functional All-in-one Controller available anywhere. These products are currently trusted with thousands of applications world-wide.

The NEW XL Prime Series builds upon that proven reputation - offering new and existing users alike performance upgrades and a highly secure, modern memory architecture. This is accomplished with a new Horner designed System on Module (SOM) - containing a faster CPU, onboard mass storage and 100% non-volatile memory. The only battery is a small coin cell - simply tasked with maintaining the clock.

If you are a new automation designer looking for an innovative, reliable control solution - the XL Prime Series offers a fully integrated product in hardware and software. If you are an existing XL Series user - your current application program will port straight through in less than 30 seconds. In either case you can't go wrong!

- ALL-IN-ONE CONTROL performs all machine functions in a unified hardware design; Logic Control, Operator Interface, I/O and Networking.
- MODERN MEMORY ARCHITECTURE based on a custom designed SOM (System on Module) utilizing a powerful ARM microprocessor and 100% nonvolatile memory for reliability
- HIGH-PERFORMANCE LOGIC ENGINE fast scan times solving user logic using Variable-based Advanced Ladder logic or the IEC 6-1131 language set.
- ONLINE PROGRAMMING make logic changes without stopping the controller.
- HIGH-RESOLUTION COLOR TOUCHSCREEN for detailed graphics and nearly instantaneous screen updates.
- ADVANCED HIGH-SPEED COUNTER four built-in counters supporting frequencies over 500 kHz.
- INDUSTRIAL ETHERNET AND REMOTE CONTROL -Ethernet IP, Modbus TCP and BACnet IP; FTP file transfer, Email. WebMI* for web-based Remote Monitoring; Push data to the cloud with MQTT* Sparkplug. *WebMI/MQTT require one-time license.
- PLUG-AND-PLAY DATALOGGING record machine and process variables to microSD or USB Flash Drive.

LOWER COSTS, MORE OPTIONS, EASY-TO-USE

With fully integrated hardware and software, the XL Prime series offers easier programming, installation, development and set-up. Our controllers have a small footprint and can easily retrofit into an existing system with little effort. The XL Prime are not limited to their on-board I/O. Many variations of distributed remote I/O, including SmartBlock, SmartStix, and SmartMod can be connected via CsCAN, Ethernet, or Modbus. RTU/Modbus based SmartMod I/O is also a cost-effective means of adding a small amount of analog I/O. The XL Prime series utilizes microSD™ Data Storage Memory, ideal for data logging, machine recipes, and application files.

CONNECTIVITY

The XL Prime series is designed as a modular system for easy selection and growth; CsCAN (CAN Based) high speed networking and Modbus RTU networking capabilities are standard in both series controllers. Ethernet is standard in the XL Prime series of controllers, and available as an optional component in all other models. Remote I/O options offer high performance, accurate analog, and easy-to-configure digital only modules. Horner I/O has flexible communication options that easily expand current systems.

CUSTOMIZED FOR SPECIFIC OEM NEEDS

The XL Prime series is a white-label product: operator stations that other companies can rebrand. Also, they fit in most cabinets, console designs, and color schemes. A customized overlay can be added to match the language, logo, and industry terms. This gives the flexibility to use the XL Prime series in any application.

MOTT SPARKPLUG SUPPORT

Part of the XL Prime series progressive advancements includes support for MQTT Sparkplug as a licensed option. MQTT Sparkplug is an OASIS standard messaging protocol for the Internet of Things (IoT). It is designed as an extremely lightweight publish/subscribe messaging transport that is ideal for connecting remote devices with a small code footprint and minimal network bandwidth. MQTT Sparkplug today is used in a wide variety of industries, such as automotive, manufacturing, telecommunications,

oil and gas, etc. It has also become one of the most popular choices for modern SCADA systems, such as Ignition SCADA by Inductive Automation®.



BUILT-IN DIGITAL & ANALOG I/O

	DC In	DC Out	Relay Out	HSC In•	Pulse Out**	mA/V In	mA/V RTD/TC (Universal)	mA/V Out
Model 1 [†]	4	4		4	2	4		
Model 0								
Model 2	12		6	4		4		
Model 3	12	12		4	2	2		
Model 4	24	16		4	2	2		
Model 5	12	12		4	2		2	2
Model 6	12	12		4	2		6	4

^{*}shared with total DC inputs **shared with total DC outputs

BUILT-IN I/O OPTIONS

HE-XDAC007	2-channel Analog Out (mA/V)
HE-XDAC107	4-channel Analog Out (mA/V)
HE-XHSQ	24V Dual High Speed Output
HE-XHSQ-5	5V Dual High Speed Output

XL PRIME SERIES PART NUMBERS

Model	No I/O	Model 2	Model 3 Model 4		Model 5	Model 6
X5 Prime - H	X5 Prime - HE-XP5 Model 1, see specifications above.					
XL4 Prime	HE-XPC1E0	HE-XPC1E2	HE-XPC1E3	HE-XPC1E4	HE-XPC1E5	HE-XPC1E6
XL6 Prime	HE-XPL1E0	HE-XPL1E2	HE-XPL1E3	HE-XPL1E4	HE-XPL1E5	HE-XPL1E6
XLW Prime	HE-XPLWE0	HE-XPLWE2	HE-XPLWE3	HE-XPLWE4	HE-XPLWE5	HE-XPLWE6
XL7 Prime	HE-XPW1E0	HE-XPW1E2	HE-XPW1E3	HE-XPW1E4	HE-XPW1E5	HE-XPW1E6
XL10 Prime	HE-XPV1E0	HE-XPV1E2	HE-XPV1E3	HE-XPV1E4	HE-XPV1E5	HE-XPV1E6
XL15 Prime*	HE-XP15E0	HE-XP15E2	HE-XP15E3	HE-XP15E4	HE-XP15E5	HE-XP15E6
*this model of	coming soon					

XL PRIME REMOTE I/O OPTIONS

ocs-I/o	Base offers 2 Flexible Inputs (Digital or Analog), 1 Digital Output, 1 Universal Analog Inputs, 1 Analog Outputs. Add-on modules available for expandability.
SMARTRAIL	Expands the I/O capacity of any Prime controller. Uses either CANbus or Ethernet communications and can be installed locally or remotely.
SMARTBLOCK	Provides easy configuration and network expansion using CsCAN communications.
SMARTSTIX	A cost-effective options as expansion or remote I/O which is also compact. Uses CsCAN communications.

WebMI - TAKE (REMOTE) CONTROL

With Horner WebMI, you can monitor and control plant data from the palm of your hand. Published directly from the OCS Controller, WebMI allows the same or unique Web pages to be monitored and controlled from your computer, tablet or other mobile device, supporting all of our controllers. Developed completely within our Cscape environment, WebMI allows for state-of-the-art HTML5 development without the need for web programming skills. The licensing and registration process is quick and simple while the benefits and affordability of WebMI will truly change your world.



Cscape Configurability

Implement your OCS application remotely without any manual HTML development.



Level-Based, Object Security

From graphic objects to application commands - you control who can do what.



IOT - Internet of Things

Instantly connect to your automated applications to grow and improve business.



HTML5

Instantly deliver almost everything you want to accomplish online to your web browser.



Scalable Vector Graphics (SVG)

Sharp, clear, and professional screens regardless of the device you use, any size.



Licensing Capabilities

On or off-line licensing packages that will work within your organizational scope.





-XL PRIME SERIES OCS



THE WORLD'S MOST ADVANCED
ALL-IN-ONE CONTROLLER
JUST OUTDID ITSELF

[†] Model 1 applies to the X5 Prime only





Controller

Operator Interface

Ethernet/ Internet

Serial

Networking

Physical Specifications



FEATURES Ladder Logic Memory Logic Scan Rate Removable Memory

Local Comment Storage Floating Point Support AutoTune PID Capable Characters/Pixels Display Technology Character Height Number of Screens

Fields or Objects per Screen

OEM Faceplate Available Built-in I/O points

Digital Inputs/Outputs, Max Analog Inputs/Outputs, Max General Purpose Registers (words)* General Purpose Internal Coils (bits)

RS-232 Ports/RS-485 Ports PLC/Drive Protocols

Communications RTU/Modbus Master/Slave/Serial ASCII In/Out USB Port - USB 2.0 port A USB Port -Mini-B port Integrated CsCAN Network Maximum CsCAN Distance**

> Programming Over Network Peer-to-Peer Messaging Height (inches/mm) Width (inches/mm)

Humidity (non-condensing)

Product Certifications/Approvals

Depth (inches/mm) I/O Module Depth Operating Temperature

WebMI Compatibility (Licensed Option)

Ethernet Support Remote Access

Remote File Access

Serial Ports

Total Keys Function Keys



Add on - SmartStix, SmartRail, SmartBlock, SmartMod





X5 Prime
2MB
0.02mS/K
microSD
Yes
Yes
Yes
480 x 272
LCD with LED 450 nits
Selectable Fonts
1023
1023
5 (on screen)
4 (on screen)
Yes
12
CsCAN & Ethernet
2048 / 2048
512 / 512
50,000
16,384
Yes
EnvisionRV
EnvisionFX
Yes
2
RS-232 / RS-485 (x2)
Yes
Yes
Datalog & Backup
Programming Only
<u>Standard</u>
1640 ft.
Yes
Yes
3.79" / 96mm
4.92" / 125mm
1.22" / 31mm
COM option adds 0.5"/13 mm depth
-10°C to 60°C
5 to 95%
UL Class 1 Div II, CE

UL Type 1, 3R, 4, 4x, 12, 12k, 13



The fee fee fee
XL4 Prime
2MB
0.02mS/K
microSD
Yes
Yes
Yes
320 x 240 (QVGA)
3.5" TFT Color
Selectable Fonts
1023
1023
5
4
Yes
22 - 44
CsCAN & Ethernet
2048 / 2048
512 / 512
50,000
32768 (16384 ret.)
Standard
HTTP or EnvisionRV
FTP or EnvisionFX
Yes
2
RS-232 & RS-485 (1 of each)
Yes
Yes
Datalog & Backup
Programming Only
Standard
1640 ft.
Yes
Yes
3.78" / 96.0 mm
3.78" / 96.0 mm
2.26" / 57.5 mm
COM option adds 0.5"/13 mm depth
-10 to 60°C
5 to 95%
III 61 4 B: II 6E

UL Class 1 Div II, CE

UL Type 1, 3R, 4, 4x, 12, 12k, 13



XL6 Prime
2MB
0.02mS/K
microSD
Yes
Yes
Yes
640 x 480
5.7" TFT Color
Selectable Fonts
1023
1023
6
6 (on screen)
Yes
22 - 44
CsCAN & Ethernet
2048 / 2048
512 / 512
50,000
32768 (16384 ret.)
Standard
HTTP or EnvisionRV
FTP or EnvisionFX
Yes
3
RS-232 &/or RS485
Yes
Yes
Datalog & Backup
Programming Only
Standard
1640 ft.
Yes
Yes
5.66" / 143.8 mm
7.34" / 186.08 mm
1.84" / 46.62 mm
COM opt adds 0.9"/22mm depth
-10 to 60°C
5 to 95%
UL Class 1 Div II, CE

UL Type: 1, 3R, 4, 4x, 12, 12k, 13



XLW Prime
2MB
0.02mS/K
microSD
Yes
Yes
Yes
800 x 480
7" TFT Color
Selectable Fonts
1023
1023
6
5 (on screen)
Yes
22 - 44
CsCAN & Ethernet
2048 / 2048
512 / 512
50,000
32768 (16384 ret.)
Standard
HTTP or EnvisionRV
FTP or EnvisionFX
Yes
3
RS-232 &/or RS485
Yes
Yes
Datalog & Backup
Programming Only
Standard
1640 ft.
Yes
Yes
5.66" / 143.8 mm
7.34" / 186.08 mm
1.84" / 46.62 mm
COM opt adds 0.9"/22mm depth
-10 to 60°C
5 to 95%
UL Class 1 Div II, CE

UL Type: 1, 3R, 4, 4x, 12, 12k, 13







XL10 Prime
2MB
0.02mS/K
microSD
Yes
Yes
Yes
640 x 480 (VGA)
10.4" TFT Color
Selectable Fonts
1023
1023
8
7
Yes ^{††}
22 - 44
CsCAN & Ethernet
2048 / 2048
512 / 512
50,000
32768 (16384 retentive)
Standard, 2 Ports
HTTP or EnvisionRV
FTP or EnvisionFX
Yes
3
RS-232 &/or RS485
Yes
Yes
Datalog & Backup
Programming Only
Standard, 2 Ports
1640 ft.
Yes
Yes
9.08" / 230.6 mm
11.94" / 303.3 mm
2.43" / 61.7 mm
COM option adds 0.5" / 13 mm depth
-10 to 60°C
5 to 95%
UL Class 1 Div II, CE
UL Type 1, 3R, 4, 4x, 12, 12k, 13



XL15 Prime
2MB
0.02mS/K
microSD
Yes
Yes
Yes
1024 x 768 (XGA)
15" TFT Color
Selectable Fonts
1023
1023
8 (on screen)
7 (on screen)
No
22 - 44
CsCAN & Ethernet
2048 / 2048
512 / 512
50,000
32768 (16384 retentive)
Standard, 2 Ports
HTTP or EnvisionRV
FTP or EnvisionFX
Yes
3
RS-232 & RS-485; RS-232 / RS-485
Yes
Yes
Datalog & Backup / Programming Only
Standard, 2 Ports
1640 ft.
Yes
Yes
12.60" / 320.0 mm
14.57" / 370.08mm
4.08" / 103.6 mm
COM option adds 0.5" / 13 mm depth
-10 to 60°C
5 to 95%
UL Class 1 Div II, CE
UL Type 1, 3R, 4, 4x, 12, 12k, 13, ABS

Operating

Specifications

& Standards

^{*}Actual retentive register count may vary from model to model, please contact factory for more details