



XL PRIME SERIES  
XLE/e & XLT/e



THE WORLD'S MOST COMPLETE  
ALL-IN-ONE CONTROLLER LINE



Compliant



XL7 Prime  
now with  
ATEX



Compliant

# HORNER AUTOMATION GROUP



## FEATURES

<b>Controller</b>	Ladder Logic Memory
	Logic Scan Rate
	Removable Memory
	Local Comment Storage
	Floating Point Support
	AutoTune PID Capable
<b>Operator Interface</b>	Characters/Pixels
	Display Technology
	Character Height
	Number of Screens
	Fields or Objects per Screen
	Total Keys
	Function Keys
	OEM Faceplate Available
<b>I/O</b>	Built-in I/O points
	Add on - SmartStix, SmartRail, SmartBlock, SmartMod
	Digital Inputs/Outputs, Max
	Analog Inputs/Outputs, Max
	General Purpose Registers (words)*
	General Purpose Internal Coils (bits)
<b>Ethernet/ Internet</b>	Ethernet Support
	Remote Access
	Remote File Access
	WebMI Compatibility (Licensed Option)
<b>Serial Communications</b>	Serial Ports
	RS-232 Ports/RS-485 Ports
	PLC/Drive Protocols
	RTU/Modbus Master/Slave/Serial ASCII In/Out
	USB A Port - USB 2.0
<b>Networking</b>	USB Port
	Integrated CsCAN Network
	Maximum CsCAN Distance**
	Programming Over Network
<b>Physical Specifications</b>	Peer-to-Peer Messaging
	Height (inches/mm)
	Width (inches/mm)
	Depth (inches/mm)
<b>Operating Specifications &amp; Standards</b>	Operating Temperature
	Humidity (non-condensing)
	Product Certifications/Approvals
	Environmental Rating

## XL SERIES



XLE/e
256 KB
0.7 mS/K
up to 32 GB microSD
Yes
Yes
Yes
128 x 64
Transflective LCD
Selectable Fonts
1023
50
20
10
Yes
22 - 44
CsCAN & Ethernet
2048 / 2048
512 / 512
9999
4096 (2048 retentive)
Yes
EnvisionRV
EnvisionFX
Yes
2
RS-232 / RS-485 (x2)
Yes
Yes
Flash Drive, Camera, Keyboard & Mouse
Mini B Programming Only
Standard
1640 ft.
Yes
Yes
3.78" / 96.0 mm
3.78" / 96.0 mm
2.26" / 57.5 mm
-10 to 60°C
5 to 95%
UL Class 1 Div II, CE
UL Type 1, 3R, 4, 4x, 12, 12k, 13, ABS

XLT/e
256 KB
0.8 mS/K
up to 32 GB microSD
Yes
Yes
Yes
160 x 128
Transflective LCD
Selectable Fonts
1023
50
5
4
Yes
22 - 44
CsCAN & Ethernet
2048 / 2048
512 / 512
9999
4096 (2048 retentive)
Yes
EnvisionRV
EnvisionFX
Yes
2
RS-232 / RS-485 (x2)
Yes
Yes
Flash Drive, Camera, Keyboard & Mouse
Mini B Programming Only
Standard
1640 ft.
Yes
Yes
3.78" / 96.0 mm
3.78" / 96.0 mm
2.26" / 57.5 mm
-10 to 60°C
5 to 95%
UL Class 1 Div II, CE
UL Type 1, 3R, 4, 4x, 12, 12k, 13, ABS



X5 Prime
2MB
0.02mS/K
microSD
Yes
Yes
Yes
480 x 272
4.3" TFT Color, 450 nits
Selectable Fonts
1023
1023
5 (on screen)
4 + System Key (on screen)
Yes
12
CsCAN & Ethernet
2048 / 2048
512 / 512
50,000
32768 (16384 ret.)
Yes
Ethernet IP (Server & HMI), Modbus TCP (Client/Server), BACnet IP (Server), EGD
MQTT Sparkplug, Horner OCS360 Cloud Service, WebMI via HTML5, Envision RV*
SMTP (Client), NTP (Client), FTP (Server)
2
RS-232 / RS-485 (x2)
Yes
Yes
Flash Drive, Camera, Keyboard & Mouse
Mini B Programming Only
Standard
1640 ft.
Yes
Yes
3.79" / 96mm
4.92" / 125mm
1.22" / 31mm
-10°C to 60°C
5 to 95%
UL Class 1 Div II, CE
UL Type 1, 3R, 4, 4x, 12, 12k, 13

XL4 Prime
2MB
0.02mS/K
microSD
Yes
Yes
Yes
320 x 240 (QVGA)
3.5" TFT Color, 640 nits
Selectable Fonts
1023
1023
5
4 + System Key
Yes
22 - 44
CsCAN & Ethernet
2048 / 2048
512 / 512
50,000
32768 (16384 ret.)
Standard
Standard
2
RS-232 & RS-485 (1 of each)
Yes
Yes
Flash Drive, Camera, Keyboard & Mouse
Mini B Programming Only
Standard
1640 ft.
Yes
Yes
3.78" / 96.0 mm
3.78" / 96.0 mm
2.26" / 57.5 mm
-10 to 60°C
5 to 95%
UL Class 1 Div II, CE
UL Type 1, 3R, 4, 4x, 12, 12k, 13

\*Actual retentive register count may vary from model to model, please contact factory for more details  
 \*\*Please refer to CsCAN Installation Manual

\*(MQTT Sparkplug & WebMI require a one-time upgrade; OCS360 is an annual subscription service.)



# XL PRIME SERIES



FEATURES	
<b>Controller</b>	Ladder Logic Memory
	Logic Scan Rate
	Removable Memory
	Local Comment Storage
	Floating Point Support
	AutoTune PID Capable
<b>Operator Interface</b>	Characters/Pixels
	Display Technology
	Character Height
	Number of Screens
	Fields or Objects per Screen
	Total Keys
	Function Keys
	OEM Faceplate Available
<b>I/O</b>	Built-in I/O points
	Add on - SmartStix, SmartRail, SmartBlock, SmartMod
	Digital Inputs/Outputs, Max
	Analog Inputs/Outputs, Max
	General Purpose Registers (words)*
	General Purpose Internal Coils (bits)
<b>Ethernet/Internet</b>	Ethernet Support
	Remote Access
	Remote File Access
	WebMI Compatibility (Licensed Option)
<b>Serial Communications</b>	Serial Ports
	RS-232 Ports/RS-485 Ports
	PLC/Drive Protocols
	RTU/Modbus Master/Slave/Serial ASCII In/Out
	USB A Port - USB 2.0
<b>Networking</b>	USB Port
	Integrated CsCAN Network
	Maximum CsCAN Distance**
	Programming Over Network
	Peer-to-Peer Messaging
<b>Physical Specifications</b>	Height (inches/mm)
	Width (inches/mm)
	Depth (inches/mm)
<b>Operating Specifications &amp; Standards</b>	Operating Temperature
	Humidity (non-condensing)
	Product Certifications/Approvals
Environmental Rating	

XL6 Prime
2MB
0.02mS/K
microSD
Yes
Yes
Yes
640 x 480
5.7" TFT Color, 450 nits
Selectable Fonts
1023
1023
6
5 + System Key
Yes
22 - 44
CsCAN & Ethernet
2048 / 2048
512 / 512
50,000
32768 (16384 ret.)
Standard
3
RS-232 &/or RS485
Yes
Yes
Flash Drive, Camera, Keyboard & Mouse
Mini B Programming Only
Standard
1640 ft.
Yes
Yes
5.66" / 143.8 mm
7.34" / 186.08 mm
1.84" / 46.62 mm
-10 to 60°C
5 to 95%
UL Class 1 Div II, CE
UL Type: 1, 3R, 4, 4x, 12, 12k, 13, 13k, 13k US

XLW Prime
2MB
0.02mS/K
microSD
Yes
Yes
Yes
800 x 480
7" TFT Color, 420 nits
Selectable Fonts
1023
1023
6
5 + System Key (on screen)
Yes
22 - 44
CsCAN & Ethernet
2048 / 2048
512 / 512
50,000
32768 (16384 ret.)
Standard
3
RS-232 &/or RS485
Yes
Yes
Flash Drive, Camera, Keyboard & Mouse
Mini B Programming Only
Standard
1640 ft.
Yes
Yes
5.66" / 143.8 mm
7.34" / 186.08 mm
1.84" / 46.62 mm
-10 to 60°C
5 to 95%
UL Class 1 Div II, CE
UL Type: 1, 3R, 4, 4x, 12, 12k, 13, 13k, 13k US

XL7 Prime
2MB
0.02mS/K
microSD
Yes
Yes
Yes
800 x 480
7" - TN Clr, 420 nits (Std)/1000 nits (-22 opt)*
Selectable Fonts
1023
1023
6
5 + System Key
Yes
22 - 44
CsCAN & Ethernet
2048 / 2048
512 / 512
50,000
32768 (16384 ret.)
Standard, 2 Ports
3
RS-232 &/or RS485
Yes
Yes
Flash Drive, Camera, Keyboard & Mouse
Type C - Programming Only
Standard, 2 Ports
1640 ft.
Yes
Yes
5.69" / 144.49 mm
8.27" / 210 mm
3.57" / 90.63 mm
-10 to 60°C (-40°C option available)
5 to 95%
UL Class 1 Div II, CE, Atex (-450 opt)
UL: 1, 3R, 4, 4x, 12, 12k, 13, 13k, 13k US

XL10 Prime
2MB
0.02mS/K
microSD
Yes
Yes
Yes
640 x 480 (VGA)
10.4" TFT Color, 550 nits
Selectable Fonts
1023
1023
8
7 + System Key
Yes††
22 - 44
CsCAN & Ethernet
2048 / 2048
512 / 512
50,000
32768 (16384 retentive)
Standard, 2 Ports
3
RS-232 &/or RS485
Yes
Yes
Flash Drive, Camera, Keyboard & Mouse
Mini B Programming Only
Standard, 2 Ports
1640 ft.
Yes
Yes
9.08" / 230.6 mm
11.94" / 303.3 mm
2.43" / 61.7 mm
-10 to 60°C
5 to 95%
UL Class 1 Div II, CE
UL Type 1, 3R, 4, 4x, 12, 12k, 13, 13k, 13k US

\*Actual retentive register count may vary from model to model, please contact factory for more details  
 \*\*Please refer to CsCAN Installation Manual

\*22 opt - Sunlight Display - TFT Color, 900 nits



FEATURES	
<b>Controller</b>	Ladder Logic Memory
	Logic Scan Rate
	Removable Memory
	Local Comment Storage
	Floating Point Support
<b>Operator Interface</b>	AutoTune PID Capable
	Characters/Pixels
	Display Technology
	Character Height
	Number of Screens
	Fields or Objects per Screen
	Total Keys
	Function Keys
	OEM Faceplate Available
	Built-in I/O points
<b>I/O</b>	Add on - SmartStix, SmartRail, SmartBlock, SmartMod
	Digital Inputs/Outputs, Max
	Analog Inputs/Outputs, Max
	General Purpose Registers (words)*
	General Purpose Internal Coils (bits)
<b>Ethernet/ Internet</b>	Ethernet Support
	Remote Access
	Remote File Access
	WebMI Compatibility (Licensed Option)
<b>Serial Communications</b>	Serial Ports
	RS-232 Ports/RS-485 Ports
	PLC/Drive Protocols
	RTU/Modbus Master/Slave/Serial ASCII In/Out
	USB A Port - USB 2.0
<b>Networking</b>	USB Port
	Integrated CsCAN Network
	Maximum CsCAN Distance**
	Programming Over Network
	Peer-to-Peer Messaging
<b>Physical Specifications</b>	Height (inches/mm)
	Width (inches/mm)
	Depth (inches/mm)
<b>Operating Specifications &amp; Standards</b>	Operating Temperature
	Humidity (non-condensing)
	Product Certifications/Approvals
	Environmental Rating



XL10W Prime	XL15 Prime
2MB	2MB
0.02mS/K	0.02mS/K
microSD	microSD
Yes	Yes
Yes	Yes
Yes	Yes
1024 x 600 (WSVGA)	1024 x 768 (XGA)
10.1" LED Color, 300 nits	15" TFT Color, 500 nits
Selectable Fonts	Selectable Fonts
1023	1023
1023	1023
8 (on screen)	8 (on screen)
5+ System Key (on screen)	7 + System Key (on screen)
Yes <sup>††</sup>	No
22 - 44	22 - 44
CsCAN & Ethernet	CsCAN & Ethernet
2048 / 2048	2048 / 2048
512 / 512	512 / 512
50,000	50,000
32768 (16384 retentive)	32768 (16384 retentive)
Standard, 2 Ports	Standard, 2 Ports
Ethernet IP (Server & HMI), Modbus TCP (Client/Server), BACnet IP (Server), EGD MQTT Sparkplug, Horner OCS360 Cloud Service, WebMI via HTML5, Envision RV* SMTP (Client), NTP (Client), FTP (Server)	
3	3
RS-232 & RS-485; RS-232 / RS-485	RS-232 & RS-485; RS-232 / RS-485
Yes	Yes
Yes	Yes
Flash Drive, Camera, Keyboard & Mouse	Flash Drive, Camera, Keyboard & Mouse
USB Type C, Programming Only	USB Type C, Programming Only
Standard, 2 Ports	Standard, 2 Ports
1640 ft.	1640 ft.
Yes	Yes
Yes	Yes
6.5" / 166.2 mm	11.07" / 281.3 mm
10.4" / 263.9 mm	14.34" / 364.3mm
2.2" / 55.8 mm	2.80" / 71.1 mm
-10 to 60°C	-10 to 60°C
5 to 95%	5 to 95%
UL Class 1 Div II (pending), CE	UL Class 1 Div II (pending), CE
UL Type 1, 3R, 4, 4x, 12, 12k, 13 (pending)	UL Type 1, 3R, 4, 4x, 12, 12k, 13 (pending)

\*Actual retentive register count may vary from model to model, please contact factory for more details  
\*\*Please refer to CsCAN Installation Manual

\*(MQTT Sparkplug & WebMI require a one-time upgrade; OCS360 is an annual subscription service.)

# THE INDUSTRY LEADER

## 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.

## MQTT 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®.



# IN ALL-IN-ONE CONTROLS

## 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
X5 Prime	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

## ADD ON 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
HE-WIFIUSBV2	22mm Panel Mounted USB WiFi Module

## XL & XL PRIME SERIES PART NUMBERS

Model	No I/O	Model 2	Model 3	Model 4	Model 5	Model 6
XLE	HE-XE100	HE-XE102	HE-XE103	HE-XE104	HE-XE105	HE-XE106
XLEe	HE-XE1E0	HE-XE1E2	HE-XE1E3	HE-XE1E4	HE-XE1E5	HE-XE1E6
XLT	HE-XT100	HE-XT102	HE-XT103	HE-XT104	HE-XT105	HE-XT106
XLTe	HE-XT1E0	HE-XT1E2	HE-XT1E3	HE-XT1E4	HE-XT1E5	HE-XT1E6
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
XL10W Prime	HE-X10PE0	HE-X10PE2	HE-X10PE3	HE-X10PE4	HE-X10PE5	HE-X10PE6
XL15 Prime*	HE-XP15E0	HE-XP15E2	HE-XP15E3	HE-XP15E4	HE-XP15E5	HE-XP15E6

## XL PRIME REMOTE I/O OPTIONS

<b>OCS-I/O</b>	Base offers 2 Flexible Inputs (Digital or Analog), 1 Digital Output, 1 Universal Analog Inputs, 1 Analog Outputs. Add-on modules available for expandability.
<b>SMARTTRAIL</b>	Expands the I/O capacity of any Prime controller. Uses either CANbus or Ethernet communications and can be installed locally or remotely.
<b>SMARTBLOCK</b>	Provides easy configuration and network expansion using CsCAN communications.
<b>SMARTSTIX</b>	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.



## GLOBAL HEADQUARTERS

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## INTERNATIONAL OPERATIONS

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