THE INDUSTRY LEADER IN ALL-IN-ONE CONTROLS

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.

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 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
† Model 1 applies to the X5 Prime only

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 - 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 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.

XL PRIME SERIES OCS

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.

HORNER AUTOMATION GROUP

XL15 Prime · **XL10 Prime** · **XL7 Prime** · **XLW Prime** · **XL6 Prime** · **XL4 Prime** · **X5 Prime**

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

HORNER AUTOMATION GROUP

FEATURES		X5 Prime	XL4 Prime	XL6 Prime	XLW Prime	XL7 Prime	XL10 Prime	XL15 Prime
Controller	Ladder Logic Memory	2MB	2MB	2MB	2MB	2MB	2MB	2MB
	Logic Scan Rate	0.02mS/K	0.02mS/K	0.02mS/K	0.02mS/K	0.02mS/K	0.02mS/K	0.02mS/K
	Removable Memory	microSD	microSD	microSD	microSD	microSD	microSD	microSD
	Local Comment Storage	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Floating Point Support	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	AutoTune PID Capable	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Operator Interface	Characters/Pixels	480 x 272	320 x 240 (QVGA)	640 x 480	800 x 480	800 x 480	640 x 480 (VGA)	1024 x 768 (XGA)
	Display Technology	LCD with LED 450 nits	3.5" TFT Color	5.7" TFT Color	7" TFT Color	7" TFT Color	10.4" TFT Color	15" TFT Color
	Character Height	Selectable Fonts	Selectable Fonts	Selectable Fonts	Selectable Fonts	Selectable Fonts	Selectable Fonts	Selectable Fonts
	Number of Screens	1023	1023	1023	1023	1023	1023	1023
	Fields or Objects per Screen	1023	1023	1023	1023	1023	1023	1023
	Total Keys	5 (on screen)	5	6	6	6	8	8 (on screen)
	Function Keys	4 (on screen)	4	6 (on screen)	5 (on screen)	5	7	7 (on screen)
	OEM Faceplate Available	Yes	Yes	Yes	Yes	Yes	Yes††	No
I/O	Built-in I/O points	12	22 - 44	22 - 44	22 - 44	22 - 44	22 - 44	22 - 44
	Add on - SmartStix, SmartRail, SmartBlock, SmartMod	CsCAN & Ethernet	CsCAN & Ethernet	CsCAN & Ethernet	CsCAN & Ethernet	CsCAN & Ethernet	CsCAN & Ethernet	CsCAN & Ethernet
	Digital Inputs/Outputs, Max	2048 / 2048	2048 / 2048	2048 / 2048	2048 / 2048	2048 / 2048	2048 / 2048	2048 / 2048
	Analog Inputs/Outputs, Max	512 / 512	512 / 512	512 / 512	512 / 512	512 / 512	512 / 512	512 / 512
	General Purpose Registers (words)*	50,000	50,000	50,000	50,000	50,000	50,000	50,000
	General Purpose Internal Coils (bits)	16,384	32768 (16384 ret.)	32768 (16384 ret.)	32768 (16384 ret.)	32768 (16384 ret.)	32768 (16384 retentive)	32768 (16384 retentive)
Ethernet/ Internet	Ethernet Support	Yes	Standard	Standard	Standard	Standard, 2 Ports	Standard, 2 Ports	Standard, 2 Ports
	Remote Access	EnvisionRV	HTTP or EnvisionRV	HTTP or EnvisionRV	HTTP or EnvisionRV	HTTP or EnvisionRV	HTTP or EnvisionRV	HTTP or EnvisionRV
	Remote File Access	EnvisionFX	FTP or EnvisionFX	FTP or EnvisionFX	FTP or EnvisionFX	FTP or EnvisionFX	FTP or EnvisionFX	FTP or EnvisionFX¯
	WebMI Compatibility (Licensed Option)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Serial Communications	Serial Ports	2	2	3	3	3	3	3
	RS-232 Ports/RS-485 Ports	RS-232 / RS-485 (x2)	RS-232 & RS-485 (1 of each)	RS-232 &/or RS485	RS-232 &/or RS485	RS-232 &/or RS485	RS-232 & RS485	RS-232 & RS-485; RS-232 / RS-485
	PLC/Drive Protocols	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	RTU/Modbus Master/Slave/Serial ASCII In/Out	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	USB Port - USB 2.0 port A	Datalog & Backup	Datalog & Backup	Datalog & Backup	Datalog & Backup	Datalog & Backup	Datalog & Backup	Datalog & Backup / Programming Only
	USB Port -Mini-B port	Programming Only	Programming Only	Programming Only	Programming Only	Programming Only	Programming Only	
Networking	Integrated CsCAN Network	Standard	Standard	Standard	Standard	Standard, 2 Ports	Standard, 2 Ports	Standard, 2 Ports
	Maximum CsCAN Distance**	1640 ft.	1640 ft.	1640 ft.	1640 ft.	1640 ft.	1640 ft.	1640 ft.
	Programming Over Network	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Peer-to-Peer Messaging	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Physical Specifications	Height (inches/mm)	3.79" / 96mm	3.78" / 96.0 mm	5.66" / 143.8 mm	5.66" / 143.8 mm	5.66" / 143.8 mm	9.08" / 230.6 mm	12.60" / 320.0 mm
	Width (inches/mm)	4.92" / 125mm	3.78" / 96.0 mm	7.34" / 186.08 mm	7.34" / 186.08 mm	8.27" / 210.1 mm	11.94" / 303.3 mm	14.57" / 370.08mm
	Depth (inches/mm)	1.22" / 31mm	2.26" / 57.5 mm	1.84" / 46.62 mm	1.84" / 46.62 mm	1.78" / 43.94 mm	2.43" / 61.7 mm	4.08" / 103.6 mm
	I/O Module Depth	COM option adds 0.5"/13 mm depth	COM option adds 0.5"/13 mm depth	COM opt adds 0.9"/22mm depth	COM opt adds 0.9"/22mm depth	COM opt adds 0.9"/22mm depth	COM option adds 0.5" / 13 mm depth	COM option adds 0.5" / 13 mm depth
Operating Specifications & Standards	Operating Temperature	-10°C to 60°C	-10 to 60°C	-10 to 60°C	-10 to 60°C	-10 to 60°C	-10 to 60°C	-10 to 60°C
	Humidity (non-condensing)	5 to 95%	5 to 95%	5 to 95%	5 to 95%	5 to 95%	5 to 95%	5 to 95%
	Product Certifications/Approvals	UL Class 1 Div II, CE	UL Class 1 Div II, CE	UL Class 1 Div II, CE	UL Class 1 Div II, CE	UL Class 1 Div II, CE	UL Class 1 Div II, CE	UL Class 1 Div II, CE
	Environmental Rating	UL Type 1, 3R, 4, 4x, 12, 12k, 13	UL Type 1, 3R, 4, 4x, 12, 12k, 13	UL Type: 1, 3R, 4, 4x, 12, 12k, 13	UL Type: 1, 3R, 4, 4x, 12, 12k, 13	UL: 1, 3R, 4, 4x, 12, 12k, 13	UL Type 1, 3R, 4, 4x, 12, 12k, 13	UL Type 1, 3R, 4, 4x, 12, 12k, 13, ABS

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