ALL-IN-ONE INTELLIGENT AND POWERFUL CONTROLS

THE INDUSTRY LEADER IN ALL-IN-ONE CONTROLS

INDUSTRY LEADING ALL-IN-ONE CONTROLLER

The **XL** series provides the best all-in-one, affordable control solution for OEMs, integrators and end-users by combining a robust, reliable control product with an operator interface, I/O and networking into a single compact unit. The XL series is designed to provide you with ease of use, cost savings and flexibility for your operation, no matter the application.

With proven success across a wide variety of applications, the XL series is ideal for:

- Custom OEM products
- Power management & back-up generation
- Semiconductor applications
- Packaging machinery
- Water treatment
- Compressor control
- Pump control
- Food processing
- Motion control
- Distributed conveyor control
- HVAC/Environmental control
- Mobile machinery
- Automotive parts manufacturing

The **X** family of products incorporates a similar all-in-one construction as with the XL series. By providing a fixed array of I/O, however, the X Series provides a streamlined approach to the market. Applications that do not require the power of the XL products are perfectly suited to our X line of products.

POWERFUL, SECURE CSCAPE PROGRAMMING SOFTWARE

Both the X and XL series, developed using a single, industry-recognized software platform, Cscape, combine graphical ladder logic programming, operator interface development, I/O configuration and network configuration. The user friendly interface provides free form and drag & drop editor, as well as more than 100 functions to choose from. In addition to the Cscape Advanced Ladder offering, Cscape also supports the IEC 1131 programming languages.

From the Horner website, hornerautomation.com, download the Cscape software or software updates at no charge. This free service allows you to avoid costly licensing fees while always having the most up-to-date software version.

LOWER COSTS, MORE OPTIONS, EASY-TO-USE

With fully integrated hardware and software, both the X and XL series offer easier programming, installation, development and set-up. Our controllers have a small footprint and can easily retrofit into an existing system with little effort. Niether the XL nor the X products are 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 series is the first industrial product to utilize MicroSD™ Data Storage Memory, ideal for data logging, machine recipes, and application files.

CONNECTIVITY

Both the X and XL series are 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 and X 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

Both the X and XL series are designed to look like white label operator stations, fitting in with most cabinet, console designs, and color schemes. You can add a customized overlay to match your language, logo, and industry terms. This gives you the flexibility to use the XL or X series in any application.

Additionally, the XL series can be utilized to control any machine by connecting it with our best-in-class motion control solution. Delivering a unified programming environment for application development – our suite of controllers, drives and motors will help to effectively increase productivity, performance and throughput at a competitive, cost-effective price.

Our X line of products, such as the X5, introduces a series of fixed I/O controllers with exceptional performance and a streamlined ordering and pricing structure. These powerful and efficient controllers are well-suited to perform many of the same high-end applications as our XL series at the price point of an introductory component – value engineering hard at work.

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 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

XL 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
XLt	HE-XT100	HE-XT102	HE-XT103	HE-XT104	HE-XT105	HE-XT106
XL4	HE-XC1E0	HE-XC1E2	HE-XC1E3	HE-XC1E4	HE-XC1E5	HE-XC1E6
EXL6	HE-EXL1E0	HE-EXL1E2	HE-EXL1E3	HE-EXL1E4	HE-EXL1E5	HE-EXL1E6
XL7	HE-XW1E0	HE-XW1E2	HE-XW1E3	HE-XW1E4	HE-XW1E5	HE-XW1E6
EXL10	HE-EXV1E0	HE-EXV1E2	HE-EXV1E3	HE-EXV1E4	HE-EXV1E5	HE-EXV1E6

XL SERIES COM 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-XEC	Add-on Ethernet
HE-XPBS	Profibus DP Slave
HE-XRC9	900MHz I W Radio Modem
HE-XMC	14.4 K Telephone Modem
HE-XRC*	GSM/GPRS Cellular Modem
HE-200GPS183**	GPS Receiver

not all options available across all models
*additional suffixes define technology, GPS support, and antenna; contact factory for more info
**external unit

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 our controllers except the XLe and XLt. 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.

Cybsersecurity
IT compatible, high-level security algorithms ensure continued uptime at all times.

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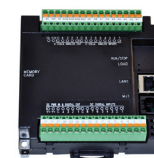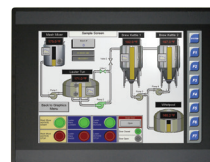
Licensing Capabilities
On or off-line licensing packages that will work within your organizational scope.

HORNER AUTOMATION GROUP

MADE IN USA

FEATURES		XLe	XLt	XL4	EXL6
Controller	Ladder Logic Memory	256 KB	256 KB	1 MB	1 MB
	Logic Scan Rate	1.2 mS/K	1.2 mS/K	0.013 mS/K	0.013 mS/K
	Removable Memory	microSD	microSD	microSD	microSD
	Local Comment Storage	yes	yes	yes	yes
	Floating Point Support	yes	yes	yes	yes
	AutoTune PID Capable	yes	yes	yes	yes
	Motion Commands (CANOpen)	yes	yes	yes	yes
Operator Interface	Characters/Pixels	128 x 64	160 x 128	320 x 240	640 x 480
	Display Technology	Transflective LCD	Transflective LCD	3.5'' TFT Color	5.7'' TFT Color
	Character Height	selectable fonts	selectable fonts	selectable fonts	selectable fonts
	Number of Pages	1023	1023	1023	1023
	Fields or Objects per Page	50	50	1023	1023
	Total Keys	20	5	5	6
	Function Keys	10	4	4	5
	OEM Faceplate Available	yes	yes	yes	yes
I/O	Built-in I/O points	22 - 44	22 - 44	22 - 44	22 - 44
	SmartStix, SmartRail, SmartBlock I/O Support	yes, CsCAN	yes, CsCAN	yes, CsCAN & Ethernet	yes, CsCAN & Ethernet
	Digital Inputs/Outputs, Max	2048 / 2048	2048 / 2048	2048 / 2048	2048 / 2048
	Analog Inputs/Outputs, Max	512 / 512	512 / 512	512 / 512	512 / 512
	General Purpose Registers (words)*	9999	9999	49999	49999
	General Purpose Internal Coils (bits)	4096	4096	32768	32768
Ethernet/ Internet	Ethernet Support	HE-XEC (add-on)	HE-XEC (add-on)	standard	standard
	Remote Access	EnvisionRV	EnvisionRV	HTTP or EnvisionRV	HTTP or EnvisionRV
	Remote File Access	EnvisionFX	EnvisionFX	FTP or EnvisionFX	FTP or EnvisionFX
	WebOCS Compatability†	no	no	yes	yes
Serial Communications	Serial Ports	2	2	2	3
	RS-232 Ports/RS-485 Ports	RS-232 / RS-485 (x2)	RS-232 / RS-485 (x2)	RS-232 & RS-485 (1 of each)	RS-232 & RS-485; RS-232 / RS-485
	PLC/Drive Protocols	yes	yes	yes	yes
	RTU/Modbus Master/Slave	yes	yes	yes	yes
	Serial ASCII In/Out	yes	yes	yes	yes
	USB Ports (A and Mini-B)	no	no	yes	yes
Networking	Integrated CsCAN Network	standard	standard	standard	standard
	Maximum CsCAN Distance**	1640 ft.	1640 ft.	1640 ft.	1640 ft.
	Programming Over Network	yes	yes	yes	yes
	Peer-to-Peer Messaging	yes	yes	yes	yes
Physical Specifications	Height (inches/mm)	3.780'' / 96.00 mm	3.780'' / 96.00 mm	3.780'' / 96.0 mm	5.653'' / 143.58 mm
	Width (inches/mm)	3.780'' / 96.00 mm	3.780'' / 96.00 mm	3.780'' / 96.0 mm	7.326'' / 186.08 mm
	Depth (inches/mm)	2.264'' / 57.5 mm	2.264'' / 57.5 mm	2.264'' / 57.5 mm	1.835'' / 46.62 mm
	I/O Module Depth	COM option adds 0.5'' / 13 mm depth	COM option adds 0.5'' / 13 mm depth	COM option adds 0.5'' / 13 mm depth	COM option adds 0.857'' / 22.225 mm depth
Operating Specifications & Standards	Operating Temperature†	-10 to 60ºC	-10 to 60ºC	-10 to 60ºC	-10 to 60ºC
	Humidity (non-condensing)	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
	Environmental Rating	UL Type 3R, 4, 4x, 12, 12k, 13	UL Type 3R, 4, 4x, 12, 12k, 13	UL Type 3R, 4, 4x, 12, 12k, 13, ABS	UL Type 3R, 4, 4x, 12, 12k, 13

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

HORNER
AUTOMATION GROUP

MADE IN USA

FEATURES		XL7	EXL10	RCC972	RCC1410	RCC8842
Controller	Ladder Logic Memory	1 MB	1 MB	128KB	128KB	128KB
	Logic Scan Rate	0.013 mS/K	0.013 mS/K	0.013 mS/K	0.013 mS/K	0.013 mS/K
	Removable Memory	microSD	microSD	microSD	microSD	microSD
	Local Comment Storage	yes	yes	yes	yes	yes
	Floating Point Support	yes	yes	yes	yes	yes
	AutoTune PID Capable	yes	yes	yes	yes	yes
	Motion Commands (CANOpen)	yes	yes	yes	yes	yes
Operator Interface	Characters/Pixels	800 x 480	640 x 480	N/A	N/A	N/A
	Display Technology	7" TFT Color	10.4" VGA TFT Color	N/A	N/A	N/A
	Character Height	selectable fonts	selectable fonts	N/A	N/A	N/A
	Number of Pages	1023	1023	N/A	N/A	N/A
	Fields or Objects per Page	1023	1023	N/A	N/A	N/A
	Total Keys	6	8	N/A	N/A	N/A
	Function Keys	5	7	N/A	N/A	N/A
	OEM Faceplate Available	yes	yes††	N/A	N/A	N/A
I/O	Built-in I/O points	22 - 44	22 - 44	24	24	22
	SmartStix, SmartRail, SmartBlock I/O Support	yes, CsCAN & Ethernet	yes, CsCAN & Ethernet	yes, CsCan & Ethernet	yes, CsCan & Ethernet	yes, CsCan & Ethernet
	Digital Inputs/Outputs, Max	2048 / 2048	2048 / 2048	2048 / 2048	2048 / 2048	2048 / 2048
	Analog Inputs/Outputs, Max	512 / 512	512 / 512	512 / 512	512 / 512	512 / 512
	General Purpose Registers (words)*	49999	49999	4096	4096	4096
	General Purpose Internal Coils (bits)	32768	32768	2048	2048	32768
Ethernet/ Internet	Ethernet Support	standard, 2 ports	standard, 2 ports	standard	standard	standard
	Remote Access	HTTP or EnvisionRV	HTTP or EnvisionRV	HTTP or EnvisionRV	HTTP or EnvisionRV	HTTP or EnvisionRV
	Remote File Access	FTP or EnvisionFX	FTP or EnvisionFX	FTP or EnvisionFX	FTP or EnvisionFX	FTP or EnvisionFX
	WebOCS Compatability†	yes	yes	yes	yes	yes
Serial Communications	Serial Ports	3	3	1	2	2
	RS-232 Ports/RS-485 Ports	RS-232 & RS-485; RS-232 / RS-485	RS-232 & RS-485; RS-232 / RS-485	RS-232	RS-232 & RS-485	RS-232 & RS-485
	PLC/Drive Protocols	yes	yes	yes	yes	yes
	RTU/Modbus Master/Slave	yes	yes	yes	yes	yes
	Serial ASCII In/Out	yes	yes	yes	yes	yes
	USB Ports (A and Mini-B)	yes	yes	no	no	no
Networking	Integrated CsCAN Network	standard	standard	standard	standard	standard
	Maximum CsCAN Distance**	1640 ft.	1640 ft.	1640 ft.	1640 ft.	1640 ft.
	Programming Over Network	yes	yes	yes	yes	yes
	Peer-to-Peer Messaging	yes	yes	yes	yes	yes
Physical Specifications	Height (inches/mm)	5.66" / 143.8 mm	9.08" / 230.6 mm	4.370" / 111 mm	4.370" / 111 mm	4.370" / 111 mm
	Width (inches/mm)	8.27" / 210.1 mm	11.94" / 303.3 mm	4.567" / 116 mm	4.567" / 116 mm	4.567" / 116 mm
	Depth (inches/mm)	2.72" / 69.1 mm	2.43" / 61.7 mm	1.411" / 35.84 mm	1.411" / 35.84 mm	1.411" / 35.84 mm
	I/O Module Depth	COM option adds 0.5" / 13 mm depth	COM option adds 0.5" / 13 mm depth	N/A	N/A	N/A
Operating Specifications & Standards	Operating Temperature†	-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%
	Product Certifications/Approvals	UL Class 1 Div II, CE	UL Class 1 Div II, CE	CE	CE	CE
	Environmental Rating	UL Type 3R, 4, 4x, 12, 12k, 13, ABS	UL Type 3R, 4, 4x, 12, 12k, 13	IP20	IP20	IP20

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

††To be ordered by Horner, includes keypad

NOTE: RCC972 does not have a real time clock.

HORNER
AUTOMATION GROUP

MADE IN USA

FEATURES		RCC2414	X5
Controller	Ladder Logic Memory	128KB	1MB
	Logic Scan Rate	0.013 mS/K	0.013 mS/K*
	Removable Memory	microSD	microSD
	Local Comment Storage	yes	yes
	Floating Point Support	yes	yes
	AutoTune PID Capable	yes	yes
	Motion Commands (CANOpen)	yes	yes
Operator Interface	Characters/Pixels	N/A	480 x 272
	Display Technology	N/A	4.3" TFT Color
	Character Height	N/A	selectable fonts
	Number of Pages	N/A	1023
	Fields or Objects per Page	N/A	1023
	Total Keys	N/A	5 (on screen)
	Function Keys	N/A	4 (on screen)
	OEM Faceplate Available	N/A	yes
I/O	Built-in I/O points	11	12
	SmartStix, SmartRail, SmartBlock I/O Support	yes, CsCan & Ethernet	yes, CsCAN &Ethernet
	Digital Inputs/Outputs, Max	2048 / 2048	2048 / 2048
	Analog Inputs/Outputs, Max	512 / 512	512 / 512
	General Purpose Registers (words)*	4096	8192 (1024 retentive)
	General Purpose Internal Coils (bits)	2048	2048 (1024 retentive)
Ethernet/ Internet	Ethernet Support	standard, 2 ports	standard
	Remote Access	HTTP or EnvisionRV	HTTP or EnvisionRV
	Remote File Access	FTP or EnvisionFX	FTP or EnvisionFX
	WebOCS Compatability†	yes	yes
Serial Communications	Serial Ports	2	2
	RS-232 Ports/RS-485 Ports	RS-485 (x2)	RS-232 & RS-485
	PLC/Drive Protocols	yes	yes
	RTU/Modbus Master/Slave	yes	yes
	Serial ASCII In/Out	yes	yes
	USB Ports (A and Mini-B)	yes	yes
Networking	Integrated CsCAN Network	standard	standard
	Maximum CsCAN Distance**	1640 ft.	1640 ft.
	Programming Over Network	yes	yes
	Peer-to-Peer Messaging	yes	yes
Physical Specifications	Height (inches/mm)	4.370" / 111 mm	3.53" / 89.76 mm
	Width (inches/mm)	4.567" / 116 mm	4.69" / 119.18 mm
	Depth (inches/mm)	1.411" / 35.84 mm	1.4" / 35.8 mm
	I/O Module Depth	N/A	N/A
Operating Specifications & Standards	Operating Temperature†	-10 to 60ºC	-10 to 60ºC
	Humidity (non-condensing)	5 to 95%	5 to 95%
	Product Certifications/Approvals	CE	CE
	Environmental Rating	IP20	UL Type 3R, 4, 4x, 12, 12k, 13

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

*estimated

GLOBAL HEADQUARTERS

59 S. State Ave.
Indianapolis, Indiana 46201
P 317-916-4274
F 317-639-4279
TF 877-665-5666
www.hornerautomation.com
sales@heapg.com

INTERNATIONAL OPERATIONS

HORNER EUROPE

Horner Ireland Limited, Unit 1
Centrepoint, Centrepark Road
Cork, Ireland
P +353-21-4321266
F +353-21-4321826
info@horner-apg.com
www.horner-apg.com

HORNER CANADA

Suite 200, 5970 Centre Street SE
Calgary, Alberta T2H OC1
P (403) 444-0928
F (403) 265-0966
info@hornercanada.com
www.hornercanada.com

HORNER INDIA

Vaishnavi, No. 3, Domlur 2nd Stage
3rd Phase, Domlur Main Rd.
Bangalore 560071
Karnataka, India
P +91-80-41263460 / 61 / 62
F +91-80-41263464
info@india.horner-apg.com

HORNER AUSTRALIA

Unit 15
104 Ferntree Gully Road
Oakleigh Victoria 3166
P 03 9544 0733
F 03 9544 0977
jim.callan@heapg.com

HORNER CHINA

Sales and Tech Support for China
Room 1001, Nongke Building
No. 268, Baidilu Road, Nankai District
Tianjin 300192, P.R. China
P +86-022-23367571/23360759
F +86-022-23662715
info@hornerchina.com.cn
www.hornerchina.com.cn

HORNER SOUTH AMERICA

Sales and Tech Support for South America
Rua Bento Gonçalves, 31
93265-350 – Esteio – RS Brazil
P +55 51-4042-3037
F +55 51-4042-3037
info@hornerbrasil.com.br