



OCS All-in-One Controllers & More

Product Catalog



www.hornerautomation.com



TABLE OF CONTENTS

		Links
		Data Page Web Page
Micro Series.....	pg 4	 
XLEe.....	pg 7	 
XLTe.....	pg 8	 
XL Prime Series.....	pg 9	 
Canvas Collection.....	pg 11	 
RCC Series.....	pg 14	 
RCC6512.....	pg 17	 
OCSI/O Series.....	pg 19	 
CPU and Plug & Play Collection.....	pg 23	



MICRO OCS SERIES



INDUSTRY LEADING ALL-IN-ONE CONTROLLER

Our **Micro OCS** line of products 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 popular XL series at the price point of an introductory component - value engineering hard at work.

The **Micro OCS** 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 Micro OCS Series provides a streamlined approach to the market. Applications that do not require the power of the XL products are perfectly suited to our Micro OCS line of products.

POWERFUL, SECURE CSCAPE PROGRAMMING SOFTWARE

The **Micro OCS Series** (developed using a single, industry-recognized software platform, Cscape) combines 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.

For a comparison guide of the Micro OCS line of products, please [CLICK HERE](#) to visit our website.

MODELS:



Micro OCS Series

This series is ideal for:

- Custom OEM Products
- Power Management & Back-up Generation
- Semiconductor Applications
- Packaging Machinery & Food Processing
- Water Treatment & Pump Control
- HVAC/Environmental Control
- Automotive Parts Manufacturing!

FEATURES:

MINIMAL PHYSICAL DESIGN - The small, sleek profile enables you to fit more in your panel, saving space and resources. The Micro OCS packs a big picture into an overall small package.

COMPREHENSIVE I/O CONFIGURATION - In an effort to make implementing Horner OCS controllers as seamless and user-friendly as possible, we have selected a streamlined set of on-board I/O. The wide scope of digital and analog I/O make automating your applications, and your organization, as simple as the push of a (virtual) button. If the built-in I/O isn't enough for your specific application, you can easily expand via Ethernet, CAN, or serial.

FLEXIBILITY - In the market of fixed I/O, web-compatible controllers, the Micro is unmatched. Suited for most applications across a diverse range of industries, it exceeds standards (and expectations). With powerful processor speeds, an intuitive user interface, and rugged durability, the suite of capabilities are similar to our more established XL line of products.

COMPETITIVE ADVANTAGE - With the addition of the Micro OCS controller, our engineers at Horner Automation have designed a slim, versatile, and complimentary product to our existing line of robust industrial solutions. When utilized as an introductory piece, it empowers your organization to grow by seamlessly incorporating additional Horner solutions to your expanding system.

[More information on the Micro Series](#)

MICRO SERIES PART NUMBERS

Digital Outputs	X2A	X4A	X7A	X10A	X5 (one model only)
Relay Outputs	X2R	X4R	X7R	X10R	

LOGIC CONTROLLER

	X5	X2, X4, X7, X10
Logic Scan Rate	.04 mS/K	1.2 mS/K (X2), .4 mS/K (X4, X7, X10)
Ladder Logic Memory	1 MB	256kB
I/O Variables	8192 (retentive 1,024) words & 4,096 (retentive 2,048) bits	5,000 words & 2,048 (retentive 1,024) bits
Built-In I/O Points	12	Model A - 30; Model R - 26

I/O OPTIONS

X5	4 DC In, 4 DC Out, 4 HSC In, 2 Pulse Out, 4 Analog In
X2A	12 DC In (4 HSC In), 12 DC Out (2 Pulse Out), 4 Analog In, 2 Analog Out
X2R	12 DC In (4 HSC In), 2 DC Out (2 Pulse Out), 6 Relay Out, 4 Analog In, 2 Analog Out
X4A	12 DC In (4 HSC In), 12 DC Out (2 Pulse Out), 4 Analog In, 2 Analog Out
X4R	12 DC In (4 HSC In), 2 DC Out (2 Pulse Out), 6 Relay Out, 4 Analog In, 2 Analog Out
X7A	12 DC In (4 HSC In), 12 DC Out (2 Pulse Out), 4 Analog In, 2 Analog Out
X7R	12 DC In (4 HSC In), 2 DC Out (2 Pulse Out), 6 Relay Out, 4 Analog In, 2 Analog Out
X10A	12 DC In (4 HSC In), 12 DC Out (2 Pulse Out), 4 Analog In, 2 Analog Out
X102	12 DC In (4 HSC In), 2 DC Out (2 Pulse Out), 6 Relay Out, 4 Analog In, 2 Analog Out

OPERATING SPECS. & STANDARDS

Primary Power Range	24 VDC $\pm$ 20% (X2, X4, X7), 10-30VDC (X5, X10)
Operating Temperature	-10° to 60°C (X5 with option for -40° to 60°C)
Relative Humidity	5 to 95% (non-condensing)
UL Type Ratings	UL 50E Type 1, 4x, 12, 12k, 13 (X2, X4, X7, X10 - indoor use only), 3R, 4, 4x, 12, 12k, 13 (X5 only)

USER INTERFACE

Model	Resolution	Total Keys/Function Keys
X5	480 x 272	5 (on screen), 4 (on screen)
X2	128 x 64	20, 10
X4	480 x 272	5 (on screen), 4 (on screen)
X7	800 x 480	5 (on screen), 4 (on screen)
X10	1024 x 600	5 (on screen), 4 (on screen)

PHYSICAL DIMENSIONS (WXHxD)

X5	mm/in	90 x 125 x 36 / 3.79 x 4.92 x 1.41
X2	mm/in	125 x 96 x 35.8 / 4.92 x 3.78 x 1.41
X4	mm/in	96 x 125 x 1.41 / 3.79 x 4.92 x 1.41
X7	mm/in	143.5 x 186.1 x 53 / 5.65 x 7.33 x 2.08
X10	mm/in	166 x 264 x 56 / 6.5 x 10.1 x 2.2

CONNECTIVITY

USB Ports	USB A: (X5 only) USB mini-B: Programming
Serial Ports	1 - RS-232 and 1 - RS-485
Serial Protocols	Modbus Master/Slave, RTU, Serial ASCII In/Out
Ethernet Support	Standard all except X2

MEMORY & STORAGE

Removable Mass Storage	microSD(>32GB)
Built-In Storage	16 MB (X2, X4, X7, X10); 128 MB (X5)



XL SERIES



XL PRIME SERIES

INDUSTRY LEADING ALL-IN-ONE CONTROLLERS

The **XL Series** XLEe and XLTe provide 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. 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!

For a comparison guide of the Prime Series of products, please [CLICK HERE](#) to visit our website.

XLEe SPECIFICATIONS AND TECHNICAL INFORMATION



PHYSICAL CHARACTERISTICS

- 1 DIN rail mounting clip
- 2 Wide-range DC power
- 3 CAN port
- 4 Ethernet LAN Port (optional)
- 5 High capacity microSD slot
- 6 RS-232/RS-485 serial ports
- 7 USB mini-B port
- 8 Transflective LCD screen
- 9 Programmable soft keys
- 10 Numeric / Function keys

CONTROLLER	
CPU	High Performance 32 Bit Arm with DSP and FPU Acceleration
Logic Scan Rate	0.7 mS/K
Built-In Storage	16Mb
Removable Memory	32GB microSD
Retentive Storage	32K Battery-Backed Ram
Programming Languages	Advanced Ladder or IEC: ST, LD, FBD, IL, SFC
USER INTERFACE	
Display Technology	2.2" Transflective LCD
Resolution / Color	128 x 64, Monochrome
Keypad	20 Key Domed Membrane
CONNECTIVITY	
Serial Ports	2 Ports with RS-232 and RS-485
USB Ports (Mini-B)	1 Programming
Ethernet	10/100 Support with Auto MDIX Support (optional)
CAN	1 Port 125Kb - 1Mb

More information on the XLEe

STANDARD	ETHERNET	I/O MODELS
HE-XE100	HE-XE1E0	No Built-in I/O
HE-XE102	HE-XE1E2	12 DC in, 6 Relay Out, 4 - 12-bit Analog In
HE-XE103	HE-XE1E3	12 DC in, 12 DC Out, 2 - 12-bit Analog In
HE-XE104	HE-XE1E4	24 DC in, 16 DC Out, 2 - 12-bit Analog In
HE-XE105	HE-XE1E5	12 DC in, 12 DC Out, 2 - 14/16-bit Analog In (mA/V/Tc/mV/RTD), 2 - 12-bit Analog Out
HE-XE106	HE-XE1E6	12 DC in, 12 DC Out, 6 - 14/17-bit Analog In (mA/V/Tc/mV/RTD), 4 - 12-bit Analog Out
Remote I/O		All Models Support SmartRail, SmartBlock, SmartStix, SmartMod, various 3rd party I/O devices
OPERATING SPECS. & STANDARDS		
Primary Power Range		10-30VDC
Power		1-5W (depending on model/configuration)
Operating Temperature		-10° to 60° C
Humidity (non-condensing)		5 to 95% Non-Condensing
Environmental Ratings		IP65, UL Type 3R, 4, 4x, 12, 12k, 13
PHYSICAL SPECIFICATIONS		
Dimensions		mm: 96.0 tall x 96.0 wide x 57.5 deep in: 3.78 tall x 3.78 wide x 2.26 deep

XLTe SPECIFICATIONS AND TECHNICAL INFORMATION



PHYSICAL CHARACTERISTICS

- 1 DIN rail mounting clip
- 2 Wide-range DC power
- 3 CAN port
- 4 Ethernet LAN Port (optional)
- 5 High capacity microSD slot
- 6 RS-232/RS-485 serial ports
- 7 USB mini-B port
- 8 Transflective LCD screen
- 9 Function keys



CONTROLLER	
CPU	High Performance 32 Bit Arm with DSP and FPU Acceleration
Logic Scan Rate	0.8 ms/K
Built-In Storage	16Mb
Removable Memory	32GB microSD
Retentive Storage	32K Battery-Backed Ram
Programming Languages	Advanced Ladder or IEC: ST, LD, FBD, IL, SFC
USER INTERFACE	
Display Technology	3.5" Transflective LCD
Resolution / Color	160 x 128, Monochrome
Keypad	5 Key Domed Membrane
CONNECTIVITY	
Serial Ports	2 Ports with RS-232 and RS-485
USB Ports (Mini-B)	1 Programming
Ethernet	10/100 Support with Auto MDIX Support (optional)
CAN	1 Port 125Kb - 1Mb

More information on the XLTe

STANDARD	ETHERNET	I/O MODELS
HE-XT100	HE-XT1E0	No Built-in I/O
HE-XT102	HE-XT1E2	12 DC in, 6 Relay Out, 4 - 12-bit Analog In
HE-XT103	HE-XT1E3	12 DC in, 12 DC Out, 2 - 12-bit Analog In
HE-XT104	HE-XT1E4	24 DC in, 16 DC Out, 2 - 12-bit Analog In
HE-XT105	HE-XT1E5	12 DC in, 12 DC Out, 2 - 14/16-bit Analog In (mA/V/Tc/mV/RTD), 2 - 12-bit Analog Out
HE-XT106	HE-XT1E6	12 DC in, 12 DC Out, 6 - 14/17-bit Analog In (mA/V/Tc/mV/RTD), 4 - 12-bit Analog Out
Remote I/O		All Models Support SmartRail, SmartBlock, SmartStix, SmartMod, various 3rd party I/O devices
OPERATING SPECS. & STANDARDS		
Primary Power Range		10-30VDC
Power		1-5W (depending on model/configuration)
Operating Temperature		-10° to 60° C
Humidity (non-condensing)		5 to 95% Non-Condensing
Environmental Ratings		IP65, UL Type 3R, 4, 4x, 12, 12k, 13
PHYSICAL SPECIFICATIONS		
Dimensions		mm: 96.0 tall x 96.0 wide x 57.5 deep in: 3.78 tall x 3.78 wide x 2.26 deep

MODELS:



XL Prime Series

The World's Most Advanced All-In-One Controller Just Outdid Itself

New users will be impressed by the power and speed... Current users will love the seamless transition from the XL Series!

FEATURES:

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% non-volatile 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.



[More information on the XL Prime Series](#)

XL PRIME SERIES PART NUMBERS

I/O OPTION	<u>XL4 Prime</u>	<u>XL6 Prime</u>	<u>XLW Prime</u>	<u>XL7 Prime</u>	<u>XL10W Prime</u>	<u>XL10 Prime</u>	<u>XL15 Prime</u>
Option 0	HE-XPC1E0	HE-XPL1E0	HE-XPLWE0	HE-XPW1E0	HE-X10PE0	HE-XPV1E0	HE-XP15E0
Option 2	HE-XPC1E2	HE-XPL1E2	HE-XPLWE2	HE-XPW1E2	HE-X10PE2	HE-XPV1E2	HE-XP15E2
Option 3	HE-XPC1E3	HE-XPL1E3	HE-XPLWE3	HE-XPW1E3	HE-X10PE3	HE-XPV1E3	HE-XP15E3
Option 4	HE-XPC1E4	HE-XPL1E4	HE-XPLWE4	HE-XPW1E4	HE-X10PE4	HE-XPV1E4	HE-XP15E4
Option 5	HE-XPC1E5	HE-XPL1E5	HE-XPLWE5	HE-XPW1E5	HE-X10PE5	HE-XPV1E5	HE-XP15E5
Option 6	HE-XPC1E6	HE-XPL1E6	HE-XPLWE6	HE-XPW1E6	HE-X10PE6	HE-XPV1E6	HE-XP15E6

*X5 Prime is available as HE-XP5 only

LOGIC CONTROLLER

CPU	ARM
Logic Scan Rate	0.02 ms/kB
Logic Program Size	2MB
Program Variables	50,000 words & 32,768 bits
I/O Variables	1,024 words & 4,096 bits
Logic Languages	Horner Advanced Ladder - IEC 6-1131

CONNECTIVITY

USB Ports	USB A: Storage, WiFi (opt), Video USB mini-B: Programming
Serial Ports	1 - RS-232 and 1 - RS-485 Addl RS232/RS485 on XL7, XL10, XL15
Serial Protocols	Modbus Master/Slave, BACnet MSTP Slave SNP, DF1, ASCII, NMEA
Ethernet Ports	1 - X5 Prime, XL4 Prime, XL6 Prime, XLW Prime 2 - XL7 Prime, XL10W Prime, XL10 Prime, XL15 Prime
Ethernet Protocols	Modbus TCP Client & Server, BACnet IP Server, Ethernet IP I/O Device, Logix Tag Exchange, Ethernet Global Data, ASCII over Ethernet, Web- MI, Email, FTP Server, NTP
CAN Ports	1 - X5 Prime, XL4 Prime, XL6 Prime, XLW Prime 2 - XL7 Prime, XL10W Prime, XL10 Prime, XL15 Prime
CAN Protocols	CsCAN, CANopen (Master & Slave) J1939, DeviceNet Scanner

USER INTERFACE

Model	Resolution	Physical Keys
X5 Prime	480 x 272	0
XL4 Prime	320 x 240	5
XL6 Prime	640 x 480	6
XLW Prime	800 x 480	0
XL7 Prime	800 x 480	6
XL10W Prime	1024 x 600	0
XL10 Prime	640 x 480	8
XL15 Prime	1024 x 768	0

AUDIO & VIDEO

Video Playback	USB Video, mp4 - 320 x 240
Audio Playback	wav, mp3 XL7 Prime, XL10 Prime, XL15 Prime only

I/O OPTIONS

X5 Prime Option (only)	4 DC In, 4 DC Out, 4 - 12 bit Analog In
Option 0	No Built-in I/O
Option 2	12 DC In, 6 Relay Out, 4 - 12-bit Analog In
Option 3	12 DC In, 12 DC Out, 2 - 12-bit Analog In
Option 4	24 DC In, 16 DC Out, 2 - 12-bit Analog In
Option 5	12 DC In, 12 DC Out, 2 - 14/16-bit Analog In (mA/V/Tc/mV/RTD), 2 - 12-bit Analog Out (mA/V)
Option 6	12 DC In, 12 DC Out, 6 - 14/17-bit Analog In (mA/V/Tc/mV/RTD), 4 - 12-bit Analog Out (mA/V)
Remote I/O	All Models Support SmartRail, SmartBlock, SmartStix, SmartMod and OCSI/O

PHYSICAL DIMENSIONS (WXHxD)

X5 Prime	mm / in	90 x 119 x 36 / 3.79 x 4.92 x 1.41
XL4 Prime	mm / in	96 x 96 x 58 / 3.78 x 3.78 x 2.26
XL6 Prime	mm / in	187 x 144x 47 / 7.34 x5.66 x 1.84
XLW Prime	mm / in	187 x 144x 47 / 7.34 x5.66 x 1.84
XL7 Prime	mm / in	211x 144 x 70 / 8.27 x5.66 x 2.72
XL10 Prime	mm / in	304 x 231 x 62 / 11.94 x 9.08 x 2.43
XL15 Prime	mm / in	371 x 320 x 104 / 14.57 x 12.6 x 4.08

MEMORY & STORAGE

Removable Mass Storage	microSD(>32GB) USB (>32GB)
Onboard Mass Storage (Program Storage)	EMMC (8GB)
High Speed RAM (Variable Storage)	MRAM (128kB)
All memory is 100% non-volatile (non-battery dependent)	

OPERATING SPECS. & STANDARDS

Primary Power Range	10-30VDC
Operating Temperature	-10° to 60°C
Relative Humidity	5 to 95% (non-condensing)
UL Rating	Class 1, Div 2; Groups A, B, C, D
UL Type Ratings	3R, 4, 4x, 12, 12k, 13
IP Rating	IP65



CANVAS SERIES



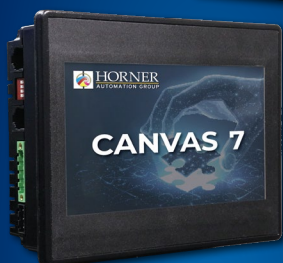
INDUSTRY LEADING ALL-IN-ONE CONTROLLERS

For years, the Horner XL and XL Prime Series have enjoyed a reputation as the most highly functional All-in-one Controllers available anywhere. These products are currently trusted with thousands of applications world-wide. The NEW Canvas Collection builds upon that proven reputation. Horner's Canvas Series of OCS controllers is just as the name implies - a new canvas for users to utilize a brand new set of enhanced graphics objects in Cscape 10 to give full creative freedom to create screens as technically advanced or as visually stunning as they desire. Take advantage of single touch swipe gestures and a redesigned system menu to build your application for the modern world. The Canvas Series also supports WebMI+ as the next iteration of one of the best remote access tools for your OCS controllers, and also offers MQTT Sparkplug, numerous CAN protocols and Enhanced IEC programming support right out of the box with no licensing fees.

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

For a comparison guide of the Canvas Collection of products, please [CLICK HERE](#) to visit our website.

MODELS:



Canvas Collection

The World's Most Advanced
All-In-One Controller Just Surpassed Itself!

FEATURES:

ALL-IN-ONE CONTROL - performs all machine functions in a unified hardware design; Logic Control, Operator Interface, I/O and Networking.

VIBRANT COLOR TOUCHSCREENS - Design modern and responsive machine control dashboards.

ALL NEW GRAPHICS OBJECTS - Designed from the ground up with all-new graphics. Trending, recipes, alarms - all redesigned with a modern look and fully featured.

MULTI-CORE MICROPROCESSOR - Fast, consistent scan times with separate, dedicated CPU cores for logic and graphics.

FLEXIBLE LOGIC LANGUAGES - Use the logic language of your choice - Advanced Ladder Logic or the IEC 6-1131 languages.

INDUSTRIAL ETHERNET - Fast and flexible Ethernet with Ethernet IP, Modbus TCP, BACnet IP; FTP file transfer and Email.

IIOT & REMOTE CONTROL - Push data to the cloud with MQTT Sparkplug. Remotely monitor and control the machine with WebMI+ from a web browser. No extra licenses required!

OCS360 CLOUD SERVICE READY - Canvas is pre-configured to support Horner's upcoming OCS360 Cloud Service

PROGRAM CANVAS USING CSCAPE 10 - To support all the major innovations we have packed into Canvas, we're introducing Cscape 10 - a major update to our free application development software. With Cscape 10, you'll develop graphics screens in tabs side-by-side with your logic routines. And with Canvas your screens can take advantage of fully redesigned objects such as our all-new Alarm Handler, Recipe Editor and Video Player. If graphs and trends are a critical element of your machine - Canvas offers all-new XY Graphs, Scatter Graphs and Trend Graphs. Trend Graphs support up to 16 pens, multiple Y-Axes and historical logging to microSD.



CSCAPE 10

[More information on the Canvas](#)

CANVAS SERIES PART NUMBERS

I/O OPTION	CV5	CV4	CV7	CV7D	CV10D
Option 0	HE-CV-043C-01	HE-CV-035C-00	HE-CV-070C-00	HE-CV-070D-00	HE-CV-101D-00
Option 2		HE-CV-035C-02	HE-CV-070C-02	HE-CV-070D-02	HE-CV-101D-02
Option 3		HE-CV-035C-03	HE-CV-070C-03	HE-CV-070D-03	HE-CV-101D-03
Option 4		HE-CV-035C-04	HE-CV-070C-04	HE-CV-070D-04	HE-CV-101D-04
Option 5		HE-CV-035C-05	HE-CV-070C-05	HE-CV-070D-05	HE-CV-101D-05
Option 6		HE-CV-035C-06	HE-CV-070C-06	HE-CV-070D-06	HE-CV-101D-06

LOGIC CONTROLLER		I/O OPTIONS	
CPU	ARM	CV5 Option (only)	4 DC In, 4 DC Out, 4 - 12 bit Analog In
Logic Scan Rate	0.02 ms/kB	Option 0	No Built-in I/O
Logic Program Size	2MB	Option 2	12 DC In, 6 Relay Out, 4 - 12-bit Analog In
Program Variables	50,000 words & 32,768 bits	Option 3	12 DC In, 12 DC Out, 2 - 12-bit Analog In
I/O Variables	1,024 words & 4,096 bits	Option 4	24 DC In, 16 DC Out, 2 - 12-bit Analog In
Logic Languages	Horner Advanced Ladder IEC 6-1131	Option 5	12 DC In, 12 DC Out, 2 - 14/16-bit Analog In (mA/V/Tc/mV/RTD), 2 - 12-bit Analog Out (mA/V)
		Option 6	12 DC In, 12 DC Out, 6 - 14/17-bit Analog In (mA/V/Tc/mV/RTD), 4 - 12-bit Analog Out (mA/V)
		Remote I/O	All Models Support SmartRail, SmartBlock, SmartStix, SmartMod and OCSI/O

CONNECTIVITY	
USB Ports	USB A: Storage, WiFi (opt), Video USB mini-B: Programming
Serial Ports	1 - RS-232 and 1 - RS-485 Addl RS232/RS485 on Canvas 7, 7D, and 10D
Serial Protocols	Modbus Master/Slave, BACnet MSTP Slave SNP, DFI, ASCII, NMEA
Ethernet Ports	1 - Canvas 4, Canvas 5, Canvas 7 2 - Canvas 7D, Canvas 10D
Ethernet Protocols	Modbus TCP Client & Server, BACnet IP Server, Ethernet IP I/O Device, Logix Tag Exchange, Ethernet Global Data, ASCII over Ethernet, WebMI, Email, FTP Server, NTP
CAN Ports	1 - CV5, CV4, CV7, 2 - CV7D, CV10D
CAN Protocols	CsCAN, CANopen (Master & Slave) J1939, DeviceNet Scanner

PHYSICAL DIMENSIONS (WXHxD)			
Canvas 4	mm/in	96 x 96 x 58 / 3.78 x 3.78 x 2.26	
Canvas 5	mm/in	96 x 125 x 31 / 3.79 x 4.92 x 1.22	
Canvas 7	mm/in	186 x 144 x 47 / 7.34 x 5.66 x 1.84	
Canvas 7D	mm/in	210 x 144 x 44 / 8.27 x 5.66 x 1.78	
Canvas 10D	mm/in	303 x 231 x 62 / 11.94 x 9.08 x 2.43	

USER INTERFACE		
Model	Resolution	Physical Keys
Canvas 4	320 x 240	4 + System Key
Canvas 5	480 x 272	0
Canvas 7	800 x 480	0
Canvas 7D	800 x 480	5 + System Key
Canvas 10D	1024 x 600	0

MEMORY & STORAGE	
Removable Mass Storage	microSD(>32GB) USB (>32GB)
Onboard Mass Storage (Program Storage)	EMMC (8GB)
High Speed RAM (Variable Storage)	MRAM (128kB)
All memory is 100% non-volatile (non-battery dependent)	

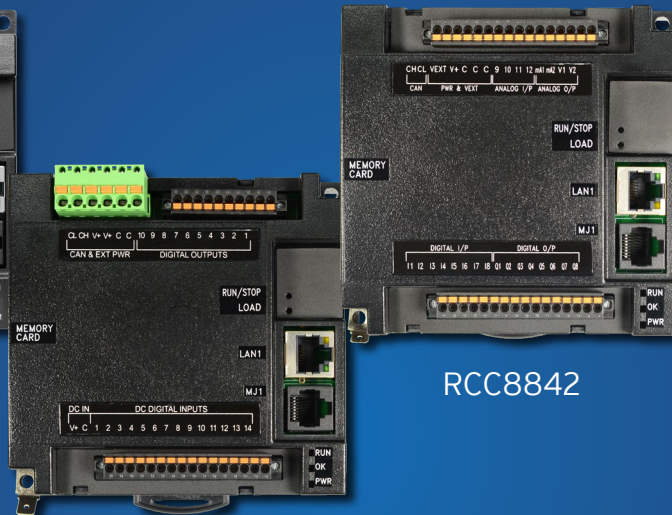
AUDIO & VIDEO	
Video Playback	USB Video, mp4 320 x 240
Audio Playback	wav, mp3 CV7D, CV10D only

OPERATING SPECS. & STANDARDS	
Primary Power Range	10-30VDC
Operating Temperature	-10° to 60°C
Relative Humidity	5 to 95% (non-condensing)
UL Rating	Class 1, Div 2; Groups A, B, C, D
UL Type Ratings	3R, 4, 4x, 12, 12k, 13
IP Rating	IP65

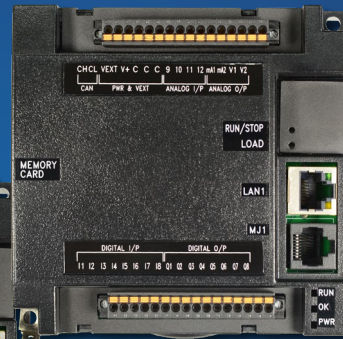
RCC SERIES



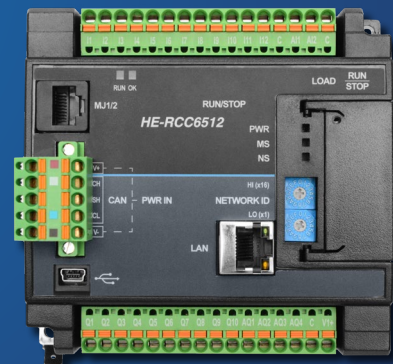
RCC972



RCC1410



RCC8842



RCC6512

LOWER COSTS, MORE OPTIONS, EASY-TO-USE

With fully integrated hardware and software, both the **RCC Series** 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. Neither the XL nor the RCC 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.

For a comparison guide of the RCC line of products, please [CLICK HERE](#) to visit our website.

RCC SERIES

Simple Needs, Intuitive Design

Provides original equipment manufacturers (OEMs), integrators, and automation end-users with flexible, functional I/O and simple all-in-one controller options without a built-in screen.



Agriculture

- Increase overall productivity
- Reduce energy consumption

Building Automation

- Improve occupant comfort
- Economical operation systems

Material Handling

- Minimize HMI inefficiencies
- Track/log/catalog data

Oil and Gas

- Maximize capacity utilization
- Maintain emission standards

Renewable Energy

- Data logging, remote access
- Sunlight and UV protection

Water/Wastewater

- Operate chlorination systems
- Station pump control

Flexibility Meets Functionality

The RCC series is smart enough to perfectly complement our OCS family and ideal for applications where a screenless controller is the best fit. RCC controllers also pair well with the remote capabilities of the Horner webOCS line of products.

The RCC controllers are equipped with a range of digital and analog inputs and outputs - providing users with superior I/O options for both Discrete and Process Applications.

Additionally, most RCCs contain RS-232 & RS-485, CAN and 10/100 Ethernet - which provides you with serial connectivity, I/O expansion, Ethernet communications and advanced functions such as e-mail and web serving.

Programming, Data Logging and Alerts

Use the RCC's built-in serial and Ethernet ports for Cscape programming. Utilize Horner's user-friendly, ladder-logic based PLC software, our IEC 6-1131 options, and application defined communications.

Data logging, application updates and advanced recipe handling are made easy via the built-in removable microSD™ memory card. Log process based on individual events or specific times; everything is completely customizable - create virtual black box functionality for your machine.

Versatility Meets Precision - Horner webOCS

Register RCC controllers with Horner webOCS products to monitor and control plant data from the palm of your hand. Published directly from the OCS Controller, the webOCS line allows the same or unique web pages to be monitored and controlled from your computer, tablet or other mobile device. Developed completely within our Cscape environment, webOCS allows for state-of-the-art HTML5 development without the need for web programming skills.

RCC972

Ladder Logic Memory	128KB
Logic Scan Rate	0.04 mS/K
Ethernet Support	Standard
Local Comment Storage	Yes
Built-in I/O Points	24
Digital I/O Max	2048 / 2048
Analog I/O Max	512 / 512

Serial Ports	1
Remote Access	WebMI, HTTP or EnvisionRV
USB Ports (A & Mini-B)	No
Integrated CsCan Network	Standard
Height (inches/mm)	4.370" / 111 mm
Width (inches/mm)	4.567" / 116 mm
Depth (inches/mm)	1.411" / 35.84 mm

RCC972

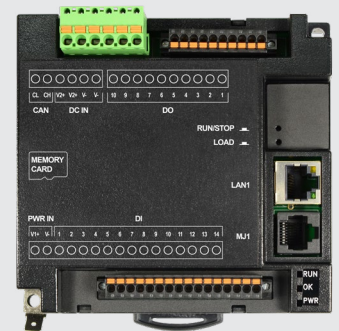


RCC1410

Ladder Logic Memory	1024KB
Logic Scan Rate	0.04 mS/K
Ethernet Support	Standard
Local Comment Storage	Yes
Built-in I/O Points	24
Digital I/O Max	2048 / 2048
Analog I/O Max	512 / 512

Serial Ports	2
Remote Access	WebMI, HTTP or EnvisionRV
USB Ports (A & Mini-B)	No
Integrated CsCan Network	Standard
Height (inches/mm)	4.370" / 111 mm
Width (inches/mm)	4.567" / 116 mm
Depth (inches/mm)	1.411" / 35.84 mm

RCC1410

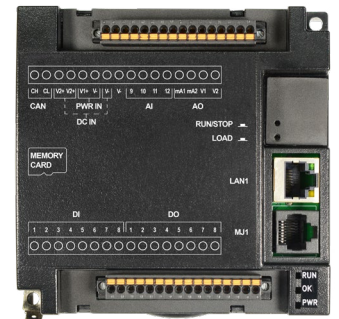


RCC8842

Ladder Logic Memory	1024KB
Logic Scan Rate	0.04 mS/K
Ethernet Support	Standard
Local Comment Storage	Yes
Built-in I/O Points	22
Digital I/O Max	2048 / 2048
Analog I/O Max	512 / 512

Serial Ports	2
Remote Access	WebMI, HTTP or EnvisionRV
USB Ports (A & Mini-B)	No
Integrated CsCan Network	Standard
Height (inches/mm)	4.370" / 111 mm
Width (inches/mm)	4.567" / 116 mm
Depth (inches/mm)	1.411" / 35.84 mm

RCC8842



RCC	Real Time Clock	DC In 12/24 VAC	DC Out 24 VDC	Analog In 0-20mA	Analog Out 0-20mA	Gen. Purpose Registers (words)	Gen. Purpose Internal Coils (bits)
972	no	8	4	8	4	4096	2048 (1024 retentive)
8842	yes	8	8	4	2	49999	32768 (16384 retentive)
1410	yes	14	10	-	-		

RCC BACK

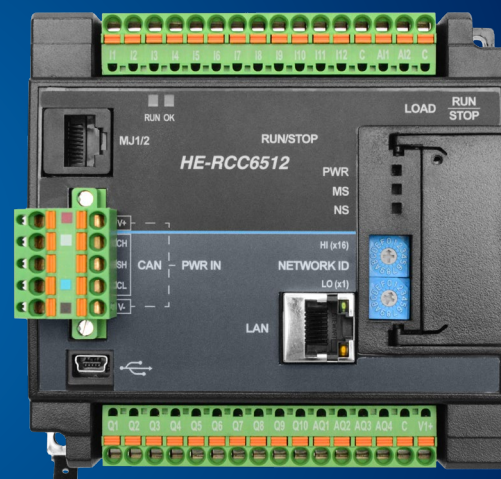


More information on the RCC Series

RCC6512

High-speed Remote I/O & Advanced Co-Processor

The RCC6512 is a versatile product to handle high speed applications. This device combines a control co-processor along with high-speed digital and analog I/O with integrated networking.



- Control Co-Processor programmed in Cscape
- Hardware high-speed I/O accelertor for handling high-speed inputs and outputs
- Eight high-speed counters that support totalizing, frequency, counting, pulse width measurement, period measurement or quadrature
- Ten sourcing high-speed outputs. Eight of which can be used as PWM signals
- Programmable input threshold for zero cross, 5V, 12V and 24V signals
- Programmable input filtering for 500kHz, 50kHz, and 5kHz

POWERFUL CO-PROCESSOR

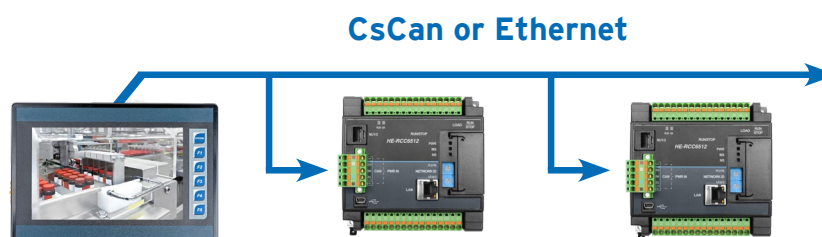
The RCC6512 is designed as an add-on co-processor to any application requiring advanced high-speed counting. The RCC6512 is programmed in Advanced Ladder using Cscape

HIGH-SPEED INPUTS, HIGH-SPEED OUTPUTS

The RCC6512 is built around a FPGA chip which provides speed and flexibility for its generous complement of high-speed I/O. On the input side, up to 8 totalizers or 4 quadrature accumulators can be supported at frequencies up to 500kHz. Analog Filtering prevents spurious noise from interfering with legitimate signals for accurare counting. Digital outputs can be configured as either setpoint controlled outputs or PWM signals. Analog Outputs (+/- 10V) are provided with motor speed control in mind.

FLEXIBLE COMMUNICATIONS

The RCC6512 supports multiple connectivity options. The on-board Ethernet port (10/100Mbps) supports some of the most popular industrial ethernet protocols. These include Modbus TCP Server, Ethernet IP I/O Device and Ethernet Global Data (EGD). Horner's highly efficient CsCAN network is also onboard with its peer-to-peer architecture and superior noise immunity.



[More information on the RCC6512](#)

RCC6512 General Specifications

Item	Specification	Item	Specification
Co-Processor Specifications		I/O Specifications	
Cscape Control Language	Advanced Ladder Logic	High-Speed DC Inputs	8 (5V/12V/24V) pos/neg
Logic Size & Scan Rate	16kB, 0.7uS/kB	Maximum HSC Frequency	500kHz (5k/50k/500k filter)
Programming Ports	USB, RS-232, microSD	General Purpose DC Inputs	4 (24V) pos/neg
General Purpose Registers (words)	2048 (256 Retentive)	High-speed DC Output	8 (5V/12V/24V) pos 0.5A
General Purpose Bits	2048 (Non-Retentive)	Max Frequency	500kHz
Digital I/O Registers	512 Input & 512 Output	General Purpose DC Outputs	2 (5V/12V/24V) pos 0.5A
Analog I/O Registers	256 Input & 256 Output	Analog Inputs	2 (0-10V, 0-20mA)
Dimensions (maximum)	4.67"H x 4.57"W x 2.81"D	Resolution, Accuracy	12-bits, 1% full scale
Required Power (steady-state)	120mA @ 24Vdc	Input Impedance	V: 100kohm mA: 15ohm
Primary Power Range	10-28Vdc	Analog Outputs	4 (-10V to +10V)
Operating/Storage Temperature	-10C to +60C	Resolution, Accuracy	12-bits, 0.25% full scale
Relative Humidity	5-95% Non-condensing	Minimum Load	500ohm

Part Number Description

[SmartBlock Standard](#)

HE579MIX102	Isolated mixed Digital/Analog I/O module (12/6/4)
HE579RTD100	Isolated RTD Input Module, 4 channel
HE579RTD200	Isolated RTD Input Module, 8 channel
HE579THM100	Isolated Thermocouple Input Module, 4 channel
HE579MIX577	Isolated Thermocouple Input Module, 8 channel
HE579MIX577	4 Analog Inputs, 2 Analog Outputs (0-10V, 0-5V, 0-20mA, 4-20mA)
HE579MIX977	8 Analog inputs, 4 Analog Outputs (0-10V, 0-5V, 0-20mA, 4-20mA)
HE579ADC570	6 Analog Inputs (0-10V, 0-5V 0-20mA, 4-20mA, and 10 K thermistor)
HE579ADC970	SmartBlock 12x Analog In, +10, 4-20mA, Thermistor
HE579DAC107	4 Analog Outputs (0-10V, 0-5V, 0-20mA, 4-20mA)
HE579DAC207	8 Analog Outputs (0-10V, 0-5V, 0-20mA, 4-20mA)
HE579DIQ880	8 DC inputs and 8 relay outputs
HE579DIQ8881	8 DC inputs and 8-.5 amp DC outputs
HE579MIX105	Isolated Mixed Digital/Analog I/O Module (12/12/2/2)
HE579ACM300	AC power Monitor (3-phase)

Part Number Description

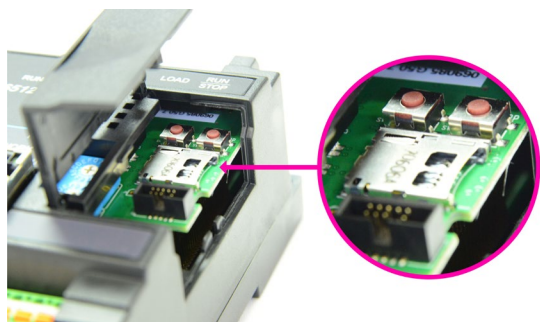
[SmartBlock Open-style](#)

HE-RLT12	Replacement relay for HE569DQM212
HE-SSR04	Replacement SSR for HE69DQM204
GE-SSR05	Replacement SSR for HE69DQM205
HE569DQM204	8 High Current, Socketed SSRs (AC)

Part Number Description

[SmartStix Standard](#)

HE559DIM610	16 DC Inputs (pos/neg)
HE559DIM710	32 DC Inputs (pos/neg)
HE559DQM602	16 Relay Outputs, 2A max
HE559DQM606	16 DC Outputs (pos) 0.5A max
HE559DQM706	32 DC Outputs (pos) 0.5A max
HE559DIQ816	16 DC Inputs (pos/neg) & 16 DC Outputs (pos) 0.5A max



The RCC6512 features a microSD slot for data logging and maintenance functions.



SmartStix Digital I/O can be used alongside SmartBlock I/O & the RCC6512 Co-processor.

OCS-I/O

Highly Expandable & Flexible Remote I/O for OCS

OCS-I/O packs a lot of flexibility, capability, and expandability in a small package that makes it the perfect complementary CsCAN solution for OCS platforms.



Field-Swappable - In order to minimize downtime, the OCS-I/O modules are hot-swappable - even the base! This lets you pop in/out replacements without the need to stop your machine or process and be right back up and running.

Fieldbus Network - CsCAN, has both a CsCAN In and CsCAN Out in order to easily daisy-chain your CsCAN network with module RJ45 connections.

Expand to 7 modules per base

& 16 modules per network
 Uses sturdy spring-clamp terminals to maintain a low-profile design

Compact Footprint - a loaded up base still fits in a footprint of 90H x 215W (mm) or 3.5H x 8.75W (in.)

Maybe You Only Need One More...

Sometimes you only need a little bit. Start with the CNX116 - which includes I/O right on the base! Meant as the perfect small amount of complementary I/O, the CNX116 gives you (2) **Flexible Inputs** (Digital or 12-bit Analog), (2) **Digital Outputs**, (1) 16-bit **Universal Analog Input** and (1) 12-bit **Analog Output** right onboard. Yes, you read that correctly - two inputs that can be used for either digital or analog signals, giving it up to 3 analog inputs without even needing another module!

...Or Maybe You Need A Lot

With expandability up to 7 modules per base and 16 bases per network, OCS-I/O can handle almost any amount of I/O needs. It even includes a CsCAN In and CsCAN Out port to allow you to easily daisy-chain multiple bases without requiring a lot of custom wiring.

Either Way, Configuration Is a Breeze

Whether it's a little or a lot, OCS-I/O configuration is meant to be simple and effortless. It's configured using Cscape software, so when wired up, it can find the base and autopopulate all installed modules automatically. From there you may only need to tweak a couple of configurations for the base or modules to be ready to go. Cscape also calculates the I/O power usage for you automatically, so you'll never overload an I/O base.



500m

[More information on the OCS-I/O](#)

CAN-based OCS-I/O supports up to 16 bases with a maximum network distance of 500m.

ADU100

Analog Inputs	4
Resolution	16-bit
Supported Input Types	RTD/TC/0-20mA/0-10V
Thermocouple Types	J/K/T/E/N/R/S
RTD Types	PT100, PT1000
Max Error at 25°C	0.2%
Operating Air Temp	-40°C to 60°C



DAC107

Analog Outputs	4
Resolution	12-bit
Output Ranges	0-20mA/4-20mA/ +/-10V
Minimum 10V Load	500Ω
Maximum Current Load	500Ω
Max Error at 25°C	0.2%
Operating Air Temp	-40°C to 60°C



DIM620

AC Inputs	8
Commons per Module	1
Input Voltage Range	90 to 240VAC
Absolute Max Voltage	260 VAC
OFF to ON Response	<20ms
ON to OFF Response	<20ms
Operating Air Temp	-40°C to 60°C



DIQ512

Digital Inputs	4
Input Voltage Range	12 to 24 VDC
Commons per Module	4
Relay Outputs	4
Max Output Voltage	120VAC
Max Output Current	3A each
Operating Air Temp	-40°C to 60°C



DIQ616

DC Inputs	8
Input Voltage Range	12 to 24 VDC
Input Commons	1
DC Outputs	8 (0.5A)
Absolute Max Voltage	32DC
Output Commons	1
Operating Air Temp	-40°C to 60°C



DQM502

Relay Outputs	4
Max Current per Relay	8A AC / 5A DC
Max Total Current	16A
Max Output Voltage	240VAC
Expected Life	100K @ Rated Load
Operating Air Temp	-40°C to 50°C



CNX116 Base

Max Number of Modules	7 per base
Flexible Inputs	2 (Digital or Analog)
Input Voltage Range	5V, 12V or 24V
Analog Input Types	0-20mA/4-20mA/0-10V
DC Outputs	2 (2A)
Output Voltage Range	10 to 30 VDC
Operating Air Temp	-40°C to 60°C

Universal Analog In	1
Input Resolution	16-bit
Supported Input Types	RTD/TC/0-20mA/0-10V
Max Error at 25°C	0.2%
Analog Outputs	1
Output Resolution	12-bit
Output Ranges	0-20mA/4-20mA/0-10V



CNX100 Base

Max Number of Modules	7 per base
Output Voltage Range	10 to 30 VDC



ADC270

Analog Inputs	8
Resolution	16-bit
Supported Input Types	4-20mA/0-20mA/0-10V
Input Impedance	15Ω (Current) 2MΩ (V)
Max Input Voltage	± 15V
Max Error at 25°C	0.2%
Operating Air Temp	-40°C to 60°C



DAC207

Analog Outputs	8
Resolution	12-bit
Output Ranges	0-20mA/4-20mA/0-10V
Input Impedance	500Ω
Max Input Voltage	± 30V
Max Error at 25°C	0.2%
Operating Air Temp	-40°C to 60°C



MIX105

DC Inputs	4
DC Outputs	4
Analog Inputs	4
Supported Input Types	4-20mA/0-20mA
Analog Outputs	2
Supported Output Types	4-20mA/0-20mA
Operating Air Temp	-40°C to 60°C



NTC800

Analog Inputs	8
Supported Input Types	10Ω Thermistor (Precon Type III)
Resolution	12-bit
Max Error at 25°C	0.2%
Resolution Scaling	0.1 Degree per count
Operating Air Temp	-40°C to 60°C



DIM610

DC Inputs	16
Input Voltage Range	12 to 24 VDC
Input Commons	2
Absolute Max Voltage	32DC
OFF to ON Response	<10ms
ON to OFF Response	<10ms
Operating Air Temp	-40°C to 60°C



DQM602

Relay Outputs	8
Input Commons	2
Max Output Voltage	240VAC
Max Current per Relay	2A
Max Current per Common	5A
Expected Life	100K @ Rated Load
Operating Air Temp	-40°C to 60°C



DQM606

DC Outputs	16
Input Commons	2
Max Output Voltage	28VDC
Max Current per Point	0.5A
Max Total Output Current	4A
Expected Life	100K @ Rated Load
Operating Air Temp	-40°C to 60°C



HSC840

High Speed DC Inputs	8
High Speed Input Modes	Frequency, Totalizer, Pulse Width Measurement, Period Measurement, Quadrature (4 max)
Max Input Frequency	500 kHz
High Speed DC Outputs	4
High Speed Output Modes	PWM, PTO, HSC Output, Stepper
Max Output Frequency	500 kHz
Operating Air Temp	-40°C to 60°C



[More information on the OCS-I/O](#)

OCS-I/O Module I/O Point Summary

CNX116 Base			
Flexible Inputs Digital or Analog	DC Outputs	Universal Analog Inputs	Analog Outputs
2*	2	1	1

*I1 and I2 can be configured as either digital or analog inputs

OCS-I/O	AC Inputs	DC Inputs	Relay Outputs	DC Outputs	Universal Analog Inputs	Analog Outputs
HE959ADU100	0	0	0	0	4	0
HE959DAC107	0	0	0	0	0	4
HE959DIM620	8	0	0	0	0	0
HE959DIQ512	0	4	4	0	0	0
HE959DIQ616	0	8	0	8	0	0
HE959DQM502	0	0	4	0	0	0
HE959ADC270	8	0	0	0	0	0
HE959DAC207	0	0	0	0	0	8
HE959MIX105	4	4	0	4	0	2
HE959NTC800	8	0	0	0	0	0
HE959DIM610	0	16	0	0	0	0
HE959DQM602	0	0	8	0	0	0
HE959DQM606	0	0	0	16	0	0
HE959HSC840	0	8 (HS)	0	4 (HS)	0	0

MODELS:



CPU and Plug & Play Collection

The OCS-I/O Lineup is Expanding!

The OCS-I/O lineup of modular and flexible expansion I/O has been extremely popular with our customers. When we started creating these products a few years ago, we always had a vision of a larger family of products in mind for what this lineup could expand to.

CPU250

The CPU250 is Horner's Micro OCS equivalent in the OCS-I/O CPU lineup. Serial, Ethernet, and CAN communications are available as standard, as well as support for WebMI that can be used as a remote interface. It also makes a transition to USB-C for programming purposes, and can even be powered locally by the same connection, in order to easily load a program on your test bench or desk setup! Like the Micro OCS lineup, the CPU250 comes with a great amount of onboard I/O. Up to 34 I/O points - a whopping 16 of which can be configured as analog! And if that isn't enough, as part of the OCS-I/O family it can easily be expanded with up to 7 OCS-I/O modules locally as well.

CPU300

With the all-new CPU300 in Horner's OCS-I/O CPU series, this advanced product really shines with the unseen flexibility of an All-In-One controller design. It starts with a powerful multi-core CPU with performance on par with Horner's Canvas series of controllers and includes a suite of new connectivity including USB Type C, dual ethernet ports with support for a built-in switch, and a new Display connection for remote displays that Horner has branded as "Plug and Play Displays". (Starting out with a 4", 7", 10", 15" and two with Advanced Features - in a 7" and 10") This connection provides power and display/touch signals to Plug and Play displays in a simplified and robust cable connection, fit for traditional panel builds as well as harsher environments such as mobile applications. It can be used with a variety of available screen sizes and resolutions, while still supporting a local 2.2" display that can be used for advanced diagnostics without the need for an HMI if needed.

On top of all the connectivity options is the ability to use OCS-I/O modules as local I/O up to 7 modules, plus an additional dedicated OCS-I/O port that can be used in junction with another rack of OCS-I/O modules (1 base + up to 7 modules) that can also be treated as local synchronous I/O. This dedicated port provides 24V power to the remote I/O base to once again provide a very simplified connection to all of your system hardware and reduce the number of terminal connections needed in your panel wiring.

CPUs

HE959CPU250

2MB Logic capacity, 50,000 %R Holding Registers

8 DC Inputs (4 High Speed), 10 DC Outputs (2 High Speed)

8 Flexible Inputs (Digital or Analog) configured as DC In or 0-10V/4-20mA inputs

8 Analog Outputs (4 x 4-20mA, 4 x 0-10V)

Compatible with OCS-I/O modules for local and remote I/O expansion

Ethernet, RS-232/485 and CAN ports, and WebMI-capable

USB-C for programming, Micro SD slot for datalogging



FEATURES

Controller

Ladder Logic Memory

Logic Scan Rate

Removable Memory

Onboard Display

Buttons

Plug & Play Compatible

Plug & Play Graphics

I/O

Local I/O Expansion

of I/O Modules Supported

Remote I/O Expansion

Digital Inputs/Outputs, Max

Analog Inputs/Outputs, Max

General Purpose Registers (words)*

General Purpose Internal Coils (bits)

Communications

Ethernet Ports

Ethernet Protocols

CAN Ports

CAN Protocols

Serial Ports

Serial Protocols

USB A Support

USB Type C Support

WebMI Support

Physical Specifications

Height (in / mm)

Width (in / mm)

Depth (in / mm)

Operating Specifications

Operating Temperature

Humidity (non-condensing)

Product Certifications/Approvals

Environmental Rating

HE959CPU300

2 MB

0.02 ms/K

Up to 32 GB Micro SD

2.2" 128 x 64 color display

Yes, used for local display navigation

Yes

Enhanced Graphics (Canvas)

Yes

7

OCS-I/O, SmartStix, SmartRail, SmartMod, SmartBlock

2048

2048

50,000

32,768

2 x 10/100 Mbps, built-in switch

Modbus TCP/IP, Ethernet/IP I/O Adapter, BACnet IP and more

2

CsCAN, DeviceNet, CANopen, J1939

2 in single RJ45 port (1 x RS-232, 1 x RS-485)

Modbus RTU master/slave, BACnet MSTP, GPS and more

Yes

Yes, Programming Only

Yes

(inches/mm)

(inches/mm)

(inches/mm)

-10°C to 60°C

5 to 95%

-

IP20



Plug & Play Displays



FEATURES		4"	7"	10"
Operator Interface	Part Number	HE-PD4	HE-PD7	HE-PD10
	Characters/Pixels	480 x 272	800 x 480	1024 x 600
	Display Technology	TFT Resistive Touch	TFT Resistive Touch	TFT Resistive Touch
	Brightness	350 nits	450 nits	250 nits
	Function Keys	Virtual	Virtual	Virtual
	Connection Type	Plug & Play Display Connector	Plug & Play Display Connector	Plug & Play Display Connector
Physical Specs	Height (in / mm)	3.79" / 96mm	5.65" / 143.50mm	6.5" / 166.2mm
	Width (in / mm)	4.92" / 125mm	7.33" / 186.08mm	10.4" / 263.9mm
	Depth (in / mm)	1.41" / 35.8mm	2.08" / 52.88mm	2.2" / 55.8mm
	Weight (lbs / kg)	.79 lbs / .36 kg	1.3 lbs / .59 kg	2.45 lbs / 1.11 kg
	Vesa Mount Support	75 x 75mm or Panel Mount	100 x 100mm or Panel Mount	100 x 100mm or Panel Mount
Operating Specs	Operating Temperature	-10°C to 60°C	-10°C to 60°C	-10°C to 60°C
	Humidity (non-condensing)	5 to 95%	5 to 95%	5 to 95%
	Environmental Rating	IP65	IP65	IP65



FEATURES		15"	7" ADV	10" ADV
Operator Interface	Part Number	HE-PD15	HE-AP7	HE-AP10
	Characters/Pixels	1024 x 768	800 x 480	1280 x 800
	Display Technology	TFT Resistive Touch	IPS LCD with PCAP Touch	IPS LCD with PCAP Touch
	Brightness	500 nits	1000 nits	1000 nits
	Function Keys	Virtual	Virtual	Virtual
	Connection Type	Plug & Play Display Connector	Plug & Play Display Connector	Plug & Play Display Connector
Physical Specs	Height (in / mm)	12.6" / 320mm	5.8" / 147.32mm	7.5" / 190.5mm
	Width (in / mm)	14.57" / 370.08mm	7.8" / 198.12mm	10.5" / 254mm
	Depth (in / mm)	4.08" / 103.6mm	1.2" / 30.48mm	2" / 50.8mm
	Weight (lbs / kg)	6.97 lbs / 3.16 kg	1.6 lbs / .73 kg	2.0 lbs / .91 kg
	Vesa Mount Support	100 x 100mm or Panel Mount	75 x 75mm or 100 x 100mm	75 x 75mm or 100 x 100mm
Operating Specs	Operating Temperature	-10°C to 60°C	-40°C to 80°C	-30°C to 70°C
	Humidity (non-condensing)	5 to 95%	5 to 95%	5 to 95%
	Environmental Rating	IP65	IP67	IP67