AN INDUSTRY LEADER IN ALL-IN-ONE CONTROLS

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INDUSTRY LEADING ALL-IN-ONE CONTROLLER

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 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 utilise a brand new set of enhanced graphics objects starting with 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 payloads, 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!

- ALL-IN-ONE CONTROL - performs all machine functions in a unified hardware design; logic control, operator interface, I/O and networking.
- VIBRANT COLOUR 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. 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 introduced Cscape 10 - a major update to our free application development software. From Cscape 10 onwards, 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.

SMALL FOOTPRINT, EASY-TO-USE WITH PLENTY OF I/O

With fully integrated hardware and software, Canvas offers easier programming, installation and set-up than a separate PLC and HMI in a smaller footprint. Does your system require a lot of I/O? Canvas is not limited to on-board I/O only. Easily expand your I/O system using OCS-I/O, our innovative new Horner I/O system. Or choose one of our other established I/O series including SmartRail, SmartStix or SmartBlock. Add I/O in the same control panel or distribute it on the machine or throughout the facility. Whatever fits your requirements.

CONNECTIVITY

Canvas is designed to connect seamlessly in almost any environment. For the factory, Ethernet IP and Modbus TCP interact easily with just about any automation component. BACnet IP is the choice in modern Building Automation systems. With CAN, add I/O (CsCAN), connect to a fieldbus (CANopen) or mobile network (J1939). And with RS232/485 use Modbus RTU or another protocol to interface to variable frequency drives, bar code scanners or legacy equipment.

IIOT & AI READY WITH MQTT

Canvas also fully enables your machine for Industry 4.0 - the Industrial Internet of Things (IIoT) revolution. Canvas is pre-configured to connect to the Horner Cloud - OCS360. If you opt-in to this data collection service - you'll be gathering machine data in no time - collecting data you'll need in the future for data hungry advancements like AI Machine Learning.

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
† Model 1 applies to the Canvas 5 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

CANVAS SERIES PART NUMBERS

Model	Model 0 No I/O	Model 2	Model 3	Model 4	Model 5	Model 6
Canvas 4	HE-CV-035C-00	HE-CV-035C-02	HE-CV-035C-03	HE-CV-035C-04	HE-CV-035C-05	HE-CV-035C-06
Canvas 5	HE-CV-043C-01 - Model 1, see specifications above					
Canvas 7	HE-CV-070C-00	HE-CV-070C-02	HE-CV-070C-03	HE-CV-070C-04	HE-CV-070C-05	HE-CV-070C-06
Canvas 7D	HE-CV-070D-00	HE-CV-070D-02	HE-CV-070D-03	HE-CV-070D-04	HE-CV-070D-05	HE-CV-070D-06
Canvas 10D	HE-CV-101D-00	HE-CV-101D-02	HE-CV-101D-03	HE-CV-101D-04	HE-CV-101D-05	HE-CV-101D-06
Canvas 15*	HE-CV-151-00	HE-CV-151-02	HE-CV-151-03	HE-CV-151-04	HE-CV-151-05	HE-CV-151-06

*this model coming soon

CANVAS 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 Canvas 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+ & OCS360 - TAKE (REMOTE) CONTROL

Canvas includes WebMI+, to monitor or control your machine from the palm of your hand using any mobile device or web browser. Your remote view can match Canvas screens exactly, or be developed using Cscape 10 as custom, high resolution web views. WebMI+ screens are published directly from Canvas OCS. But future Horner services will provide a variety of site management capabilities - including serving up WebMI+ web pages at a high bandwidth with more simultaneous views.

Configure WebMI+ in Cscape 10
Implement your OCS web pages without any manual HTML development.

User Level Security
Choose View-only or Full Control - Object by object & user by user

IIOT – Industrial Internet of Things
Instantly connect to your automated applications for instant status and live data.

HTML5
Deliver Machine Snapshots or Custom Web Views to any web browser

Scalable Vector Graphics (SVG)
Sharp, clear, and professional screens regardless of the device or screen resolution.

Future Ready with OCS360
Canvas is pre-configured to support Horner's upcoming OCS360 cloud service

HORNER AUTOMATION GROUP

CANVAS COLLECTION

EXCEPTIONAL GRAPHICS AND MULTI-CORE PROCESSING POWER
OCS - THE COMPLETE "ALL-IN-ONE" CONTROLLER

CANVAS COLLECTION

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FEATURES		Canvas 4	Canvas 5	Canvas 7	Canvas 7D	Canvas 10D
Controller	Ladder Logic Memory	2MB	2MB	2MB	2MB	2MB
	Logic Scan Rate	0.02mS/K	0.02mS/K	0.02mS/K	0.02mS/K	0.02mS/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
Operator Interface	Characters/Pixels	320x240	480 x 272	800 x 480	800 x 480	1024 x 600
	Display Technology	3.5" QVGA	4.3" LCD with LED 450 nits	7" WVGA	7" WVGA	10.1" WSVGA
	Character Height	Selectable Fonts	Selectable Fonts	Selectable Fonts	Selectable Fonts	Selectable Fonts
	Number of Screens	1023	1023	1023	1023	1023
	Fields or Objects per Screen	1023	1023	1023	1023	1023
	Total Keys	5	5 (on screen)	6 (on screen)	6	6 (on screen)
	Function Keys	4	4 (on screen)	5 (on screen)	5	5 (on screen)
	OEM Faceplate Available	Yes	Yes	Yes	Yes	Yes
I/O	Built-in I/O points	22 - 42	12	22-42	22 - 42	22 - 42
	Add on - SmartStix, SmartRail, SmartBlock, SmartMod	CsCAN & Ethernet	CsCAN & Ethernet	CsCAN & Ethernet	CsCAN & Ethernet	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)*	50,000	50,000	50,000	50,000	50,000
	General Purpose Internal Coils (bits)	32768 (16384 ret.)	16384	32768 (16384 ret.)	32768 (16384 retentive)	32768 (16384 retentive)
Ethernet/ Internet	Ethernet Support	Standard	Yes	Standard	Standard, 2 Ports	Standard, 2 Ports
	Remote Access	HTTP or EnvisionRV	EnvisionRV	HTTP or EnvisionRV	HTTP or EnvisionRV	HTTP or EnvisionRV
	Remote File Access	FTP or EnvisionFX	EnvisionFX	FTP or EnvisionFX	FTP or EnvisionFX	FTP or EnvisionFX
	WebMI Compatibility (Licensed Option)	Yes	Yes	Yes	Yes	Yes
Serial Communications	Serial Ports	2	2	3	3	3
	RS-232 Ports/RS-485 Ports	RS-232 & RS485 (1 of each)	RS-232 / RS485 (x2)	RS-232 &/or RS485	RS-232 &/or RS485	RS-232 &/or RS485
	PLC/Drive Protocols	Yes	Yes	Yes	Yes	Yes
	RTU/Modbus Master/Slave/Serial ASCII In/Out	Yes	Yes	Yes	Yes	Yes
	USB Port - USB 2.0 port A	Datalog & Backup	Datalog & Backup	Datalog & Backup	Datalog & Backup	Datalog & Backup
	USB Port -Mini-B port	Programming Only	Programming Only	Programming Only	Programming Only	Programming Only
Networking	Integrated CsCAN Network	Standard	Standard	Standard	Standard, 2 Ports	Standard, 2 Ports
	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)	3.78" / 96.0 mm	3.79" / 96 mm	5.66" / 143.8 mm	5.66" / 143.8 mm	9.08" / 230.6 mm
	Width (inches/mm)	3.78" / 96.0 mm	4.92" / 125 mm	7.34" / 186.08 mm	8.27" / 210.1 mm	11.94" / 303.3 mm
	Depth (inches/mm)	2.26" / 57.5 mm	1.22" / 31 mm	1.84" / 46.62 mm	1.78" / 43.94 mm	2.43" / 61.7 mm
	I/O Module Depth	COM opt adds 0.5"/13mm depth	COM opt adds 0.5"/13mm depth	COM opt adds 0.9"/22mm depth	COM opt adds 0.9"/22mm depth	COM option adds 0.5" / 13 mm depth
Operating Specifications & Standards	Operating Temperature	-10 to 60ºC	-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%	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
	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 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