HORNER
AUTOMATION GROUP

X10 Micro OCS

A Premium Addition to a Suite of Built-In I/O Control Solutions

Utilising comprehensive, built-in I/O, and high-resolution colour graphics to empower organisations across a multitude of industries.

APPLICATIONS

Agriculture
- Greenhouse automation
- Enhanced resource management

Building Automation
- Comprehensive system
- Upgrade for obsolete controls

Material Handling
- Minimise HMI inefficiencies
- Track/log/catalog data

Oil and Gas
- Maximise capacity utilisation
- Maintain emission standards

Renewable Energy
- Data logging, remote access
- Sunlight and UV protection

Water/Wastewater
- Station pump controls
- Remote water well controls

COMPREHENSIVE ADVANTAGE
With the addition of the X10 Micro OCS controller, our engineers at Horner Automation have designed a slim, versatile, and complimentary product to our existing line of robust industrial solutions. The X10, when utilised as an introductory piece, empowers your organisation to grow by seamlessly incorporating additional Horner solutions (such as our more basic X4, and X7 Micro OCS controllers) to your expanding system.

POWERFUL CONTROL SOLUTION
In the market of cost-effective all-in-one controllers, the web-compatible X10 is unmatched in its abilities to control, communicate, and log data. Suited for applications across a diverse range of industries, the X10 exceeds standards (and expectations). With its efficient processor speed and larger, intuitive user interface, the suite of capabilities within the X10 expand upon our established X4 and X7 products.

FLEXIBLE I/O CONFIGURATION
In an effort to make the latest Horner Micro OCS controller as widely applicable as possible, the X10 has been designed with a streamlined set of onboard I/O supporting an impressive array of applications. Discrete manufacturing is well supported with 20-24 digital I/O points – including high-speed inputs and outputs. Are your requirements process oriented? The X10 includes analog inputs and outputs, with support for 4-20mA signals and RTD temperature sensors. If the built-in I/O isn't enough for your specific application – easily expand via Ethernet, CAN, or RS-485.

SPACE-SAVING DESIGN
The wide, sleek profile of the X10 enables you to fit more in your panel, saving space and resources. The X10 packs a big picture into an overall small package. With just a 6.88" x 5.193" cutout, this 10" wide aspect screen is intuitive, and clear.

PHYSICAL CHARACTERISTICS

1 Touchscreen

2 High Capacity MicroSD Slot

3 RS232/RS485 Serial Connector, CAN Port (via RJ45) Ethernet LAN Port

4 USB mini-B port

5 Analog I/O, DC Inputs, DC Outputs

6 DC Power

PHYSICAL SPECIFICATIONS

Dimensions	mm: 265 wide x 167.8 tall x 52.1 overall depth in: 10.4 wide x 6.6 tall x 2.05 overall depth
Weight	590g / 20.8oz

STANDARD ONBOARD I/O

Total Digital Inputs	12 x 24VDC Sinking/Sourcing
Analog Inputs	4 x 4-20mA, or 2 x RTD*
Analog Outputs	2 x 4-20mA
High Speed Inputs	4 @ 500kHz
High Speed Outputs	2 @ 65kHz
Remote I/O	All Models Support SmartRail, SmartBlock, SmartStix, SmartMod, various 3rd party I/O devices

*A 3rd and 4th RTD channel is available if Analog Outputs are not used

MODEL-DEPENDENT OUTPUTS

HE-X10A	12 x 24VDC Sourcing 0.5A
HE-X10R	6 x Relay 3A, 2 x Sinking 0.5A

INPUTS/OUTPUTS MODEL OVERVIEW

	MODEL R	MODEL A
DC In	12	12
DC Out	2	12
Relays	6	–
HS In	4	4
HS Out	2	2
Analog In	mA x 4 or RTD* x 4	4
Analog Out	mA x 2	2

*A 3rd and 4th RTD channel is available if Analog Outputs are not used

There are four high-speed inputs of the total DC Inputs.
There are two high-speed outputs of the total DC outputs.

Model A supports sourcing outputs. Model R DC outputs are sinking with integral pull up resistors.

CONTROLLER

CPU	32-bit ARM with Integrated Graphics Controller
Logic Scan Rate	0.4 mS/K
Built-In Storage	16MB
Removable Memory	Up to 32GB microSD
Retentive Storage	128K Battery-Backed Ram
Programming Languages	Advanced Ladder or Full IEC 61131-3 languages

USER INTERFACE

Display Technology	10" Wide
Resolution / Color	1024 x 600, 65K Colours
Touch Screen	Resistive

CONNECTIVITY

Serial Ports	1 Port with RS-232 and RS-485
USB Ports (Mini-B)	USB 2.0 Programming only
Ethernet	1x10Mbps/100Mbps
CAN	125kB, 250kB, 500kB, 1 Mb

OPERATING SPECS. & STANDARDS

Primary Power Range	9 - 30VDC
Operating Temperature	-10˚ to 60˚ C
Humidity	5 to 95% Non-Condensing

Please visit our website for a complete listing and to learn more about certified Horner Automation products.

HA-340-EU