HORNER AUTOMATION GROUP

# SmartRail I/O

## Highly Expandable Remote & Expansion I/O for OCS

SmartRail I/O Expands the I/O Capacity of OCS All-In-One Controllers. SmartRail uses Fieldbus technology, and can be installed locally or hundreds of meters away.


Flexible fieldbus selection
- CsCAN
- Ethernet
- CANopen
- Profibus

Local expansion I/O or remote I/O up to 500m away

Expand to 8 modules per base, & 16 bases per network

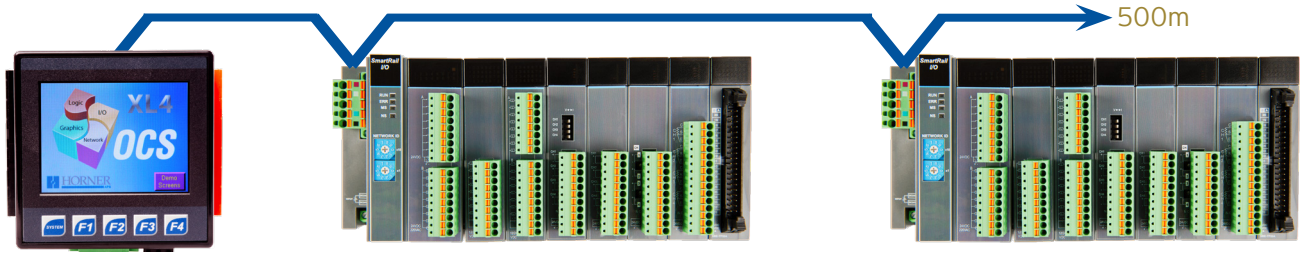
Screw-type terminals, standard spring-clamp style optional

### SmartRail is Modular, Flexible & Compact

SmartRail I/O is a modular I/O system for OCS offering a choice of fieldbus networks (CsCAN, Ethernet, CANopen and Profibus). It is a flexible I/O system that can be applied as a local expansion I/O or remote I/O distributed over hundreds of meters. SmartRail is also a compact I/O system - supporting 128 I/O points in a footprint of only 90H x 215W (mm) or 3.5H x 8.75W (in.)

### SmartRail is Easy to Configure

SmartRail gives you the benefit of Fieldbus I/O with much less complex configuration. SmartRail I/O is easily configured using Cscape programming software. Just select your I/O base - and then start adding I/O modules. Cscape even calculates I/O power usage for you automatically - so you'll never overload an I/O base.




CAN-based SmartRail supports up to 16 bases with a maximum network distance of 500m.
Shown above with optional spring-clamp terminal strips.

59 South State Ave., Indianapolis, IN 46201 | (p) 317.916.4274 (tf) 877.665.5666 (f) 317.639.4279 | www.hornerautomation.com

## SmartRail Specifications

| Item | SmartRail I/O Specification | | | |
|---|---|---|---|---|
| Bus Interfaces | Ethernet | CsCAN | CANopen | Profibus |
| Bus Connectors | Dual RJ45 | 5-pin Terminal | | 9-pin Dsub |
| Max Modules per Base | 8 | | | |
| Max Digital I/O per Base | 256 total | 256 total | 256 total | 128 in + 128 out |
| Max Analog I/O per Base | 32 | 32 | 32 | 16 in + 16 out |
| Max Bases per Network | 16 | | | |
| Input Power | 0.55A @ 24Vdc | | | |
| Temperature | Operating: -10˚C to +60˚C Storage: -25˚C to +70˚C | | | |
| Relative Humidity | 5% to 95%, non-condensing | | | |

Class I, Division 2
Groups A, B, C, D

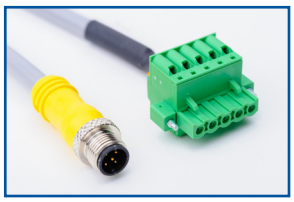
## SmartRail Model Numbers

| Part Number | Description |
|---|---|
| I/O Bases | |
| HE599ETX200 | Ethernet Base with Built-in Switch |
| HE599ETX250 | Modbus TCP/Ethernet/IP Base with Built-in Switch |
| HE599CNX100 | CsCAN I/O Base |
| HE599COS100 | CANopen I/O Base |
| Analog Modules | |
| HE599ADC170 | 4ch 4-20mA, 0-10V Analog Inputs |
| HE599RTD100 | 4ch RTD Inputs |
| HE599THM100 | 4ch Thermocouple Inputs |
| HE599MIX116 | 2ch/2ch 4-20mA, 0-10V Analog In/Out |
| HE599DAC101 | 4ch 0-10V Analog Outputs |
| HE599DAC106 | 4ch 4-20mA Analog Outputs |
| Ethernet Accessories | |
| HE599CBEnnn | Shielded Ethernet Cables (nnn=length) |

| Part Number | Description |
|---|---|
| Digital Modules | |
| HE599DIM510 | 8pt DC Input (pos/neg logic) |
| HE599DIM610 | 16pt DC Input (pos/neg logic) |
| HE599DIM710* | 32pt DC Input (pos/neg logic) |
| HE599DIQ512 | 8pt/8pt DC Input/Relay Output |
| HE599DQM502 | 8pt Relay Output, 2A |
| HE599DQM602 | 16pt Relay Output, 2A |
| HE599DQM506 | 8pt DC Output (pos logic), 0.5A |
| HE599DQM606 | 16pt DC Output (pos logic), 0.5A |
| HE599DQM706* | 32pt DC Output (pos logic), 0.2A |
| I/O Wiring Accessories | |
| HE599TRM040 | DIN-rail Terminal-strip for 32pt I/O |
| HE599CBLn40 | Terminal Strip Cable for 32pt I/O (0.5m, 2m) |
| HE599RLY037 | DIN-rail Relay Base for 32pt DC Out |
| HE599CBLn37 | Relay Base Cable for 32pt Out (0.5m, 2m) |

*Requires wiring accessories for termination

## Wiring Accessories

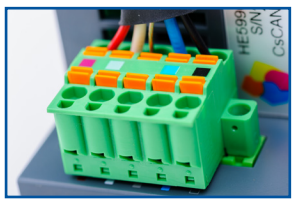


HE200CCT512
CAN Cordset Adapter & Power Tap

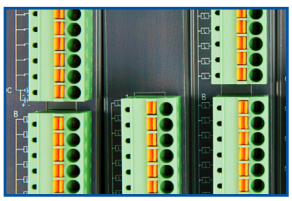
HE200CNT100
CAN Network Tee

HE200CNCnnn
CAN Network Cordsets (nnn=length)

HE200CTn100
CAN Terminator (n =Male or Female)



HE200ACC500
CAN Double Plug



HE599TRMnnn
Spring-Clamp I/O Terminals
(nnn=# of positions)

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