

# SMARTSTIX™ I/O FOR THE XL SERIES OCS



All models shown smaller than actual size.



HE559DIQ816, \$365



HE559DIM610, \$195

HE559 Series  
Starts at  
**\$195**



\* Digital models only.

- Expands Analog and Digital I/O of Any OCS Using a CsCAN Network
- May be Used Locally or Remotely
- Extremely Compact
- Removable Screw Terminals

## A New I/O for OCS

SmartStix™ I/O is a new terminal-block style I/O designed for use with the the XL series Operator Control Station (OCS). It can be used to expand the I/O capacity of any OCS, and it is very cost effective as remote I/O. SmartStix I/O connects to any OCS CsCAN™ network port to provide the best I/O selection for the application. And, output modules feature Electronic Short-Circuit Protection (ESCP).

## Compact, DIN-Rail Mounted

SmartStix I/O is extremely compact, providing 16 and 32 point digital I/O in a package only 39 mm (1.5") deep and a footprint of 50 H x 116 W mm (2 x 4.5") or 50 H x 177 W mm (2 x 7"). With its small footprint, SmartStix I/O takes up very little panel space whether located in the main control panel or tucked away in a remote location. SmartStix I/O has a barrier style terminal strip and can be mounted on a DIN-Rail. Plus, removable terminals make field replacement fast and convenient.

## Expands I/O Capacity, Local or Remote

SmartStix I/O easily expands the I/O capacity of any OCS utilizing the CsCAN network port available with every model. It is especially cost effective when added to an XL Series OCS. SmartStix I/O offers fast response times without sacrificing robustness, with no need for a costly I/O interface unit. In addition to its peer-to-peer capabilities, CsCAN is used as a highly efficient method of distributing SmartStix I/O up to 1829 m (6000')\* away.

\* Maximum distance is 457 m (1500') per segment, with up to 1829 m (6000') possible using repeaters.

## Easy to Set Up

SmartStix require minimal time and complexity to configure. Just assign a unique ID, connect the 5-wire shielded cable and you will be up and running in no time.

## SPECIFICATIONS

- Bus Protocol:** CsCAN (control station controller area network)
- Bus Connector:** 5-position terminal strip
- Maximum Distance:** 457 m (1500') per segment; 4 segments max
- Maximum Number of Total Nodes:** 253
- Module Configuration Method:** Module ID set using two rotary switches
- LED Indication:** I/O status (one per point); power, module status, network status
- Output Protection:** Electronic short-circuit protection (16 and 32 output modules only)
- Product Certifications:** CE (all models), UL (digital only)
- ANALOG INPUTS**
- Input Ranges:** ±5V, ±10 Vdc, 4 to 20 mA, ±20 mA DC
- Resolution:** 14 bits
- Accuracy@ 25°C:** 0.1%



HE559DIQ816, \$365



HE559DIM610, \$195

**Input Impedance:** 1 M $\Omega$  (voltage range), 150  $\Omega$  (mA range)

**Isolation:** 1000 Vdc IEC61010-1 300 VRMS

**Maximum Continuous Overload:** 150 Vac ( $\pm 10V$ ),  $\pm 30$  mA ( $\pm 20$  mA), clamped at  $\pm 6V$

**DIGITAL INPUTS**

**Rated Input Current:** 7 mA

**Rated Voltage:** 11 to 25 Vdc

**ON Voltage Level:** 19 Vdc or less

**OFF Voltage Level:** 6 Vdc or less

**Input Characteristics Bidirectional**

**Isolation Method:** Photo coupler

**OFF to ON Response:** 0 to 3 ms or less

**ON to OFF Response:** 0 to 3 ms or less

**ANALOG OUTPUTS**

**Output Ranges:**  $\pm 5$ ,  $\pm 10$  Vdc, 4 to 20 mA,  $\pm 20$  mA DC

**Resolution:** 14 bits

**Accuracy@ 25°C:** 0.1%

**Load Resistance:** 600 min (voltage), 500 max (mA)

**Isolation:** 1000 Vdc, IEC61010-1 300 VRMS

**Output Characteristic:** Sourcing

**DIGITAL OUTPUTS**

**Operating Voltage:** 24 Vdc

**Rated Load Voltage:** 24 Vdc

**Output Type:** Sourcing

**Maxload Current:** 0.5 A max per output 3 A per common

**OFF to ON Response:** 2 mS

**ON to OFF Response:** 2 mS

**RELAY OUTPUTS**

**Rated Load Voltage:** 24 Vdc, 220 Vac

**Minimum Load Voltage/Current:** 5 Vdc/1 mA

**Maximum Load Current (Resistive):** 2.0 A per channel, 5.0 A per common

**OFF to ON Response:** 10 mS max

**ON to OFF Response:** 12 mS max

**Output Type:** NO

**Dimensions (Approx):**

**32 I/O, Analog I/O or Relay Output:** 176 L x 48 D x 50 mm H (7 x 1.9 x 2")

**16 I/O (Not Relay):** 115 L x 48 D x 50 mm H (4.5 x 1.9 x 2")

**To Order (Specify Model Number)**

**MOST POPULAR MODELS HIGHLIGHTED!**

DIGITAL I/O		
MODEL NO.	PRICE	DESCRIPTION
HE559DIM610	\$195	16 DC inputs (24 Vdc positive/negative logic) I/O expander for CsCAN with removable field terminals
HE559DIM710	330	32 DC inputs (24 Vdc positive/negative logic) I/O expander for CsCAN with removable field terminals
HE559DIQ816	365	16 DC inputs (24 Vdc positive/negative logic) plus 16 DC outputs (pos logic) 0.5 A I/O expander for CsCAN with removable field terminals
HE559DQM602	235	16 relay outputs (250 Vac, 30 Vdc, 2 A) for CsCAN with removable field terminals
HE559DQM606	235	16 DC outputs (24 Vdc positive logic, 0.5 A) I/O expander for CsCAN with removable field terminals
HE559DQM706	399	32 DC outputs (24 Vdc, positive logic, 0.5 A) I/O expander for CsCAN with removable field terminals
ANALOG I/O		
HE559MIX577	580	4 analog inputs ( $\pm 10V$ , $\pm 20$ mA) 14-bit resolution plus 2 analog outputs ( $\pm 10V$ , $\pm 20$ mA) 14-bit resolution; channel-by-channel voltage/current selection for all channels; for CsCAN with removable field terminals

SmartStix I/O module comes with a 5-pin terminal style network connector. An optional M12 adaptor for M12 cable sets is available. SmartStix I/O have removable terminals and can be DIN-rail mounted.

Ordering Example: HE559DIM610, 16 DC input model, \$195.



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