



SmartBlock

Easy & cost-effective way to add advanced I/O

SmartBlock expands the I/O capacity of OCS All-In-One Controllers. Using CsCAN communications, SmartBlock I/O provides easy configuration and network expansion.

Wide variety of analog, digital and mixed input/output options

Easy-to-read, separate I/O connectors

LED indicator lights for each I/O point, power and network status

Include a 5-pin double CsCAN plug and Removable Field Wiring Terminals

DIN-rail mountable, in fully enclosed plastic housing

Easy to Configure & Expand

SmartBlock is designed to complement the extremely popular SmartStix Digital I/O family. These two I/O families can be used to expand the I/O capacity of just about any OCS by merely a few points – or potentially few thousand. Additionally, SmartBlock is easily configured using the Horner Cscape software and can be quickly implemented into an existing or new OCS controller.

Isolated & Highly Accurate Analog

The SmartBlock modules can be fully isolated and are highly accurate with 16-bit resolutions on most models. RTD & THM Analog models offer a .5°C accuracy margin with a 0.1°C resolution making SmartBlock a perfect match for applications that need precise, accurate data, noise immunity, and data integrity.



CsCAN supports up to 253 nodes with a maximum network distance of 1500 meters.

SmartBlock General Specifications

| Item | SmartBlock I/O Specifications |
|--------------------------------|--|
| Bus Protocol | CsCAN |
| Bus Connector | Dual 5-pin Removable Terminal |
| Maximum Distance | 1500 meters |
| Maximum Number of Nodes | 253 |
| Power Range | 10–30 VDC |
| Temperature | Operating: 0°C to +60°C Storage: -10°C to +60°C |
| Relative Humidity | 5% to 95%, non-condensing |
| Module ID Configuration Method | Dual Rotary Switches |

SmartBlock Model Numbers

| 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 |
| HE579THM200 | 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 10K 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 |
| HE579DIQ881 | 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) |
| HE-CTB505 | Current transformer, 50/5A |
| HE-CTD2505 | Current transformer, 250/5A |
| HE-CTD5005 | Current transformer, 500/5A |
| HE-CTF30C5 | Current transformer, 3000/5A |
| HE579ACM302 | AC Power Monitor (3-Phase) using Rogowski coil inputs |

| Part Number | Description |
|---------------------------------------|---|
| SmartBlock Open Frame | |
| HE-RLY12 | Replacement relay for HE569DQM212 |
| HE-SSR04 | Replacement SSR for HE569DQM204 |
| HE-SSR05 | Replacement SSR for HE569DQM205 |
| HE569DQM209 | 8 High Current Direct Connect Relays |
| HE569DQM212 | 8 High Current, Socketed Relays |
| HE569DQM212-12 | 8 High Current, Socketed Relays, supports 12V relay coils |
| HE569DQM204 | 8 High Current, Socketed SSRs (AC) |
| HE569DQM205 | 8 High Current, Socketed SSRs (DC) |

SmartStix Digital I/O (shown) complements SmartBlock Analog & Specialty I/O

