



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

