

MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

HONEYWELL CONTROLEDGE 900

900A16-0103

16-CHANNEL ANALOG INPUT MODULE

Used with the applicable Honeywell ControlEdge 900 configuration.

REFERENCE PACKAGE

OFFICIAL DOCUMENT

Selected official manufacturer pages follow this cover.

Source: Honeywell official manufacturer documentation

High Level Analog Input Module (900A16-xxxx)

The High-Level Analog Input module supports up to 16 user-configurable inputs on a per point basis for Voltage or current. Point-to-point isolation and back-plane isolation are provided. Modules perform analog to digital conversion in synchronization with CPU control execution, eliminating data interchange latency. All analog input modules are processed in parallel, eliminating scan time increases as modules are added.

A green blinking status LED on the module indicates when the module is being scanned. An amber blinking status LED when input channels are forced and a red status LED when module diagnostics exist. A user-selectable failsafe value is supported on a per channel basis.

The module supports field calibration. Each of the inputs has its own integrated 250-ohm shunt resistor which is activated through DIP switches.

Requires Euro style 36-terminal terminal block.

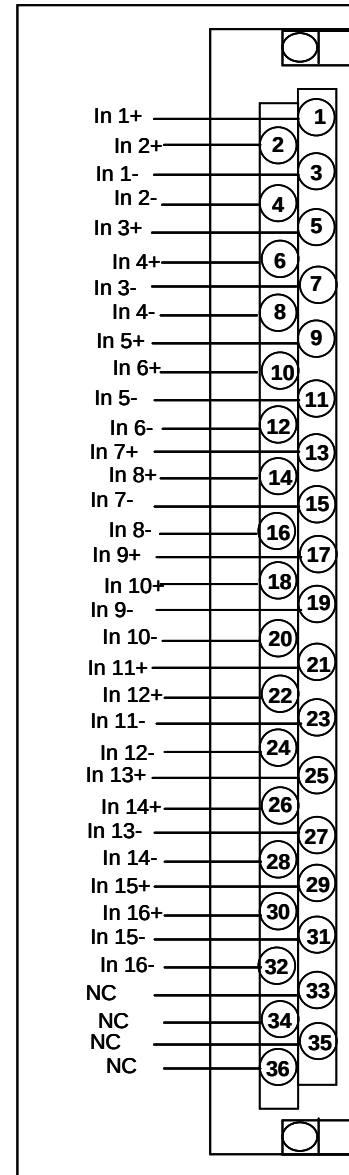


Table 3 – High Level Analog Input Specifications

Inputs per module	16 (isolated)
Input types	V, mA
Signal Source	See Table 4 on next page for range types.
Input Impedance	>1 megohm for volts and 250 ohms for mA inputs
Galvanic Input Isolation	400 VDC point to point, solid state switching; 1K VDC to logic.
Noise Rejection	Series Mode >31dB Common Mode >90dB at 120VAC
Over-range limit	+/- 10% for linear ranges (volts).

Table 3 – High Level Analog Input Specifications	
Accuracy	Factory configured accuracy = $\pm 0.1\%$ of range. Field calibration accuracy = $\pm 0.05\%$ of range <i>Reference conditions</i> Temperature = $25\text{ }^{\circ}\text{C} \pm 3\text{ }^{\circ}\text{C}$ ($77\text{ }^{\circ}\text{F} \pm 5\text{ }^{\circ}\text{F}$) Humidity = 45 % to 55 % RH non-condensing Line voltage = Nominal $\pm 1\%$ Source resistance = 0 ohm Series mode and common mode = 0 V Frequency = Nominal $\pm 1\%$
Temp. Effect on Accuracy	$\pm 0.01\%$ of full scale per degree Celsius maximum
A/D Converter	One per module
A/D Resolution	± 15 Bits
Update rate	100ms (Analog to Digital Converter per module)
Long term Stability	0.1% per year
Calibration	Data is stored in non-volatile memory Redundant Factory Calibration Individual Channel Field Calibration
Diagnostics	Monitoring of Factory Calibration, Field Calibration, 24 VDC supply, and configuration.
Channel Configuration Data	Stored in non-volatile memory.
Power supply loading	5V ; 75mA max 24V ; 50mA max

Table 4 - High Level Analog Input Reference Accuracy		
Input Type	Range	Reference Accuracy
Milliamperes	4 to 20 mAdc	$\pm 0.15\%$ F.S. (mA)**
	0 to 20 mAdc	$\pm 0.15\%$ F.S. (mA)**
**Tolerances for these input types include that of the internal Dropping Resistors.		
Volts	0 to 1VDC	$\pm 0.1\%$ F.S. (mV)
	0 to 2 VDC	$\pm 0.1\%$ F.S. (mV)
	0 to 5 VDC	$\pm 0.1\%$ F.S. (mV)
	0 to 10 VDC	$\pm 0.1\%$ F.S. (mV)
	1 to 5 VDC	$\pm 0.1\%$ F.S. (mV)
	-1 to 1 VDC	$\pm 0.1\%$ F.S. (mV)
	-2 to 2 VDC	$\pm 0.1\%$ F.S. (mV)
	-5 to 5 VDC	$\pm 0.1\%$ F.S. (mV)
	-10 to 10 VDC	$\pm 0.1\%$ F.S. (mV)