2.2.3. Analog Input with HART – Single Ended

Function

The Analog Input Module accepts current inputs from transmitters and sensing devices.

Notable Features

- Extensive self diagnostics
- Optional redundancy
- HART-capable
- Fast loop scan
- Internal or external field power selection
- On board excitation power (no need for marshalling power)
- Galvanic Isolation

Detail Specifications – Analog Input with HART – Single Ended

Parameter		Specification		
Input / Output Module		8C-PAIHA1 - Analog Input with HART, Coated		
		8U-PAIHA1 - Analog Input with HART, Uncoated		
IOTA Modules		8C-TAIXA1	Non Redundant, Coated	6”
		8U-TAIXA1	Non Redundant, Uncoated	6”
		8C-TAIXB1	Redundant, Coated	12”
		8U-TAIXB1	Redundant, Uncoated	12”
Input Type		current (2-wire or self-powered transmitters)		
Input Channels		16 Channels (All 16 Single Ended)		
A/D Converter Resolution		16 bits		
Voltage Rating		24 VDC		
Module current rating		110 mA		
Temperature	Operating Temperature	0 to 60 ℃		
	Storage temperature	-40 to 85 ℃		
Input Range		4-20 mA (through 250 Ω)		
Module Removal and Insertion Under Power		Supported		
Normal Mode Rejection Ratio, at 60 Hz		19 dB		
Normal Mode Filter Response		Single-pole RC, -3 dB @ 6.5 Hz		
Crosstalk, dc to 60 Hz (channel-to-channel)		-60 dB		
Maximum Input Voltage (any input referenced to common, no damage)		± 30 Volts		
Input Scan Rate		50 ms		
Hardware Accuracy (@ CMV = 0 V)		± 0.075% of full-scale (23.5°± 2℃) ± 0.15% of full-scale (0 to 60℃)		
Galvanic Isolation (any input terminal voltage referenced to common)		1000VAC RMS or ±1000 VDC		
Isolation Technique		Icoupler (in IOM)		
Agency certifications		CE		
		FM C US APPROVED Class I, Division 2, Group A, B, C, D; T4 Class I, Zone 2 AEx/ Ex nA II C T4		
		CSA Class I, Division 2, Group A, B, C, D; T4 Class I, Zone 2, Ex nA II C T4		