

5.3. Analog Input with HART – CC-PAIH51

Function

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

Notable Features

- Extensive self diagnostics
- Optional redundancy
- Supplies non-incendive field power (No external user supplied power)
- Suitable for Configure / Status for HART devices
- HART-capable, multivariable instruments for fast collection of control variables
- Fast loop scan
- Non-Incendive Power

Detail Specifications – Analog Input with HART

Parameter	Specification		
Input / Output Model	CC-PAIH51 - High-Level Analog Input with HART		
IOTA Models	DC-TAIX51	Non Redundant	6"
	DC-TAIX61	Redundant	12"
Input Type	Current (2-wire or self-powered transmitters)		
Input Channels ¹	16 Channels (ALL Single Ended).		
Common Mode Rejection Ratio, dc to 60 Hz (500 Ω source imbalance)	70 dB		
Common Mode Voltage, dc to 60 Hz	-6 to +5 V peak		
A/D Converter Resolution	16 bits		
Input Range ¹	4-20 mA only (through 200 Ω)		
Normal Mode Rejection Ratio, at 60 Hz	19 dB		
Normal Mode Filter Response	Single-pole RC, -3 dB @ 6.5 Hz		
Maximum Normal Mode Input	\pm 30 Volts		
Crosstalk, dc to 60 Hz (channel-to-channel)	-60 dB		
Maximum Input Voltage (any input referenced to common, no damage)	\pm 30 Volts		
Input Scan Rate	50 ms		
Hardware Accuracy (@ CMV = 0 V)	\pm 0.075% of full-scale (23.5 \pm 2 $^{\circ}$ C) \pm 0.15% of full-scale (0 to 60 $^{\circ}$ C)		
Transmitter Field Power Conditioning	Individually Protected Current Limiting Circuits for Class 1, Div 2 non-incendive interfacing. No fusing required		
Note 1: No differential / voltage inputs are supported.			