MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

HONEYWELL

CC-TAIX01 51308363-175

ANALOG INPUT TERMINATION ASSEMBLY

Used with the applicable Experion Series C configuration.

REFERENCE PACKAGE

OFFICIAL DOCUMENT

Selected official manufacturer pages follow this cover.

Source: Honeywell Experion Series-C I/O Specification EP03-490-520, CC-TAIX01 entries

4. I/O Module Sizes

IOTA Sizing is nominal (6in = 152mm, 9in =228mm, 12in =304mm, 18in = 457mm)I/O modules are associated with their respective IOTAs in the table below. An I/O Module is supported by one or more IOTAs.

I/O Module	IOTA	Description	Circuits	Size (in ")	Red.
CC-PAIH01		High-Level AI HART	16		√
	CC-TAIX01	AI IOTA		6	
	CC-TAIX11	AI IOTA Red		12	√
CC-PAIH02 CC-PAIX01 / 02		High-level AI HART High-level AI w/o HART	16		√
	CC-TAIX01	AI IOTA		6	
	CC-TAIX11	AI IOTA Red		12	√
	CC-TAID01	AI IOTA – 16 Channel Differential		9	
	CC-TAID11	AI IOTA Red – 16 Channel Differential		12	√
CC-PAIH51		High-level AI HART	16		√
	CC-TAIX51	AI IOTA		6	
	CC-TAIX61	AI IOTA Red		12	√
CC-PAIN01		High-level AI w/o HART	16		√
	CC-TAIN01	AI IOTA		6	
	CC-TAIN11	AI IOTA Red		12	√
CC-PPIX01		Pulse Input w/ Fast Cut-off	8		√
	CC-TPIX11	PI IOTA Red		12	√
CC-PAIM01		PMIO LL Mux	64		
	CC-TAIM01	PMIO LL Mux IOTA		6	
	FTA				
	Mx-TAMT04	LL Mux TC FTA	16	12	
	Mx-TAMT14	LL Mux TC FTA w/Remote CJR	16	12	
	Mx-TAMR04	LL Mux RTD FTA	16	12	
CC-PAIL51	CC-TAIL51	Low-level AI	16	9	
CC-PPIX01	CC-TPIX01	Pulse Input	8	12	√

	CC-TUIO31	Universal Input Output IOTA		9	
	CC-TUIO41	Universal Input Output IOTA Red.		12	√

5. Specifications

Specifications for Series-C I/O modules are shown below.

For information on environmental specifications, please refer to the Series-C Platform Specification and Technical data sheet EP03-520-xxx.

5.1. Analog Input with HART – CC-PAIH01 / 02

Function

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

Notable Features

- Extensive self-diagnostics
- Optional redundancy
- Open Wire Detection
- Supplies non-incendive field power
- Non-incendive Power
- HART-capable, multivariable instruments and multiple modems for fast collection of control variables
- Fast loop scan
- PV protection through an open wire detection diagnostic
- Open-wire Bad PV Detection

Detail Specifications – Analog Input with HART

Parameter	Specification	
Input / Output Model	CC-PAIH02 - High-Level Analog Input with HART	
IOTA Models	Non-Redundant	Redundant
	CC-TAIX01	CC-TAIX11
	CC-GAIX21	CC-GAIX11
	CC-TAID01	CC-TAID11
Input Type	Voltage, current (2-wire or self-powered transmitters)	
Input Channels [1]	16 Channels (12 Single Ended / 4 Differential)	
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]	0 to 5 V, 1 to 5 V, 0.4 to 2 V, 4-20 mA (through 250 Ω)	
Normal Mode Rejection Ratio, at 60 Hz	19 dB	

5.3. Analog Input – CC-PAIX01 / 02

Function

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

Notable Features

- Extensive self-diagnostics
- Optional redundancy
- Supplies non-incendive field power
- Non-Incendive Power
- Fast loop scan

Detail Specifications –Analog Input

Parameter	Specification	
Input / Output Model	CC-PAIX02 - High-Level Analog Input	
IOTA Models	Non-Redundant	Redundant
	CC-TAIX01	CC-TAIX11
	CC-GAIX21	CC-GAIX11
	CC-TAID01	CC-TAID11
Input Type [1]	Voltage, current (2-wire or self-powered transmitters)	
Input Channels [1]	16 Channels (12 Single Ended / 4 Differential)	
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]	0 to 5 V, 1 to 5 V, 0.4 to 2 V, 4-20 mA (through 250 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 (differential inputs, no damage)	± 30 Volts	
Crosstalk, dc to 60 Hz (channel-to-channel)	-60 dB	
Input Impedance (voltage inputs)	> 10 M Ω powered	
Input Scan Rate	50 ms	
Hardware Accuracy (@ CMV = 0 V)	± 0.075% of full-scale (23.5°± 2°C) ± 0.15% of full-scale (0 to 60°C)	
Transmitter Field Power Conditioning	Individually Protected Current Limiting Circuits for Class 1, Div 2 non-incendive interfacing. No fusing required	