

8C-TAIX51

Analog Input IOTA

Honeywell 8C-TAIX51 is the coated non-redundant IOTA for a sixteen-channel Series 8 analog input module. It terminates 4-20 mA signals from 2-wire or self-powered transmitters for the documented 8C-PAIN01 arrangement.

BRAND	Honeywell	MODEL	8C-TAIX51
PRODUCT	Analog Input IOTA	FAMILY	Series 8 I/O
OFFICIAL SOURCE	PlantCruise by Experion Series 8 I/O Specification	RECORD	PC03-490-100, Release 100, October 2011, section 2.2 Analog Input

DOCUMENT SCOPE

Official technical evidence, controlled engineering checks, model-specific FAQ and related product navigation.

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Product Overview and Applications

SYSTEM FUNCTION

Honeywell 8C-TAIX51 is the coated non-redundant IOTA for a sixteen-channel Series 8 analog input module. It terminates 4-20 mA signals from 2-wire or self-powered transmitters for the documented 8C-PAIN01 arrangement.

FUNCTION 1

Sixteen single-ended current inputs

FUNCTION 2

4-20 mA transmitter interface

FUNCTION 3

Coated non-redundant IOTA

FUNCTION 4

Fast 50 ms input scan

APPLICATION	ENGINEERING CONTEXT
Process transmitter input	Terminates sixteen approved 4-20 mA process transmitters for the compatible Series 8 analog input module.
Self-powered sensor input	Accepts documented current signals from self-powered transmitters within the approved channel arrangement.
Non-redundant loop acquisition	Provides the coated non-redundant IOTA path for standard Series 8 analog measurement.
Fast process monitoring	Supports the documented 50 ms scan response for configured analog loops.

Technical Data and Acceptance

PARAMETER	VERIFIED VALUE
Complete model	8C-TAIX51
Honeywell item number	51306979-175
IOTA role	Coated non-redundant analog input termination assembly
Compatible I/O module	8C-PAIN01
Input type	Current; 2-wire or self-powered transmitters
Input channels	16 single-ended channels
A/D resolution	16 bits
Input range	4-20 mA through 200 ohms
Input scan rate	50 ms
Normal-mode rejection	19 dB at 60 Hz
Normal-mode filter	Single-pole RC, -3 dB at 6.5 Hz
Channel crosstalk	-60 dB, dc to 60 Hz
Maximum input voltage	+/-30 V referenced to common without damage

Acceptance Path

1 IDENTITY

Exact 8C-TAIX51 and 8C-PAIN01 pairing match the engineering record.

2 CONFIGURATION

All sixteen channel assignments and input settings are restored.

3 LOOP CHECK

Each 4-20 mA loop reproduces its approved controlled test value.

4 SYSTEM PROOF

The non-redundant path and all diagnostics pass.

Precautions and Model-Specific FAQ

NO.	PRECAUTION	QUESTION	ANSWER
1	Verify the complete 8C-TAIX51 and 51306979-175 marking before work.	Which module is paired with Honeywell 8C-TAIX51?	Honeywell specifies 8C-TAIX51 as the coated non-redundant IOTA for the 8C-PAIN01 analog input module.
2	Confirm the associated I/O module is the documented Honeywell 8C-PAIN01.		
3	Place all affected process loops in the approved maintenance state.	How many channels does Honeywell 8C-TAIX51 terminate?	The official specification lists sixteen single-ended analog input channels.
4	Record all sixteen single-ended channel assignments and loop-power sources	Which signal range is specified for Honeywell 8C-TAIX51?	The documented input range is 4-20 mA through 200 ohms.
5	Label signal, common, shield and grounding conductors before removal.		
6	Keep each applied signal within the documented 4-20 mA input arrangement.	Which transmitter types can Honeywell 8C-TAIX51 receive?	The arrangement accepts current inputs from 2-wire or self-powered transmitters.
7	Use approved ESD controls and inspect the non-redundant IOTA and module interfaces.		
8	Verify every enabled input, scan response and diagnostic indication before release.		

FAQ, Related Products and Sources

QUESTION	ANSWER
What conversion resolution applies to Honeywell 8C-TAIX51?	The compatible analog input module uses a 16-bit A/D converter.
What scan rate applies to Honeywell 8C-TAIX51?	The Honeywell specification lists a 50 ms input scan rate.
Is Honeywell 8C-TAIX51 the redundant IOTA?	No. Honeywell identifies 8C-TAIX51 as the coated non-redundant IOTA; 8C-TAIX61 is the redundant version in the same documented family.
What proves Honeywell 8C-TAIX51 commissioning is complete?	The 8C-PAIN01 pairing, all sixteen loop assignments, 4-20 mA responses and diagnostics must agree with the approved record.

MANUFACTURER SOURCE RECORDS

PlantCruise by Experion Series 8 I/O Specification - PC03-490-100, Release 100, October 2011, section 2.2 Analog Input
Series 8 Controller and I/O Specification - S803-150-530, Version 1.0, May 2024, Series 8 architecture and I/O overview

Related Products on Apter Power

MODEL	APTER POWER PAGE
Honeywell FC-TERM-0002	View Honeywell FC-TERM-0002
Honeywell FC-TPSU-2430	View Honeywell FC-TPSU-2430
Honeywell FC-TSAO-0220M	View Honeywell FC-TSAO-0220M
Honeywell FC-TSDI-16UNI	View Honeywell FC-TSDI-16UNI
Honeywell FC-TSHART-1620M	View Honeywell FC-TSHART-1620M
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