

INDUSTRIAL AUTOMATION PRODUCT

CC-TAID11

Redundant Sixteen-Channel Analog Input IOTA

Honeywell CC-TAID11 is a 16-channel differential analog-input IOTA for redundant Series C I/O. It terminates measurement loops for paired high-level or universal analog-input modules.

IDENTITY	VERIFIED VALUE
Manufacturer	Honeywell
System family	Experion Series C I/O
Part number	51306731-175
Country	USA
HS code	8537101190

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CC-TAID11

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Technical Specifications

Technical values below are limited to the named Honeywell product record.

PARAMETER	VALUE
IOTA function	Redundant analog input IOTA
Input channels	16
Differential channels	1 to 16 with CC-TAIDx1
Redundancy	Supported
IOTA size	12 inch; 304 mm nominal
Compatible I/O modules	CC-PAIH02; CC-PAIX02
Input type	Voltage; current; 2-wire or self-powered transmitters
Input ranges	0 to 5 V; 1 to 5 V; 0.4 to 2 V; 4 to 20 mA through 250 ohm
Common-mode rejection	70 dB; dc to 60 Hz
Common-mode voltage	-6 to +5 V peak; dc to 60 Hz
A/D resolution	16 bits
Normal-mode rejection	19 dB at 60 Hz
Normal-mode filter	Single-pole RC; -3 dB at 6.5 Hz
Maximum differential input	+/-30 V; no damage
Channel crosstalk	-60 dB; dc to 60 Hz
Voltage-input impedance	>10 Mohm; powered
Input scan rate	50 ms
Hardware accuracy at 23.5 degC	+/-0.075% of full scale
Hardware accuracy at 0 to 60 degC	+/-0.15% of full scale
Field conductor capacity	Up to 12 AWG; 2.5 mm ² stranded
IOM field power	Supplied through IOTA
IOTA supply source	24 Vdc carrier bus
Field terminals	Two-level detachable terminals
Mounting orientation	Vertical
Transmitter power protection	Individually protected current-limiting circuits
Non-incendive interface	Class I, Division 2
Inline channel fusing	Not required

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System Role and Architecture

Honeywell CC-TAID11 is a 16-channel differential analog-input IOTA for redundant Series C I/O. It terminates measurement loops for paired high-level or universal analog-input modules.

FUNCTION 1

Terminates sixteen differential analog input channels

FUNCTION 2

Supports paired analog-input modules

FUNCTION 3

Connects field measurement loops to Series C I/O

FUNCTION 4

Maintains one field interface during module redundancy

Matched system components

- Series C carrier
- Paired CC-PAIH or CC-PAIX modules
- Differential analog field wiring
- C300 control configuration

ANALOG INPUT INTERFACE ARRANGEMENT

INTERFACE ITEM	DOCUMENTED VALUE
I/O module pairing	CC-PAIH02 or CC-PAIX02
Analog channel count	16 channels
Differential capability	Channels 1 through 16 with CC-TAIDx1
Current-loop resistor	250 ohm; connected by channel jumper
Voltage-input preparation	Cut the applicable 250-ohm jumper
Low-side reference	Cut the applicable common jumper for differential duty

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Applications and Engineering Context

Redundant process-transmitter inputs

Terminates sixteen differential analog input channels

Critical pressure and flow measurement

Supports paired analog-input modules

High-availability temperature acquisition

Connects field measurement loops to Series C I/O

Series C analog cabinet replacement

Maintains one field interface during module redundancy

TECHNICAL NOTE

Confirm both module types, preserve channel polarity and shield treatment, then verify redundancy status and scaled values on every restored loop.

SIXTEEN-CHANNEL ACCEPTANCE EVIDENCE

CHECK	PASS CONDITION
IOTA identity	CC-TAID11 and 12-inch redundant execution recorded
Module identity	Installed CC-PAIH02 or CC-PAIX02 pairing confirmed
Jumper record	Current/voltage and low-side jumper states documented
Channel scaling	Configured range checked against the connected transmitter
Common-mode limit	Differential circuit remains within -6 to +5 V peak
Loop test	All sixteen assigned channels pass controlled input tests

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Engineering Precautions

1

Verify the complete CC-TAID11 marking and its assigned Experion Series C I/O position before work.

2

Isolate the energy associated with Series C carrier before disconnecting CC-TAID11.

3

Protect the CC-TAID11 connectors and electronic assembly using approved ESD controls.

4

Record the as-found Paired CC-PAIH or CC-PAIX modules connections and configured assignment before replacement.

5

Confirm Differential analog field wiring matches the approved installation record for CC-TAID11.

6

Restore CC-TAID11 under controlled conditions and review its model-specific diagnostics.

7

Complete a documented functional test for redundant process-transmitter inputs before release.

RELATED PRODUCTS ON APTER POWER

MODEL	SYSTEM ROLE	APTER POWER PAGE
CC-MCAR01	Experion Series C carrier assembly	Open product page
DC-TFB412	Redundant Series C FIM IOTA	Open product page
DC-TCF901	Series C Mark II Control Firewall IOTA	Open product page
CC-TDIL11	Redundant Series C digital-input IOTA	Open product page

MANUFACTURER SOURCE RECORD

Honeywell Experion Series C I/O Specification
EP03-490-520 V10

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