

T8431C

Trusted TMR 24 Vdc Analog Input Module

PRODUCT TECHNICAL REFERENCE

ICS Triplex T8431C is a Trusted TMR 24 Vdc analog input module with 40 channels. It measures field current and voltage through the approved termination assembly and supplies monitored analog data to the application.

OFFICIAL SOURCE

Trusted TMR 24 Vdc Analog Input Module 40 Channel | ICSTT-RM273Q-EN-P, August 2021

Verified technical profile

Trusted TMR 24 Vdc Analog Input Module

Backplane supply	20 to 32 Vdc
Backplane power	20 W
Inputs	40
FTA impedance	250 ohm
Module impedance	16.967 kohm
Current range	0 to 22 mA
Voltage range	0 to 5.5 Vdc
Resolution	3.906 uA
Safety accuracy	+/-200 uA
Calibration accuracy	+/-0.15%
SOE resolution	1 ms
Operating temperature	0 to 60 deg C
Dimensions	266 x 31 x 303 mm
Weight	1.149 kg

ENGINEERING USE OF THE VERIFIED DATA

The module requires the configured Trusted slot and approved field termination hardware; an external barrier is needed where intrinsic safety applies. Commissioning includes loop-power checks, zero/span verification, channel discrepancy review, SOE setup and calibration maintenance records.

FIELD CHECKPOINTS

- Confirm T8431C, hardware revision and the assigned Trusted slot.
- Place affected process loops in the approved maintenance condition.

Only values traceable to the listed manufacturer source are treated as verified technical data.

System role and engineering boundaries

ICS Triplex T8431C is a Trusted TMR 24 Vdc analog input module with 40 channels. It measures field current and voltage through the approved termination assembly and supplies monitored analog data to the application.

1

Acquires forty monitored analog input channels

2

Measures standard field current through the approved termination interface

3

Supports configurable thresholds and sequence-of-events logging

4

Provides channel data for Trusted safety and process applications

ENGINEERING NOTE

Install T8431C in a T8100 or T8300 I/O-module slot with the matched analog-input termination assembly. Confirm the 250 ohm field interface, loop polarity, channel calibration and Toolset scaling before accepting live process measurements.

Industrial application matrix

Four source-supported operating contexts for this exact product.

Process transmitter inputs

Measures current-loop signals from pressure, flow, level or temperature transmitters.

Safety analog voting

Supplies calibrated measurements to application logic used for protective trip decisions.

Line-fault monitoring

Uses configured thresholds to distinguish process state from field wiring faults.

Redundant analog acquisition

Supports paired-module arrangements where the project requires online replacement capability.

MODEL-SPECIFIC ACCEPTANCE FOCUS

Confirm T8431C identity and revision, T8100/T8300 slot, analog termination assembly, loop power and polarity, 250 ohm interface, barriers, shielding, Toolset scaling and thresholds, calibration record and controlled process tests before commissioning.

Related-series navigation

Eight verified Apter Power product pages, kept separate from the manufacturer source record.

RELATED APTER POWER SERIES PAGES	
01	T9431 Apter Power product page
02	TC-215-02-10M5 Apter Power product page
03	TC-215-02-12M5 Apter Power product page
04	TC-301-02-2M0 Apter Power product page
05	TC-301-02-6M5 Apter Power product page
06	TC-301-02-10M0 Apter Power product page
07	T9482 Apter Power product page
08	T9803 Apter Power product page

Navigation links only - not manufacturer evidence for technical parameters.

SOURCE RECORD

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