ABB MEASUREMENT & ANALYTICS | DATA SHEET

Analog input module

XSeries, RMC, and XIO

Overview

The 2100418 TFIO module is a configurable 8-point analog input module. Each point can be configured as a 0 to 10 V voltage input or a 0 to 20 mA current input.

Point specifications

Electrical (each point)
Input Mode Range
Voltage: 0 to 10V
Current: 0 to 20mA

Maximum voltage mode input before soft over-range
10.7V

Maximum allowable continuous input current
22.8mA

Typical input impedance voltage mode
91.24K Ohms

Typical input impedance current mode
249.3 Ohms

Accuracy

4 - 20mA mode: +/- 0.45%
0 - 10V mode: +/- 0.25%
To minimize uncertainty, the TFIO AI module must be field-calibrated over the full measuring range.
This uncertainty value applies only at reference temperature.

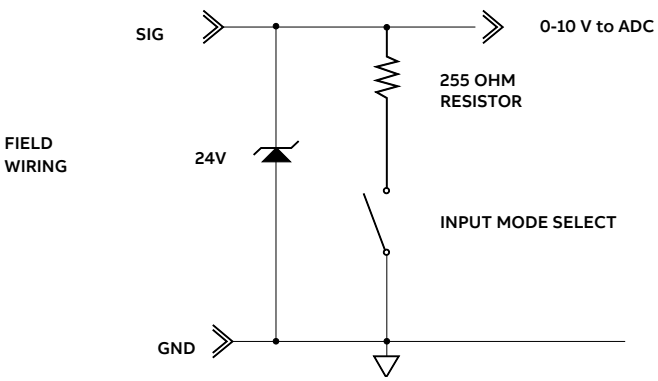
TFIO analog input (type II) module pin designation

	J1	J2	J3	J4
1	AI1 (+)	AI3 (+)	AI5 (+)	AI7 (+)
2	AI1 (GND)	AI3 (GND)	AI5 (GND)	AI7 (GND)
3	AI2 (+)	AI4 (+)	AI6 (+)	AI8 (+)
4	AI2 (GND)	AI4 (GND)	AI6 (GND)	AI8 (GND)

Hot Pluggable

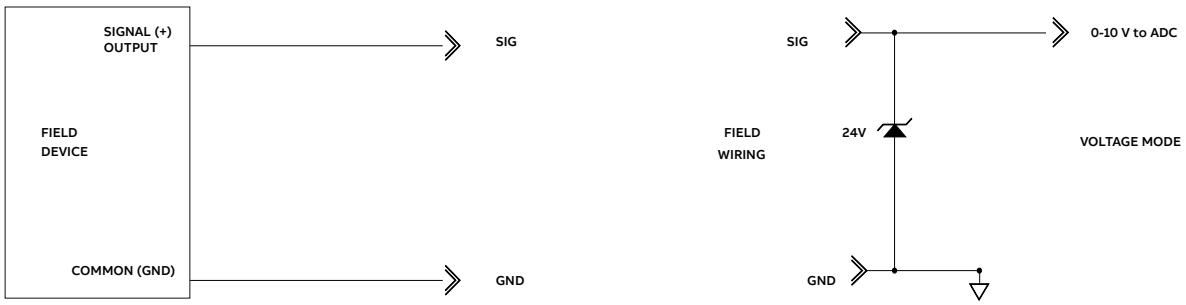
This module is hot-pluggable and can be inserted, replaced or removed during the normal operation of the device with no restart required. The system will detect the changes in the TFIO bus and reflect the state of the modules that can be verified on PCCU. User should take power precaution measurements when execution this action.

Typical point schematic

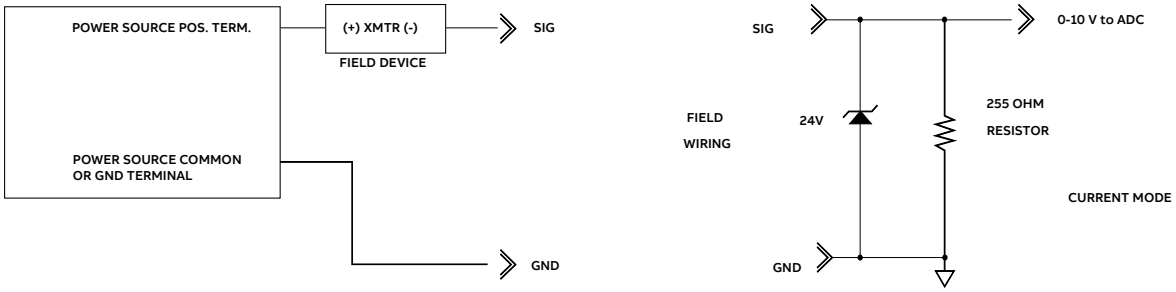


Example connections

TYPICAL VOLTAGE INPUT FIELDS WIRING



TYPICAL 2 WIRE 4–20mA DEVICE FIELD WIRING



For further information on this and other TFIO modules refer to the User Manual.

www.abb.com/upstream

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