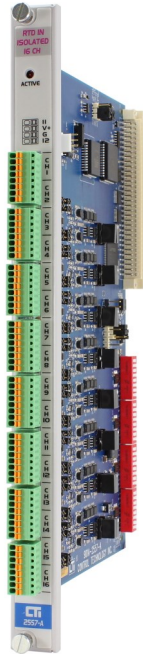


2557-A 16-Channel Isolated RTD Input Module

Classic



DESCRIPTION

The 2557-A is a high-speed 16-channel RTD input module designed to be compatible with the 2500 Series I/O base. The 2557-A translates millivolt level signals from the RTD element into a scaled temperature value. Multiple RTD types are supported as well as millivolt inputs. Scaling, alarm detection, filtering, peak and valley hold, and averaging are supported on a channel by channel basis. All parameters may be loaded into the module directly with relay ladder logic. The standard Classic Mode logs in as a 16 WX input module. The advanced Classic Plus Mode logs in as 16 X, 16 Y, 32 WX, and 32 WY registers in the PLC.

FEATURES

- CTI 2500 Series® and Simatic® 505 I/O base format
- 505 Series I/O base format
- 1500 V isolation channel-to-PLC backplane
- 1500 V isolation channel-to-channel
- 16 bit ADC for each channel
- Supports 10 Ω Cu, 100 Ω Pt, and 120 Ω Ni RTDs and millivolt inputs
- Fast 20 mSec update time
- Support for 2, 3, or 4 wire RTD elements
- 8 Removable Connectors

SPECIFICATIONS

Input Channels: 16 RTD or Millivolt inputs

Module Login:

Classic Mode: 16 WX
Classic Plus: 16X, 16Y, 32WX, and 32WY

RTD Types:

10 Ω Cu (TCR= 0.00427 $\Omega/\Omega/^\circ\text{C}$)
100 Ω Pt (TCR= 0.003850 $\Omega/\Omega/^\circ\text{C}$)
European DIN 43760
120 Ω Ni (TCR= 0.00672 $\Omega/\Omega/^\circ\text{C}$)
2, 3, and 4 wire modes

RTD Excitation Current: 250 micro amp

Millivolt Input Range: 0 to 100 mV

Millivolt Input Impedance: >1000M Ω @ DC
> 10K Ω @ 16 Hz

Absolute Millivolt Accuracy:

$\pm 1.0\%$ full scale or ± 1.0 mV

Lead Compensation: 20 Ω per lead wire

Input Overrange Protection:

30 VDC or VAC continuous

Measurement Ranges:

10 Ω Cu -100 $^\circ\text{C}$ to 260 $^\circ\text{C}$ (-148 $^\circ\text{F}$ to 500 $^\circ\text{F}$)
100 Ω Pt -200 $^\circ\text{C}$ to 850 $^\circ\text{C}$ (-328 $^\circ\text{F}$ to 1562 $^\circ\text{F}$)
120 Ω Ni -80 $^\circ\text{C}$ to 260 $^\circ\text{C}$ (-112 $^\circ\text{F}$ to 500 $^\circ\text{F}$)

ADC Resolution: 16 Bits

Connector: 8 Removable plug-in connectors
(Included with the module)

Wire Gauge: 18 to 30 AWG

Module Size: Single wide

Backplane Power Consumption: 4.75 Watts

Shipping Weight: 1.5lbs. (0.68kg)

Additional Product Information:

Environmental Specifications and UL Agency Certificates of Compliance are available on our website.

Standard Shipping Configuration:

3 wire 100 Ω Pt RTD
Digital Filtering Enabled
Degrees Centigrade
Classic Mode 16 WX

ROCK SOLID PERFORMANCE. TIMELESS COMPATIBILITY.

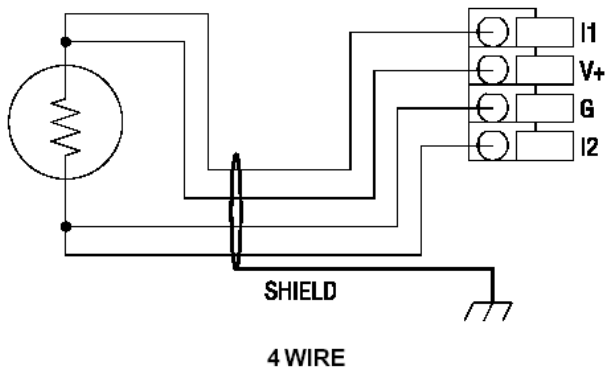
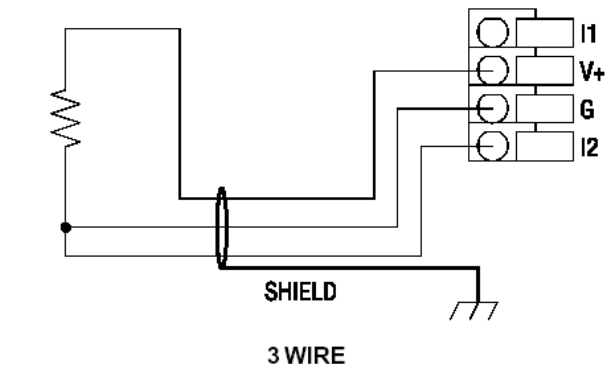
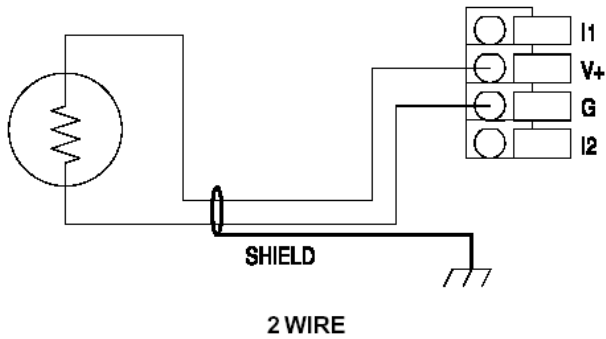
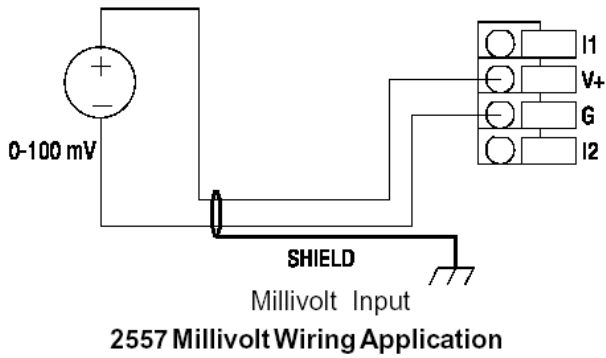


Control Technology Inc.

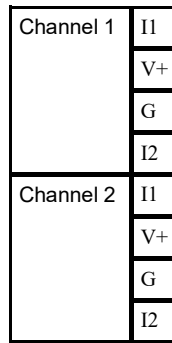
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2557-A 16-Channel Isolated RTD Input Module

FRONT PANEL WIRING CONNECTORS



2557 RTD Wiring Applications



The same inputs are repeated on each of the each of the 8 wiring blocks



Removable Block 1
for
Channels 1 & 2

Removable Block 2
for
Channels 3 & 4

Removable Block 3
for
Channels 5 & 6

Removable Block 4
for
Channels 7 & 8

Removable Block 5
for
Channels 9 & 10

Removable Block 6
for
Channels 11 & 12

Removable Block 7
for
Channels 13 & 14

Removable Block 8
for
Channels 15 & 16

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