2552-A 8-Channel Isolated RTD Input Module

Description

The 2552-A is a high-speed 8-channel isolated RTD input module designed to be compatible with the CTI 2500 Series® or Simatic® 505 I/O base in local, remote I/O, and Profibus configurations. The 2552-A translates RTD input signals into a scaled temperature value.

Features

- CTI 2500 Series® or Simatic® 505 base format
- 1500V channel-to-channel isolation
- 1500V channel-to-PLC backplane isolation
- Fast 2msec update time per channel
- Detects open in RTD or field wiring
- Compensates for lead wire resistance
- Supports 0 - 100 millivolt inputs on any channel

Specifications

Input Channels: 8 RTD input channel, independently isolated and configurable
RTD Types:
- 100Ω platinum: TCR = 0.003850, Ω/Ω/°C
- European DIN 43760
- -198 °C to 849.8 °C (-327.6°F to 1561.6°F)
- 120Ω nickel: TCR = 0.00672, Ω/Ω/°C
- Temperature Range: -79.8°C to 260.0°C (-111.6°F to 500.0°F)
- Other RTD types by special request: 0Ω Cu
- Absolute Temp Accuracy: +0.4°C (+0.8°F)
- Millivolt Range: 0 to 103.04 Millivolts
- Millivolt Input Impedance: >10KΩ @ 60Hz
- Absolute Millivolt Accuracy: ±0.5% full scale or ±500µV
- Lead Compensation: 20Ω per lead wire
- Bias Current to RTD Probe: 250 microamps
- Digital Filtering Time Constant: 0.3 Sec
- Output Units: Degrees C or F
- Repeatability: 0.05% full scale
- Resolution: 0.025% full scale
- Update Time: 2msec per channel
- Common Mode Rejection: >110dB @ 60Hz (digital filtering disabled)
- Normal Mode Rejection: >145db @ 60Hz (digital filtering enabled)
- Input ESD Protection: 20,000V
- Overrange Protection: 20 VDC input to common
- Isolation: 1500V channel-to-channel
- 1500 VDC channel-to-PLC
- Connector: Fixed 32 position terminal strip
- Wire Gauge: 18-24 AWG
- Backplane Power: 2.75W @ 5 VDC
- Module Size: Single-wide
- Shipping Weight: 1.5 lb. (0.68 Kg)

Additional Product Information:

On CTI’s Website you will find links to the 2500 Series Standard Environmental Specifications and the UL Agency Certificates of Compliance.
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2552-A Input Connector

2552-A RTD Wiring Applications

2552-A Millivolt Wiring Application

ROCK SOLID PERFORMANCE. TIMELESS COMPATIBILITY.