**Description**

The 2559-RTD is a high-speed 8-channel RTD input module designed to be compatible with the SIMATIC® 505 I/O base. The Model 2559-RTD translates RTD input signals into scaled temperature values.

**Features**

- CTI 2500 Series® or Simatic® 505 base format
- 1500V channel-PLC backplane isolation
- Fast 25ms update time for all channels
- Detects open in RTD or field wiring
- Compensates for lead resistance

**Specifications**

- **Input Channels:**
  - 8 RTD input channels
- **Supported RTD Types:**
  - Platinum 0.003850 (European DIN)
  - Platinum 0.003916 (American)
  - Platinum 0.003902
  - Platinum 0.003920
  - Copper 0.004274
  - Nickel 0.006720
  - Nickel 0.006178 (European DIN)
- **Supported Ohm Values @ 0°C:**
  - 100Ω, 120Ω, 130Ω, 200Ω, 500Ω, 1000Ω, 10Ω, 9.03Ω
- **Supported Probe Types:**
  - 2, 3, 4 wire
- **RTD Excitation Current:**
  - 250µA
- **Lead Compensation:**
  - 1000Ω per lead wire (max)
- **Input Overrange Protection:**
  - 30VDC or VAC continuous
- **Measurement Ranges:**
  - 100 Cu: -100°C to 260°C (-148°F to 500°F)
  - 100Ω Pt: -200°C to 850°C (-328°F to 1562°F)
  - 120Ω Pt: -80°C to 260°C (-112°F to 500°F)
- **Output Units:**
  - °C, °F, ohms (selectable)
- **Repeatability:**
  - ±0.1°C, ±0.2°F
- **Accuracy:**
  - 100Ω Pt: 0.9°C (1.6°F) from 0-60°C
  - 1Ω: 0.360 from 0-60°C
- **Update Time:**
  - 25 mSec (all channels, no filtering)
- **Common Mode Rejection:**
  - >130db @ 60Hz
- **Normal Mode Rejection:**
  - >80db @ 60Hz
- **Isolation:**
  - 1500 VDC channel-to-PLC
- **Shipping Configuration:**
  - 3 wire 100Ω platinum
  - Digital filtering enabled
  - Degrees C
- **Connector:**
  - Standard CTI 2500-40F 40-position removeable connector, 14-22 AWG
- **Backplane Power:**
  - 2.8W @ 5 VDC
- **Module Size:**
  - Single-wide
- **Operating Temperature:**
  - 0° to 60°C (32° to 140°F)
- **Agency Approvals Pending:**
  - UL, ULC, CE, FM (Class 1, Div.2)
- **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.
2559-RTD 8-Channel RTD Input Module

2559-RTD 8-Point Wiring Connector

ROCK SOLID PERFORMANCE. TIMELESS COMPATIBILITY.