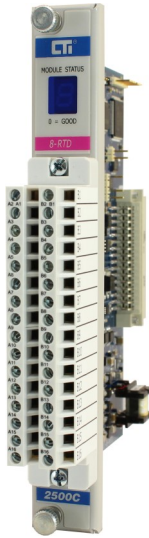




## 2500C-8-RTD RTD Input Module



### DESCRIPTION

The 2500C-8-RTD is a high-speed 8-point RTD input module designed to translate RTD signals into a scaled temperature value. This module is designed to work in a CTI 2500 Series Compact I/O base.

### FEATURES

- 8 RTD inputs
- Supports Classic and Classic Plus Modes
- 7 Segment Display for Module Status indication
- No user calibration
- Supports 2, 3 and 4 wire RTDs
- Software Configurable Range Selection
- Uses 2500C-32F removable wiring connector

2500-8-RTD Default Shipment Settings	
Operation Mode	Classic Mode
Logon	8WX
RTD	100Ω Pt
RTD Type	3 Wire
Temperature Units	Degrees C
Digital Filtering	Enabled

Input Specifications		
Operation Mode Support (See Note 1)	Classic Mode	Classic Plus Mode
Channels	8 RTD Inputs	
Module Logon	8WX	16WX/8WY
Module Update Time all modes	9 mSec	
Digital Filtering Time Constant	1000 mSec or 1 second	
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	
Measurement Ranges	10Ω 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)	
Supported Probe Types Note: 2/4 wire RTDs supported in Classic Plus Mode only.	2, 3, 4 Wire	
RTD Excitation Current	250μA	
Lead Compensation	1000Ω per lead wire (max)	
Repeatability	±0.1°C, ±0.2°C for all RTD Types	
Measurement Units	Degrees C or Degrees F selectable	
Resolution ( 15 bits plus sign)	0.1°C	
Accuracy	100Ω Pt 0.9oC (1.6°F) from 0-60°C Ωx100 0.36Ω from 0-60°C	
Common Mode Rejection	>130db @ 60Hz	
Normal Mode Rejection	-80db @ 60Hz,	
Backplane Power (MAX)	1.123 watts	
Input ESD Protection	IEC 1000-4-2 Level 4	
Over-range Protection	30VDC or VAC continuous	
Isolation	Channel to Backplane 1500VDC	
Operating Temperature Range	0°C to 60°C (32°F to 140°F)	
Agency Approvals Pending	UL, ULC, UL Class 1, Div 2, CE	
Shipping Dimensions and Weight	223.84mm x 109.86mm x 34.93mm, 0.234kg	
Storage Temperature Range	-40°C to 85°C (-40F °to 185°F)	
Relative Humidity	5% to 95% (non-condensing)	



### Control Technology Inc.

5734 Middlebrook Pike, Knoxville, TN 37921-5914  
Phone: +1.865.584.0440 Fax: +1.865.584.5720  
www.controltechnology.com

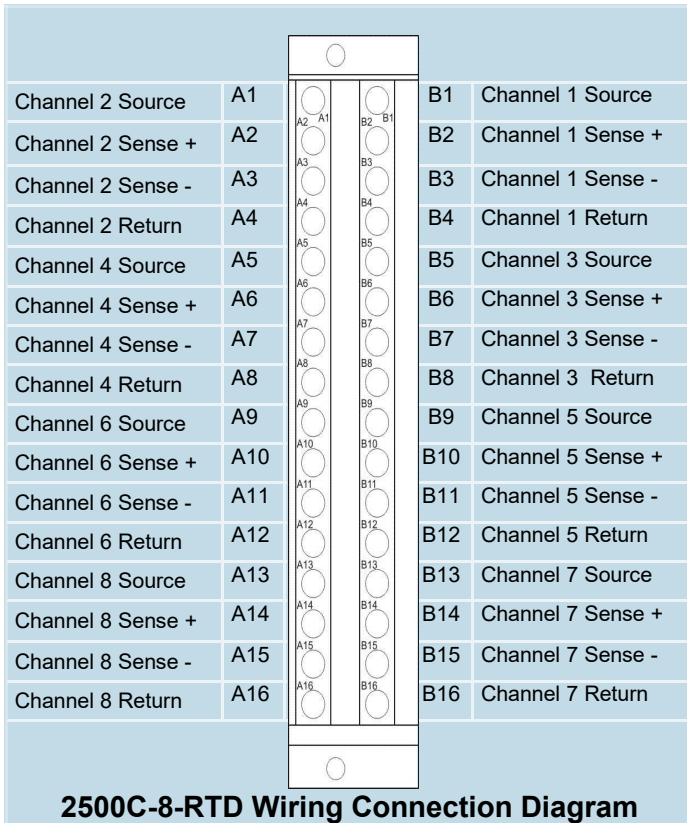




# 2500 Series™ Compact System



## 2500C-8-RTD RTD Input Module



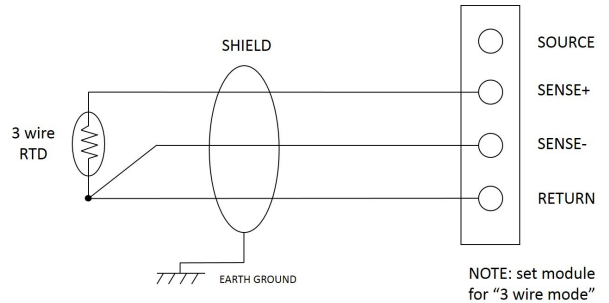
**Note:**

The 2500C-8-RTD Input Module uses CTI Wiring Connector 2500C-32F. Please see the wiring connector specification table below. This connector is ordered separately from the module.

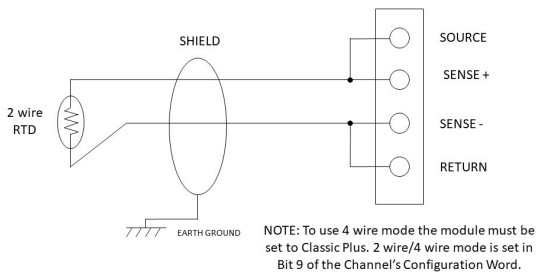
2500C-32F Specifications	
Connector Style	Removable
Number of Wiring Connections	32 point
Wire Gauge	14 to 22AWG
Screw Torque Value	5.22 lb-in
Current Rating	6A @ 300VAC
Insulation Stripping Length	0.24" 6mm
Connector Material	
Body:	Polycarbonate UL 94V0
Screw :	M3 Zinc plated Steel
Cage Clamp	Nickel Plated Brass
Socket Contact Spring:	Tin Plated Bronze
Retaining Screw:	M3 Zinc Plated Steel

7 Segment LED Code Description	
0	Normal Operation
A	Internal RAM Fail
b	Code Memory Failure
C	Internal MOVx RAM Failure
d	Shared RAM Failure
L	Lookup Table Flash Failure

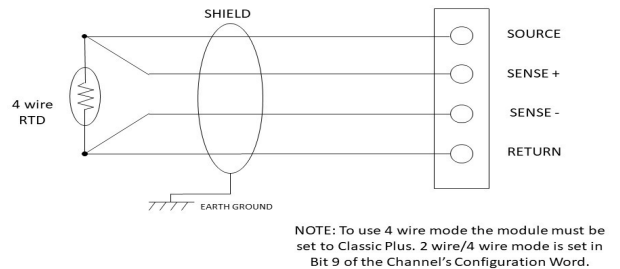
Typical Circuit—3 Wire RTD



Typical Circuit—2 Wire RTD



Typical Circuit—4 Wire RTD



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5734 Middlebrook Pike, Knoxville, TN 37921-5914  
 Phone: +1.865.584.0440 Fax: +1.865.584.5720  
[www.controltechnology.com](http://www.controltechnology.com)

