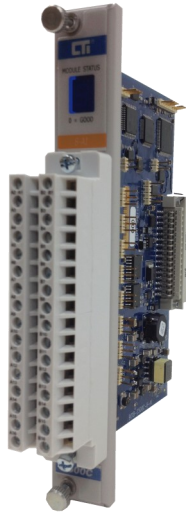




2500C-8-AI Analog Input Module



DESCRIPTION

The 2500C-8-AI is designed for CTI's 2500 Series Compact System. The module provides 8 inputs that can be configured for voltage or current signals on a channel by channel basis.

FEATURES

- 8 analog inputs
- Supports Classic and Classic Plus Modes
- 7 Segment Display for Module Status indication
- No user calibration
- Accepts voltage or current signals
- Accepts bipolar or unipolar ranges
- Software Configurable Range Selection
- Uses 2500C-32F removable wiring connector

| 2500-8-AI Default Shipment Settings | |
|-------------------------------------|--------------|
| Operation Mode | Classic Mode |
| Logon | 8WX |
| Signal Range | 0 to 20 mA |
| Digital Filtering | Enabled |
| Offset Scaling | Disabled |

| Input Specifications | | |
|--|---|----------------------------------|
| Operation Mode Support (See Note 1) | Classic Mode | Classic Plus Mode |
| Module Logon | 8WX | 8WX/8WY |
| Module Update Time all modes | 3.5mS | |
| Digital Filtering Time Constant | 200mS | 200mS |
| Signal Range(Note 2) | | |
| Unipolar | 0 to 5VDC, 0 to 20mA | 0 to 10VDC, 0 to 5VDC, 0 to 20mA |
| Bipolar Available in Classic Plus Mode Software configured | NA | +/- 5VDC, +/- 10 VDC +/- 20mA |
| Input Signal Type | Current | Voltage |
| DC Input Resistance | 250Ω | 780KΩ |
| Repeatability | 0.0025% | |
| Accuracy @ 25°C | 0.25% of full scale | 0.15% of full scale |
| Resolution (15 bits plus sign) | Unipolar 0 to 32000 | Bipolar -32000 to 32000 |
| 0 to +5VDC or +/- 5VDC | 156μV | |
| 0 to +10 VDC or +/-10VDC | 312μV | |
| 0 to +20mA or +/-20mA | .625μA | |
| Common Mode Rejection Digital Filtering Enabled | >95db @ 100Hz | |
| Normal Mode Rejection Digital Filtering Enabled | -25db @ 100Hz | |
| Backplane Power (MAX) | .706 watts | |
| Input ESD Protection | IEC 1000-4-2 Level 4 | |
| Over-range Protection | ± 500V | |
| Isolation | Channel to Channel 200V± 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) | |
| Note 1: | Classic or Classic Plus modes are jumper selectable for the module. | |
| Note 2: | In Classic Mode 0 to 5VDC or 0 to 20mA signal range is selected via jumpers for each channel. In Classic Plus Mode additional signal ranges are software configurable. | |



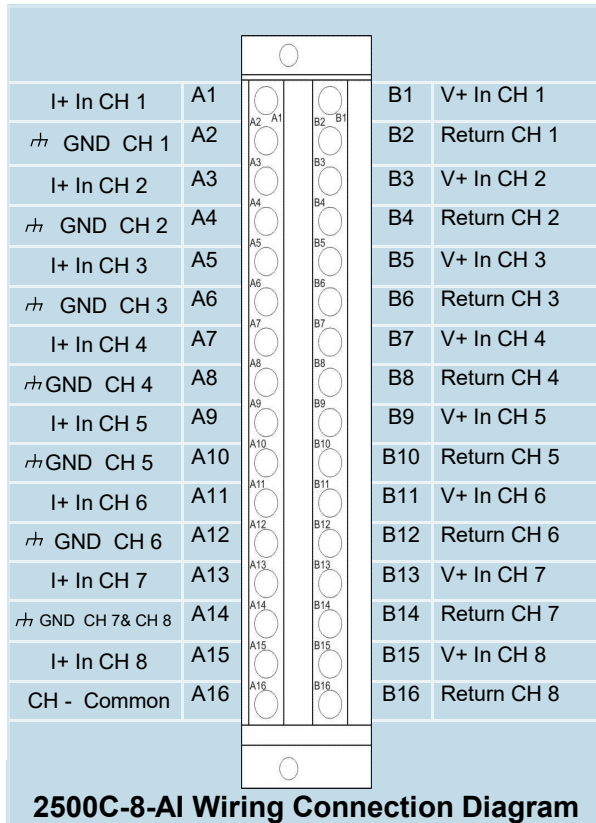
Control Technology Inc.

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





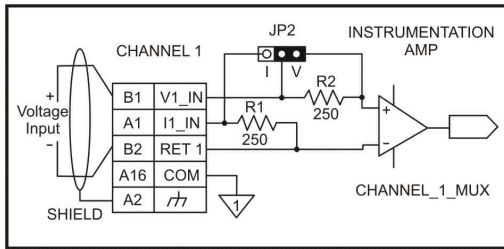
2500C-8-AI Analog Input Module



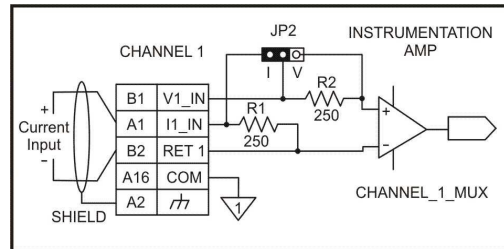
Note:

The 2500C-8-AI Analog 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 |



Typical Internal Circuit—Voltage Mode



Typical Internal Circuit—Current Mode

| 7 Segment LED Code Description | |
|--------------------------------|---------------------------|
| 0 | Normal Operation |
| A | Internal RAM Fail |
| b | Flash Failure |
| C | Internal MOVx RAM Failure |
| d | Shared RAM Failure |



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