2558 8-Channel Analog Input Module





Description

The 2558 is an 8-channel analog input module designed to be compatible with the SIMATIC® 505 series I/O base. The 2558 translates analog input signals into equivalent digital words. The 2558 is fully compatible with CTI's 2500 Series CPUs and all versions of the SIMATIC® 545 and 555 PLCs.

Features

- SIMATIC® 505 base format
- 8 analog input channels
- 140Vrms isolation between channels
- 1500V channel-to-PLC backplane isolation
- Supports 16-bit and 13-bit resolution
- Fast 5 mSec update time for all 8 channels
- No external power supply required for module
- No external current resistor required
- On-board calculations for 4-20 mA offset inputs
- Single-wide module

Specifications

Input channels: 8 analog input channels

Signal Range:

Unipolar: 0 to 5 VDC, 0 to 10 VDC, or 0 to 20 mA Bipolar: -5 to +5 VDC, -10 to +10 VDC, or -20 to

+20 mA

Update Time: 8 WX mode; 5 mSec all channels

Digital Filtering Time Constant: 0.3 Sec

DC Input Resistance:

Voltage mode: $780k\Omega$ Current mode: 250Ω **Repeatability:** 0.0025%

Accuracy:

Voltage mode: 0.125% of full scale from

0° to 60° C

Current mode: 0.225% of full scale from

0° to 60° C

Resolution 8 WX Mode:

Unipolar 15 bits plus sign:

0 - 5 VDC range = 156μV/step 0 - 10 VDC range = 312μV/step 0 - 20 mA range = .625μA/step

Bipolar 15 bits plus sign:

-5 to +5 VDC range = $156\mu\text{V/step}$ -10 to +10 VDC range = $312\mu\text{V/step}$ -20 to +20 mA range = $.625\mu\text{A/step}$

Common Mode Rejection:

>120db @ 60 Hz (digital filtering disabled)

Normal Mode Rejection:

>40db @ 500 Hz (digital filtering enabled)

Connector: Removable (requires 2500-40F)

Wire Gauge: 14-22 AWG

Backplane Power: 3 Watts (maximum)

Module Size: Single wide

Input Protection:

Input ESD Protection: 20,000 V, IEC 1000-4-2,

Level 4

Overrange Protection: +/- 300 VDC Isolation: 1500 VDC channel-to-PLC Shipping Weight: 1.5 lb (0.68 Kg)

Additional Product Information:

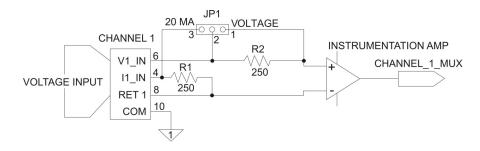
On CTI's Website you find will links to the 2500 Series Std Environmental Specifications and the UL Agency Certificates of Compliance.



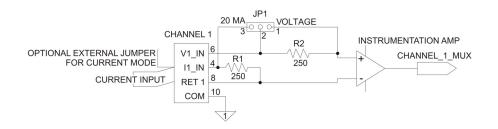
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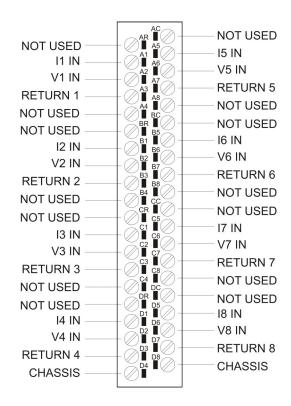
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Typical Internal Circuit Voltage Mode



Typical Internal Circuit Current Mode



2558 Wiring Connector