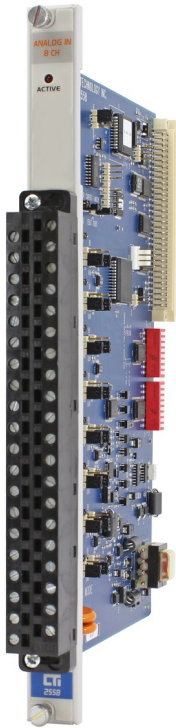


# 2558 8-Channel Analog Input Module



## 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: 780kΩ  
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 = 156μV/step  
-10 to +10 VDC range = 312μV/step  
-20 to +20 mA range = .625μA/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 .

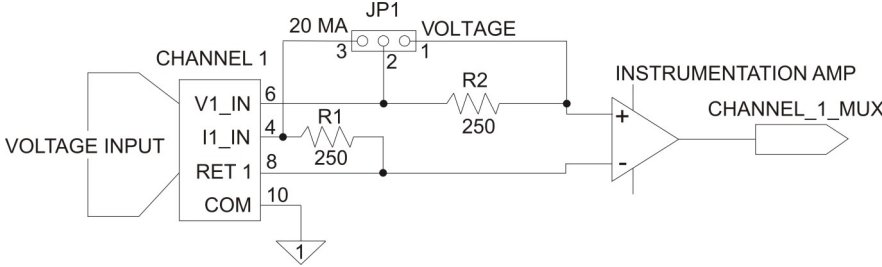


**Control Technology Inc.**

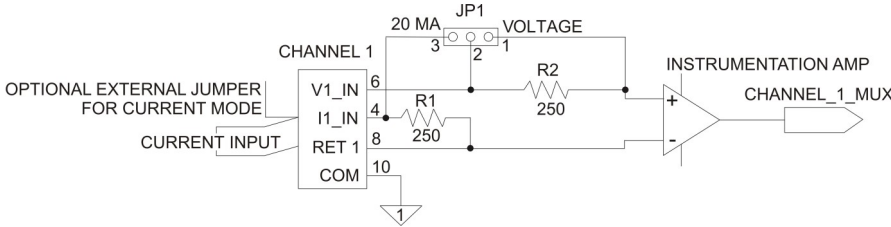
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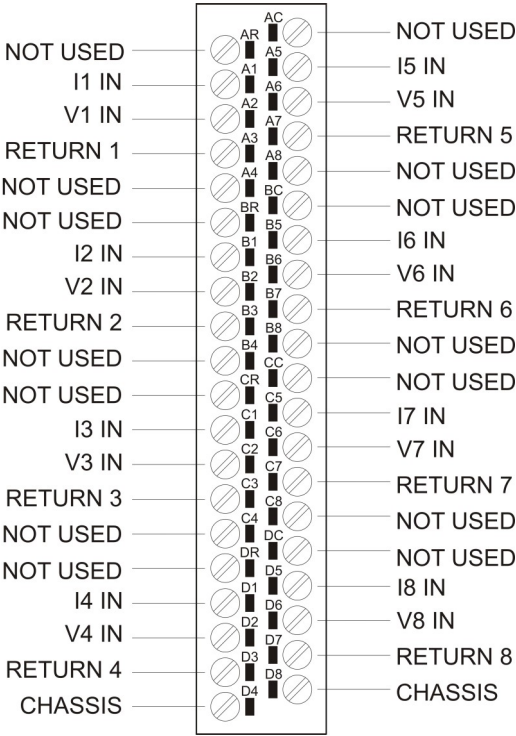
# 2558 8-Channel Analog Input Module



**Typical Internal Circuit Voltage Mode**



**Typical Internal Circuit Current Mode**



**2558 Wiring Connector**