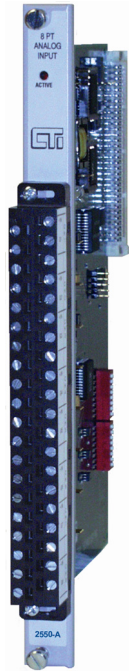


2550-A 8-Channel Isolated Analog Input Module



Description

The 2550-A is a high-speed 8-channel isolated analog input module designed to be compatible with the CTI 2500 Series and Simatic® 505 I/O base. The 2550-A translates analog input signals into an equivalent digital word.

Features

- 1500V channel-to-channel isolation
- 1500V channel-to-PLC backplane isolation
- Fast 4 mSec update time for all 8 channels
- External isolators not required
- 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 isolated 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: 4 mSec all channels

Digital Filtering Time Constant: 0.3 Sec

DC Input Resistance:

Voltage mode: 1 MW

Current mode: 250W

Repeatability: 0.05%

Accuracy:

Voltage mode: 0.1% of full scale from 0 to 60C

Current mode: 0.2% of full scale from 0 to 60C

Resolution 8 WX Mode:

Unipolar 12 bits plus sign:

0-5 VDC range = 1.25 mV/step

0-10 VDC range = 2.5 mV/step

0-20 mA range = 5 µA/step

Bipolar 11 bits plus sign:

-5 to +5 VDC range = 2.5 mV/step

-10 to +10 VDC range = 5 mV/step

-20 to +20 mA range = 10 µA/step

Common Mode Rejection:

>140db @ 60 Hz (digital filtering disabled)

Normal Mode Rejection:

>40db @ 500 Hz (digital filtering enabled)

Connector: Removable

Wire Gauge: 14-22 AWG

Backplane Power: 6 Watts (maximum)

Module Size: Single-wide

Input Protection:

Input ESD Protection: 20,000 V

Overrange Protection: 500 V

Isolation: 1500 VDC channel-to-channel

1500 VDC channel-to-PLC

Operating Temperature: 0° to 60°C

(32° to 140°F)

Storage Temperature: -40° to 85°C

(-40° to 185°F)

Humidity, Relative: 5% to 95%

(non-condensing)

Agency Approvals:

UL, UL Canada, FM (Class I, Div 2), CE

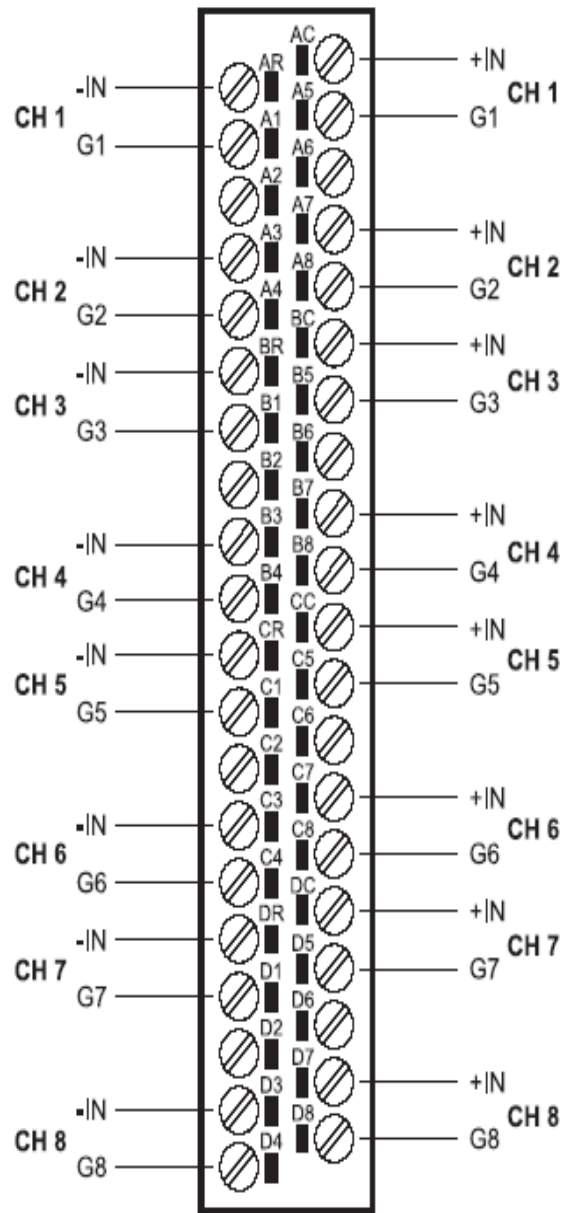
Shipping Weight: 1.5 lb. (0.68 Kg)



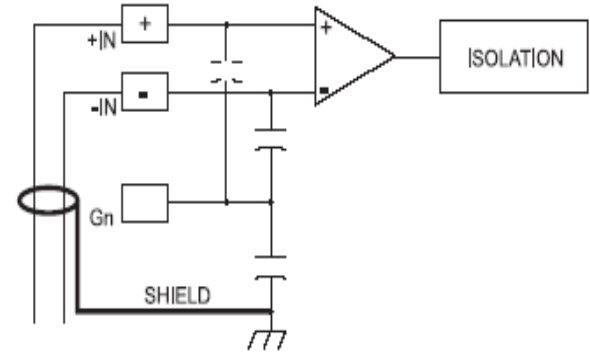
Control Technology Inc.

5734 Middlebrook Pike, Knoxville, TN 37921-5962

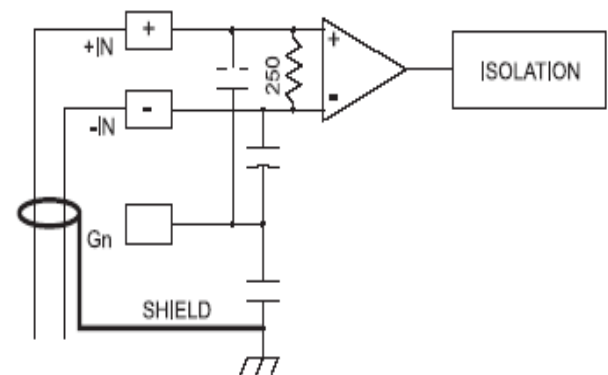
Phone: 865/584-0440 Fax: 865/584-5720 www.controltechnology.com



2550-A Connector



Typical Internal Circuit - Voltage Mode



Typical Internal Circuit - Current Mode

NOTE: The front connector on the module contains a G terminal which may be used for the shield wire if the installation is in a noise free environment. If the installation is in an extremely noisy environment CTI strongly recommends that the shield wires be terminated to the PLC chassis ground.