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 base . The 2550-A translates analog input signals into an equivalent digital word.

Features

- 1500V channel-to-channel isloation
- 1500V channel-PLC backplane isolation
- Fast 4ms update time for all channels
- External isolators not required
- No external power supply required for the module
- On-board calculations for 4-20mA offset inputs
- Single-wide module

Specifications

Input Channels:

8 isolated analog input channels

Isolation: 1500VDC Channel-to-channel and

1500 VDC channel-to-PLC

Signal Range:

Unipolar: 0 to 5VDC, 0 to 10VDC or 0 to 20mA

Bipolar: -5 to +5VDC, -10 to +10VDC or

-20 to + 20mA Update Time

8 WX mode: 4mSec all channels

Digital Filtering Time Constant: 0.3Sec

DC Input Resistance: Voltage mode: 1MW Current mode: 250W Repeatability: 0.05%

Accuracy:

Voltage mode: 0.1% of full scale from 0-60°C Current mode: 0.2% of full scale from 0-60°C

Resolution 8WX Mode: Unipolar 12 bits pls sign: 0-5VDC range = 1.25 mV/step 0-10VDC range = 2.5 mV/step

 $0-20\text{mA} = 5\mu\text{A/step}$

Bipolar 11 bits pls sign:

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

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

 $-20 \text{ to } +20 \text{mA} = 10 \mu \text{A/step}$

Common Mode Rejection:

>140db @ 60Hz

Normal Mode Rejection:

>40db @ 60Hz

Connector: standard CTI 2500-40F 40-position

removeable connector, 14-22 AWG **Backplane Power:** 6 Watts (maximum)

Module Size:: Single-wide Input ESD Protection: 20,000V Overrange Protection: 500V 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.

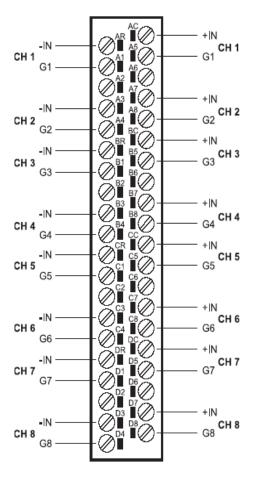
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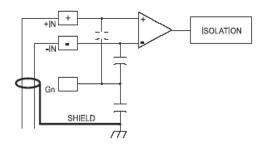


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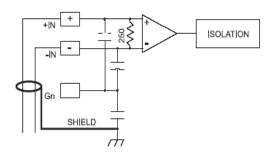
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Typical Internal Circuit - Voltage Mode



Typical Internal Circuit - Current Mode

2550-A Connector

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.

Closed Loop Control Application