2555-A 16-Channel Analog Input Module

Description
The 2555-A is a high-speed 16-channel differential analog input module designed to be compatible with the CTI 2500 Series and Simatic® 505 I/O base. The 2555-A translates analog input signals into an equivalent digital word.

Features
- Simatic® 505 I/O base format
- 1500 VDC channel-to-PLC backplane isolation
- 14 Bits resolution Unipolar, 13 Bits + Sign Bipolar
- Fast 5.9 mSec update time
- No external power supply required for module
- No external current resistor required
- Microprocessor self-diagnostics
- Supports Immediate I/O

Specifications
Input Channels:
16 differential analog input channels
140 VRMS channel-to-channel CMR
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: 5.9 mSec no filtering
8.2 mSec digital filtering enabled
Filtering Time Constant: 80 mSec
DC Input Resistance:
Voltage Mode: 680KΩ
Current Mode: 250Ω
Repeatability: 0.008%
Accuracy:
Voltage Mode: 0.057% of full scale @ 25°C
Current Mode: 0.2% of full scale @ 25°C
Resolution:
Unipolar:
14 bit plus sign
0-5 VDC range = 0.3125 mV/step
0-10 VDC range = 0.625 mV/step
0-20 mA range = 1.22 µA/step
Bipolar:
13 bit plus sign
+5 to -5 VDC range = 0.625 mV/step
+10 to -10 VDC range = 1.25mV/step
Common Mode Rejection:
>86 db @ 60Hz (digital filtering disabled)
Normal Mode Rejection:
>45 db @ 60 Hz (digital filtering enabled)
Connector: 2500-40F
Wire Gauge: 14-22 AWG
Backplane Power: 5.0 Watts
Module Size: Single-wide
Input Overrange Protection: 500 V
Isolation: 1500 VDC channel-to-PLC
Shipping Weight: 1.5 lbs (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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Typical Internal Circuit - Voltage Mode

Typical Internal Circuit - Current Mode

2555 Input Connector