



Model I-7013D

Models: I-7013, I-7013D

RTD Analog Input Module

with LED Display (I-7013D)

The I-7013 and I-7013D are single-channel RTD analog input module. The I-7013D has a 4½ digit LED display.

Feature/Benefits

- DIN rail mountable
- 10 to 30 VDC
- Dual Watchdog
- RTD direct connect

Specifications

Analog Input

- Channels: 1
- Type: Pt, Ni
- RTD Type: Pt100 $\alpha=0.00385$
Pt100 $\alpha=0.003916$
Ni 120
Pt1000 $\alpha=0.00385$
(version B1.0 or later)

Pt100	-100 C to +100 C	$\alpha=0.00385$
	0 C to +100 C	$\alpha=0.00385$
	0 C to +200 C	$\alpha=0.00385$
	0 C to +600 C	$\alpha=0.00385$
	-100 C to +100 C	$\alpha=0.003916$
	0 C to +100 C	$\alpha=0.003916$
	0 C to +200 C	$\alpha=0.003916$
	0 C to +600 C	$\alpha=0.003916$
Ni120	-80 C to +100 C	
	0 C to +100 C	
Pt1000	-200 C to +600 C	$\alpha=0.00385$

- Resolution: 16 bits
- Sampling rate: 10 Samples/Second
- Bandwidth: 5.24 Hz
- Accuracy: $\pm 0.05\%$
- Zero Drift: $\pm 0.5\mu\text{V}/^\circ\text{C}$
- Span Drift: $\pm 1.0\mu\text{V}/^\circ\text{C}$
- CMR @ 50/60 Hz: 150 dB min
- NMR @ 50/60 Hz: 100 dB min
- Isolation: 3000Vrms
- Wire Connector: 2/3/4 wire

PIN Assignments

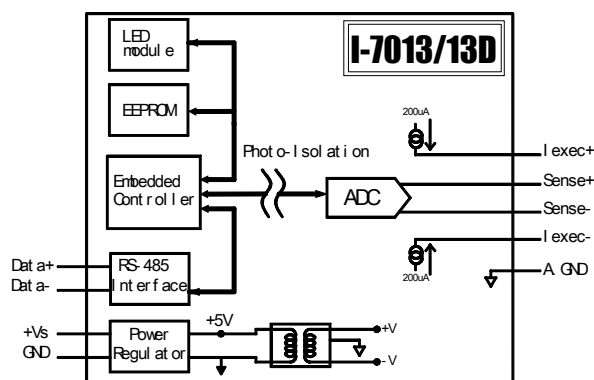
+I EXEC	1
+SENSE	
-SENSE	
-I EXEC	
A GND	
INIT*	
(Y)DATA+	
(G)DATA-	
(R)+Vs	
(B)GND	10

International Headquarters:

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Block Diagram



LED Indication 4½ digits (only for I-7013D)

RS-485 Connector

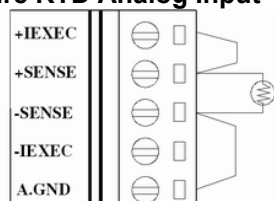
Asynchronous 2-wire half-duplex
Pluggable terminal block: Pitch 5.08mm

Baud Rate

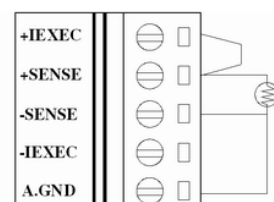
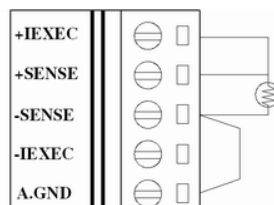
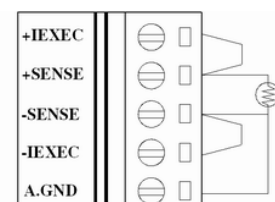
1.2K/2.4K/4.8K/9.6K/19.2K/38.4K/57.6K/115.2K bps

Wire Connection

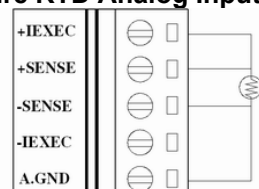
2-wire RTD Analog Input



3-wire RTD Analog Input



4-wire RTD Analog Input



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Power Requirements

Power input: 10 to 30 VDC

Power Consumption

0.7 Watt for I-7013

1.3 Watt for I-7013D

Environmental

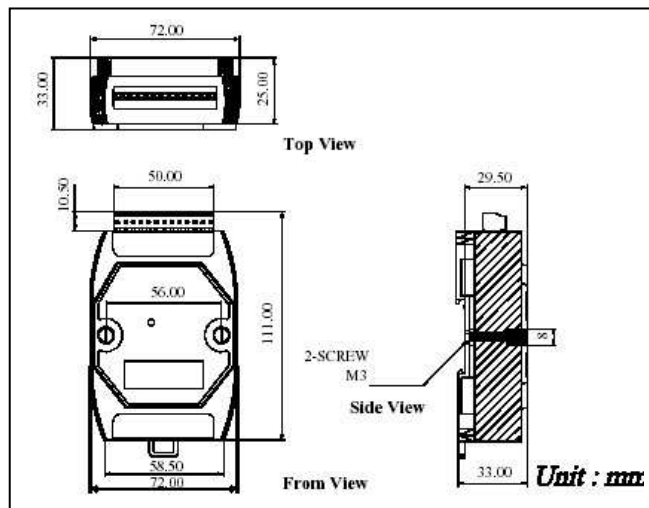
Storage temperature: -25 to 80°C
(-13 to 176 °F)

Operation temperature: -20 to 75°C
(-4 to 167 °F)

Humidity: 5 to 95%, non-condensing

Dimensions: 120L x 72W x 33H cm
(4.7 x 2.8 x 1.3 in)

Certification: CE



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