



Model I-7033D

Models: I-7033, I-7033D
3-channel RTD Analog Input Module
with LED Display (I-7033D)

I-7000 is a family of network data acquisition and control modules providing analog to digital, digital to analog, digital input/output, timer/counter and other functions. The modules can be remotely controlled by a set of commands.

The I-7033 is a three-channel RTD input module. The I-7033D is the I-7033 with 4 1/2 digital LED display.

Specifications

Analog Input

- Channels: 3
- 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	$\alpha = 0.003916$
Ni120	-80 C to +100 C	
	0 C to +100 C	
Pt1000	-200 C to +600 C	$\alpha = 0.00385$

Features/Benefits

- 3000VDC isolated analog input
- 24-bit sigma-delta ADC to provide excellent accuracy
- Software calibration
- Dual watchdog
- RTD direct connect

PIN Assignments

+I EXEC2	1	A GND	20
+SENSE2		-I EXEC1	
-SENSE2		-SENSE1	
-I EXEC2		+SENSE1	
A GND		+I EXEC1	
INIT*		A GND	
(Y)DATA+		-I EXEC0	
(G)DATA-		-SENSE0	
(R)+Vs		+SENSE0	
(B)GND	10	+I EXEC0	11

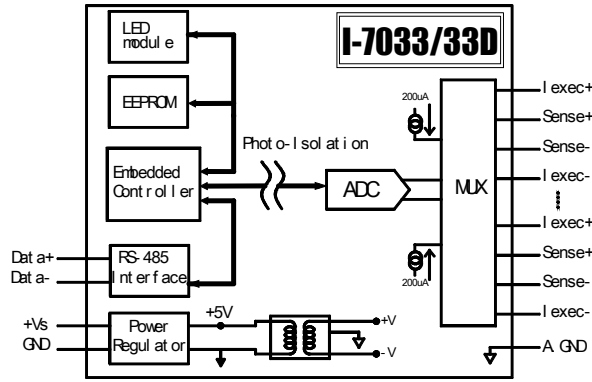
- Resolution: 16 bits
- Sampling rate: 15/12.5 Samples/Second
with filter at 60/50Hz
- Bandwidth: 15.7 Hz
- Accuracy: $\pm 0.1\%$
- Zero drift: $\pm 0.5\mu V/^\circ C$
- Span drift: $\pm 1.0\mu V/^\circ C$
- CMR @ 50/60 Hz: 150 dB
- NMR @ 50/60 Hz: 100 dB
- Isolation: 3000Vrms
- Wire connector: 2/3/4 wire

International Headquarters:

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Block Diagram



LED Indication 4 1/2 digits (only for I-7033D)

RS-485 Connector

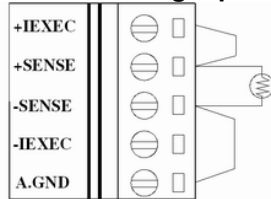
Asynchronous 2-wire half-duplex
Pluggable terminal block: Pitch 5.08mm

Baud Rate

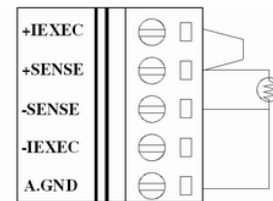
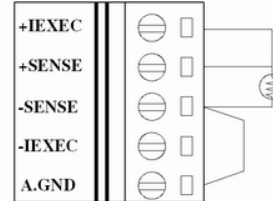
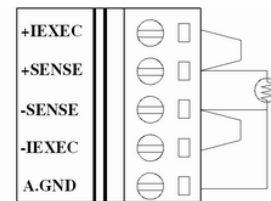
1.2K/2.4K/4.8K/9.6K/19.2K/38.4K/57.6K/115.2K bps

Wire Connection

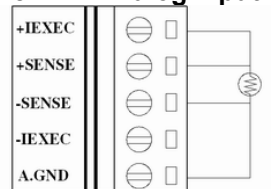
2-wire RTD Analog Input



3-wire RTD Analog Input



4-wire RTD Analog Input



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Power Requirements

Power input: +10 to +30VDC input

Power Consumption

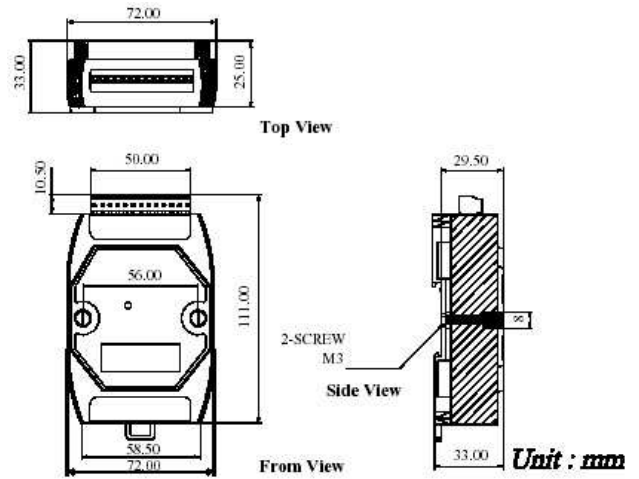
1.0Watt for I-7033
1.6Watt for I-7033D

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 LxWxH: 120L x 72W x 33H cm
47.2 x 28.4 x 13.0 in

Certification: CE



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