



Model I-7011PD with LED display

Models: I-7011P, I-7011PD

Single-Channel Thermocouple

Analog Input Module

with LED Display (I-7011PD)

The I-7011P and I-7011PD are single-channel thermocouple input modules. The I-7011PD has a 4½ digit LED display.

Feature/Benefits

- DIN rail mountable
- 10 to 30 VDC
- Dual Watchdog

Specifications

Analog Input

- Photo-isolation: 3750 Vrms
- Type: mV, V, mA (with external 125 ohms resistor)
- Thermocouple: Type J, K, T, E, R, S, B, N, C, L, M
- Channels: 1
- Voltage range: +/-15mV, +/-50mV, +/-100mV, +/- 500mV, +/-1V, +/- 2.5V
- Current range: +/- 20mA
- Resolution: 16 bits
- Sampling rate: 10 Samples/Second
- Bandwidth: 5.24 Hz
- Input impedance: 20M ohms
- Accuracy: ±0.05%
- Zero Drift: ± 0.5uV/°C
- Span Drift: 25ppm/°C
- CMR @ 50/60 Hz: 150 dB
- NMR @ 50/60 Hz: 100 dB
- Over voltage protection: 35V (P-P)
- Isolation: 3000Vrms

Digital Input

- Channel: 1
- Logic Level 0: + 1V max
- Logic Level 1: + 3.5V to 30V

Event Counter

- Max. Input Frequency: 50Hz
- Min. Pulse Width: 1 mS

Digital Output

- Channels: 2
- Open collector to 30V
- Output Load: sink 30mA max.
- Power dissipation: 300mW

PIN Assignments

+IN	1
-IN	
DO1/HI	
DIO/EV	
DO0/LO	
INIT*	
(Y)DATA+	
(G)DATA-	
(R)+Vs	
(B)GND	10

Thermocouple type: (C)

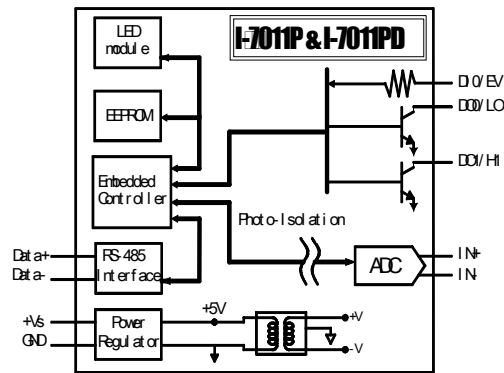
Type	Range (C)
J	-210~ +760
K	-270~+1372
T	-270~+400
E	-270~+1000
R	0~+1768
S	0~+1768
B	0~+1820
N	-270~1300
C	0~2320
L	-200~800
M	200~100

International Headquarters:

B & B Electronics Mfg. Co. 707 Dayton Road P.O. Box 1040 Ottawa, IL 61350 USA
815-433-5100 Fax 433-5104 www.bb-elec.com orders@bb-elec.com support@bb-elec.com

B & B Electronics Ltd Westlink Commercial Park Oranmore Co. Galway Ireland
+353 91 792444 Fax +353 91 792445 www.bb-europe.com orders@bb-elec.com support@bb-europe.com

Block Diagram



LED Indication 4½ digits (I-7011PD only)

RS-485 Connector

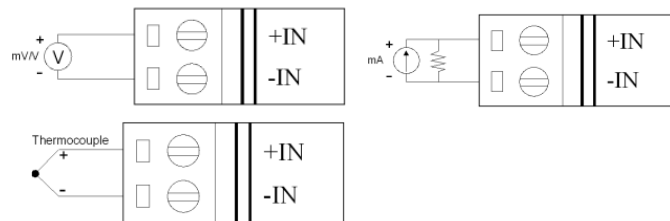
Asynchronous 2-wire half-duplex
Pluggable terminal block: Pitch 5.08mm

Baud Rate

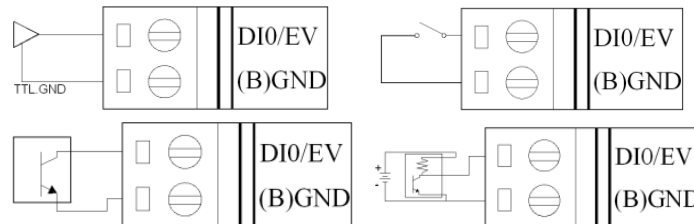
1.2K/2.4K/4.8K/9.6K/19.2K/38.4K/57.6K/115.2K bps

Wire Connection

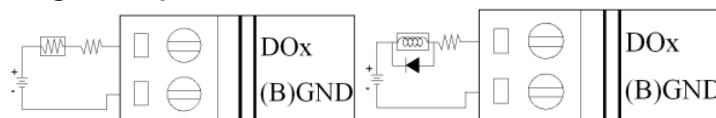
Analog Input



Digital Input



Digital Output



International Headquarters:

B & B Electronics Mfg. Co. 707 Dayton Road P.O. Box 1040 Ottawa, IL 61350 USA
815-433-5100 Fax 433-5104 www.bb-elec.com orders@bb-elec.com support@bb-elec.com

B & B Electronics Ltd Westlink Commercial Park Oranmore Co. Galway Ireland
+353 91 792444 Fax +353 91 792445 www.bb-europe.com orders@bb-elec.com support@bb-europe.com

Power Requirements

Power input: 10 to 30 VDC

Power Consumption

0.9 Watt for I-7011P

1.5 Watt for I-7011PD

Environmental

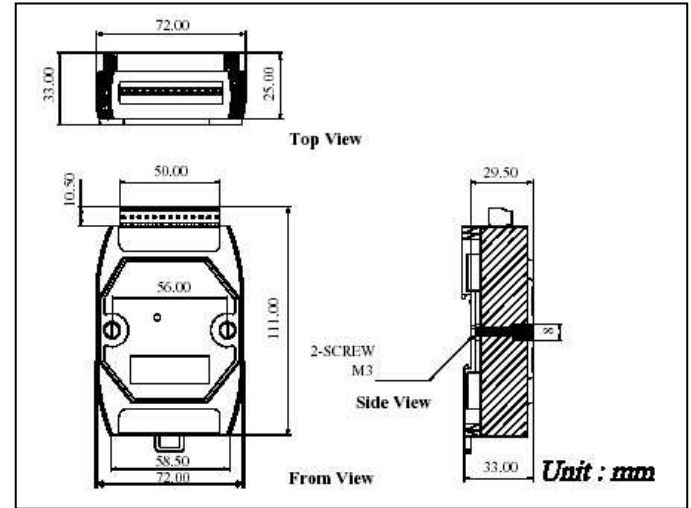
Storage temperature: -25 to 80°C
(-13 to 176°F)

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



International Headquarters:

B & B Electronics Mfg. Co. 707 Dayton Road P.O. Box 1040 Ottawa, IL 61350 USA
815-433-5100 Fax 433-5104 www.bb-elec.com orders@bb-elec.com support@bb-elec.com

B & B Electronics Ltd Westlink Commercial Park Oranmore Co. Galway Ireland
+353 91 792444 Fax +353 91 792445 www.bb-europe.com orders@bb-elec.com support@bb-europe.com