



I-7012, I-7012F: High Speed Single Analog Input Module w/ LED Display (D,FD)

I-7000 is a family of network data acquisition and control modules. They provide 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-7012 is a single channel analog input module with high/low alarm function. The I-7012D is the I-7012 with 4 1/2 digital LED display. The I-7012F is a I-7012 with high speed analog input function. The I-7012FD is the I-7012F with 4 1/2 digital LED display.



Feature/Benefits

- 3000VDC isolated analog input
- 24bit sigma-delta ADC to provide excellent accuracy
- Thermocouple direct connect with built-in CJC
- Software calibration
- Dual Watchdog

PIN Assignments

+IN	1
-IN	
DO1/HI	
DI0/EV	
DO0/LO	
INIT*	
(Y)DAT	
A+	
(G)DAT	
A-	10
(R)+Vs	
(B)GND	

Analog Input

- Type: mV, V , mA (with external 125 ohms resistor)
- Channels: 1
- Voltage range: +/-150mV,+/- 500mV, +/-1V,+/- 5V, +/-10V
- Current range: +/- 20mA
- Resolution: 16 bits
- Sampling rate: 10 Samples/Second (for 7012/7012D)
100 Samples/Second(for 7012F/7012FD)
- Bandwidth: 5.24 Hz (for 7012/7012D)
52.4 Hz(for 7012F/7012FD)
- Input impedance: 20M ohms
- Accuracy: ±0.05%
- Zero Drift: ± 20uV/°C
- Span Drift: ±25ppm/°C
- CMR @ 50/60 Hz: 86 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

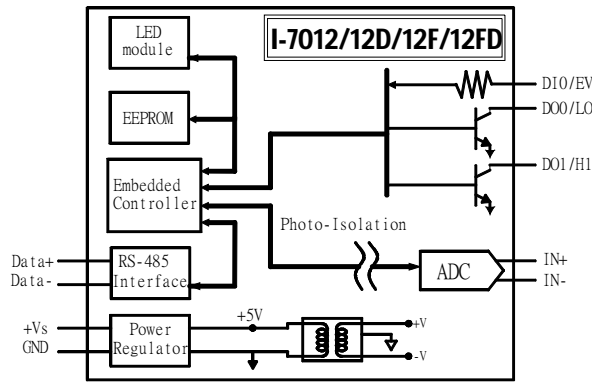
Digital Output

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





Block Diagram



LED Indication 4 1/2 digits (only for I-7012D/I-7012FD)

RS-485 Connector

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

Baud Rate

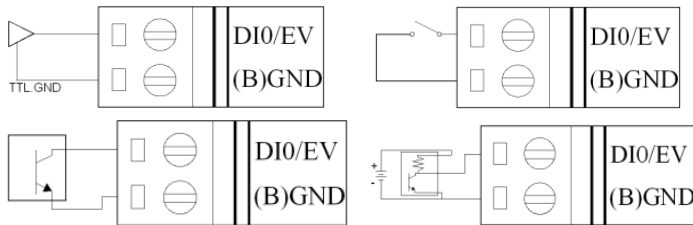
1.2K/2.4K/4.8K/9.6K/19.2K/38.4K/57.6K/115.2K bps

Wire Connection

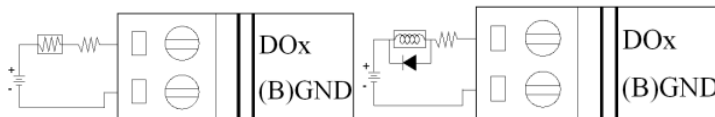
Analog Input



Digital Input



Digital Output





CAGE/NCAGE Code: 3FNFO

(310) 517-9888
www.icpdas-usa.com

High Quality Data Acquisition and Embedded Control Products

Power Requirements

Power input: +10~+30Vdc input

Power Consumption

1.3Watt for I-7012
1.9Watt for I-7012D

Environmental

Storage temperature: -25°C to 80°C
Operation temperature: -20°C to 75°C
Humidity: 5 to 95%, non-condensing

Dimensions: 120L x 72W x 33H cm
Certification: CE

