



I-9012

200 kS/s, 16-bit 8 channels
Simultaneously Sampled Analog Input Module

Features

- 16-bit AD Converter
- Simultaneously Sampled
- 200 kHz sample rate at single channel
- 8 k byte FIFO
- 4 kV ESD Protection
- 2500 VDC intra-module isolation
- Wide Operating Temperature Range: -25 ~ +75 °C



Introduction

The I-9012 is a high performance Analog Input module with 16 bits of resolution and a sampling rate up to 200 kS/s per channel. The I-9012 provide 8 channels and input range could be programmable to ± 5 V, ± 10 V Trigger Output and Trigger Input Pin cloud make multitude of I-9012 modules Simultaneously Sampled at same time. And the module also provides 4 kV ESD protection and 2500 VDC intra-module isolation.

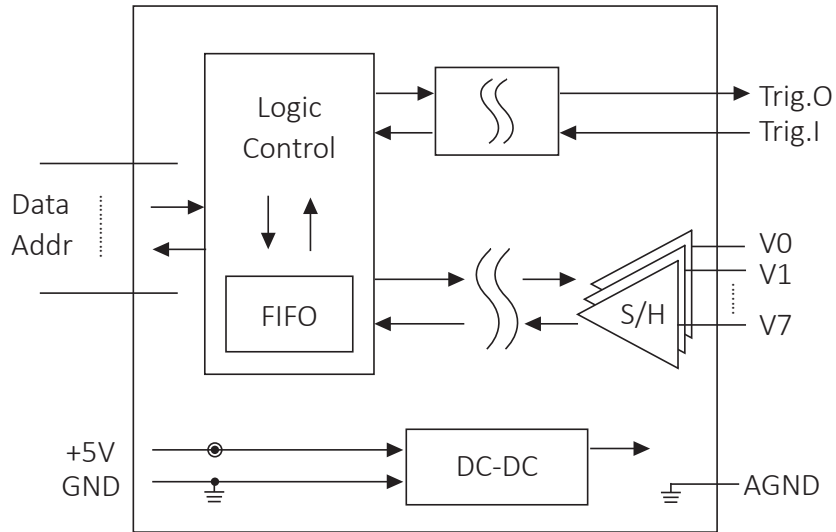
System Specifications

LED Display	
System LED Indicator	1 LED as Power Indicator
Isolation	
Intra-module Isolation, Field-to-Logic	2500 VDC
EMS Protection	
ESD (IEC 61000-4-2)	± 4 kV Contact for each Terminal ± 8 kV Air for Random Point
Power	
Consumption	1 W Max.
Mechanical	
Dimensions (W x L x H)	31 mm x 134 mm x 144 mm
Environment	
Operating Temperature	-25 ~ +75 °C
Storage Temperature	-40 ~ +85 °C
Humidity	10 ~ 90 % RH, Non-condensing

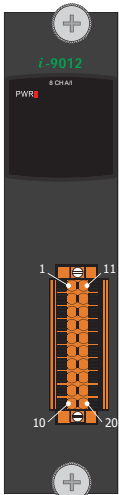
I/O Specifications

Analog Input	
Channels	8-ch Single-ended
Input Range	± 5 V, ± 10 V
Resolution	16-bit
Sample Rate	Single Channel Pacer Internal Mode: 200 kS/s Single Channel Pacer External Mode: 200 kS/s Single Channel Polling Mode: 40 kS/s
FIFO	8 KB
Accuracy	0.05 % of FSR @ 25 °C
AD Trigger Mode	Polling: Software Trigger Pacer: Internal Clock, External Clock
Trigger Output	
Frequency Range	16 Hz ~ 200 kHz
Compatibility	5 V/TTL
Output Type	Pulse
Pulse Width	100 ns/10 MHz
Trigger Input	
Frequency Range	1 Hz ~ 200 KHz
Trig Edge	Falling Edge
Logic High	> 5 V
Logic Low	< 0.8 V

Internal I/O Structure

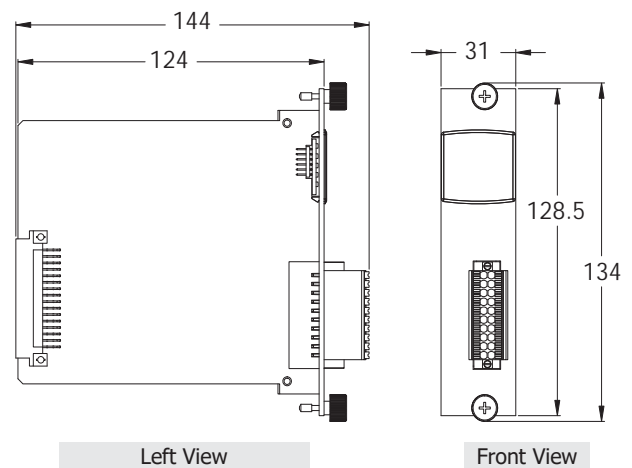


Pin Assignments

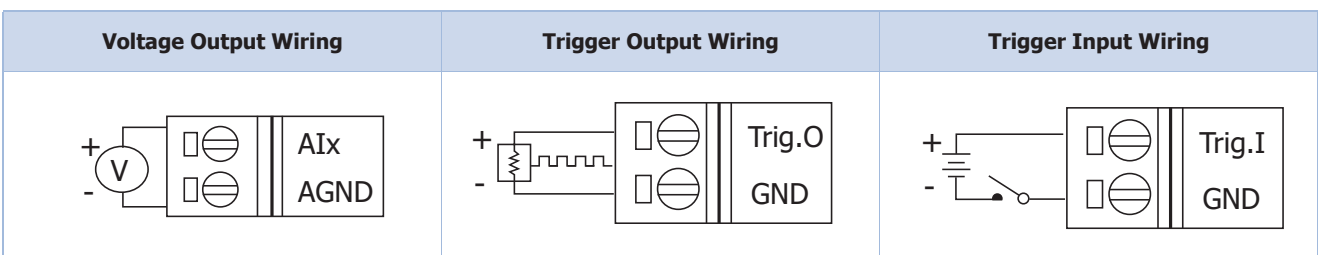


Pin Assignment	Terminal No.	Pin Assignment
Trig.O	01	11 GND
Trig.I	02	12 GND
AI0	03	13 AGND
AI1	04	14 AGND
AI2	05	15 AGND
AI3	06	16 AGND
AI4	07	17 AGND
AI5	08	18 AGND
AI6	09	19 AGND
AI7	10	20 AGND

Dimensions (Units: mm)



Wire Connections



Ordering Information

I-9012 CR 8 channels Simultaneously Sampled Analog Input Module, 200 kS/s (RoHS)