



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
- 2500 Vrms intra-module isolation
- 8 k byte FIFO
- 4 kV ESD Protection
- 2500 Vrms Intra-module Isolation
- Wide Operating Temperature Range: -25 to +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 Vrms intra-module isolation.

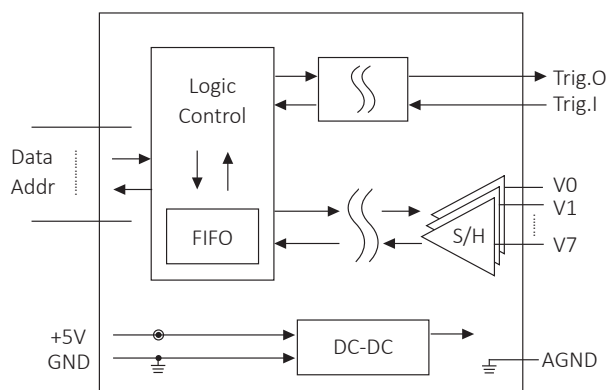
System Specifications

| Model | I-9012 |
|--|--------------------------------------|
| LED Display | |
| System LED Indicator | 1 LED as Power Indicator |
| I/O LED Indicator | Yes |
| Isolation | |
| Intra-module Isolation, Field to logic | 2500 Vrms |
| 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 (L × W × H) | 144 mm × 31 mm × 134 mm |
| Environment | |
| Operating Temperature | -25 ~ +75 °C |
| Storage Temperature | -40 ~ +85 °C |
| Humidity | 10 ~ 90 % RH, Non-condensing |

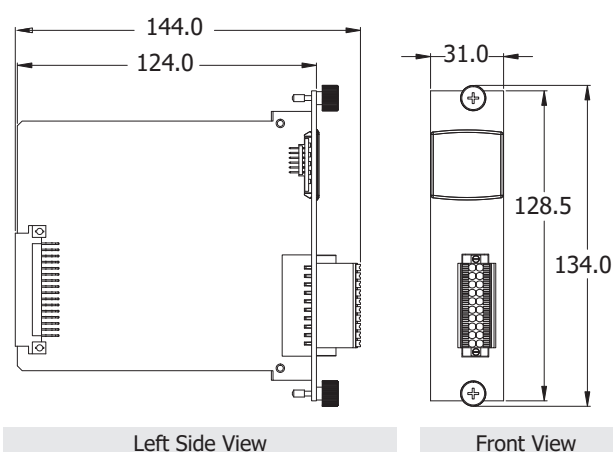
I/O Specifications

| Model | | I-9012 |
|-----------------------|---------|--|
| Analog Input | | |
| Range | | 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 k byte |
| Accuracy | | 0.05 % of FSR @ 25 °C |
| AD Trigger Mode | Polling | Software trig |
| | Pacer | Internal Clock |
| | | External Clock |
| Trig Output | | |
| Frequency Range | | 16 Hz ~ 200 KHz |
| Compatibility | | 5 V / TTL |
| Output Type | | Pluse |
| Pluse Width | | 100 ns / 10 MHz |
| Trig Input | | |
| Frequency Range | | 1 Hz ~ 200 KHz |
| Trig Edge | | Falling Edge |
| High Logic | | < 5 V |
| Low Logic | | > 0.8 V |

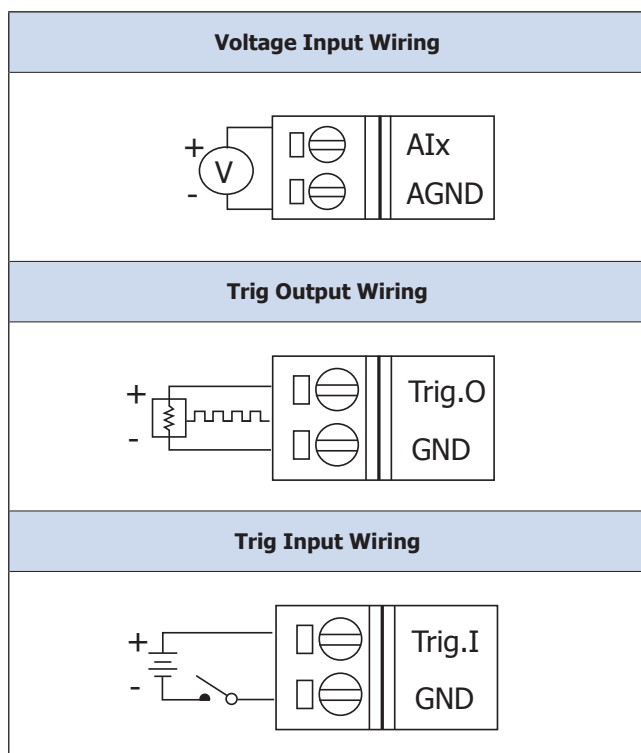
Internal I/O Structure



Dimensions (Units: mm)



Wire Connections



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 |

Ordering Information

| | |
|------------------|---|
| I-9012 CR | 200 kS/s, 16-bit 8 channels Simultaneously Sampled Analog Input Module (RoHS) |
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