



# I-87019R

8-channel Universal Analog Input Module with High Over Voltage Protection

Model:I-87019R

## Specifications

### Analog Input

Input Channels	8 Differential
Input Type	+/- 15mV, +/- 50mV, +/- 100mV, +/- 150mV +/- 500mV, +/- 1V, +/- 2.5V, +/- 5V, +/- 10V -20mA ~ +20mA (Jumper Selectable) Thermocouple (J, K, T, E, R, S, B, N, C, L, M, LDIN43710)
Resolution	16-bit
Sampling Rate	8 Samples/ sec (Total)
Accuracy	For +/-15mV: +/- 0.3% of FSR Others: +/- 0.15% of FSR
Zero Drift	+/- 20µgV/ °XC
Span Drift	+/- 25 µgV/ °XC
Common Mode Rejection	113dB
Normal Mode Rejection	100 dB
Input Impedance	>1M Ohms
Individual Channel Configurable	Yes
Open Thermocouple Detection	Yes
Overvoltage Protection	240VRMS
4KV ESD Protection	Yes, Contact for each terminal.
Intra-module Isolation, Field to Logic	3000VDC

### LED Display

1 LED as Power/ Communication Indicator  
16 LEDs as High/ Low Alarm Signals

### Power

Power Consumption Maximum : 1.1W

### Environment

Operating Temperature -25 to 75 °XC  
Storage Temperature -30 to 75 °XC  
Humidity 5 to 95%, Non-condensing

### Dimensions

**Thermocouple type**

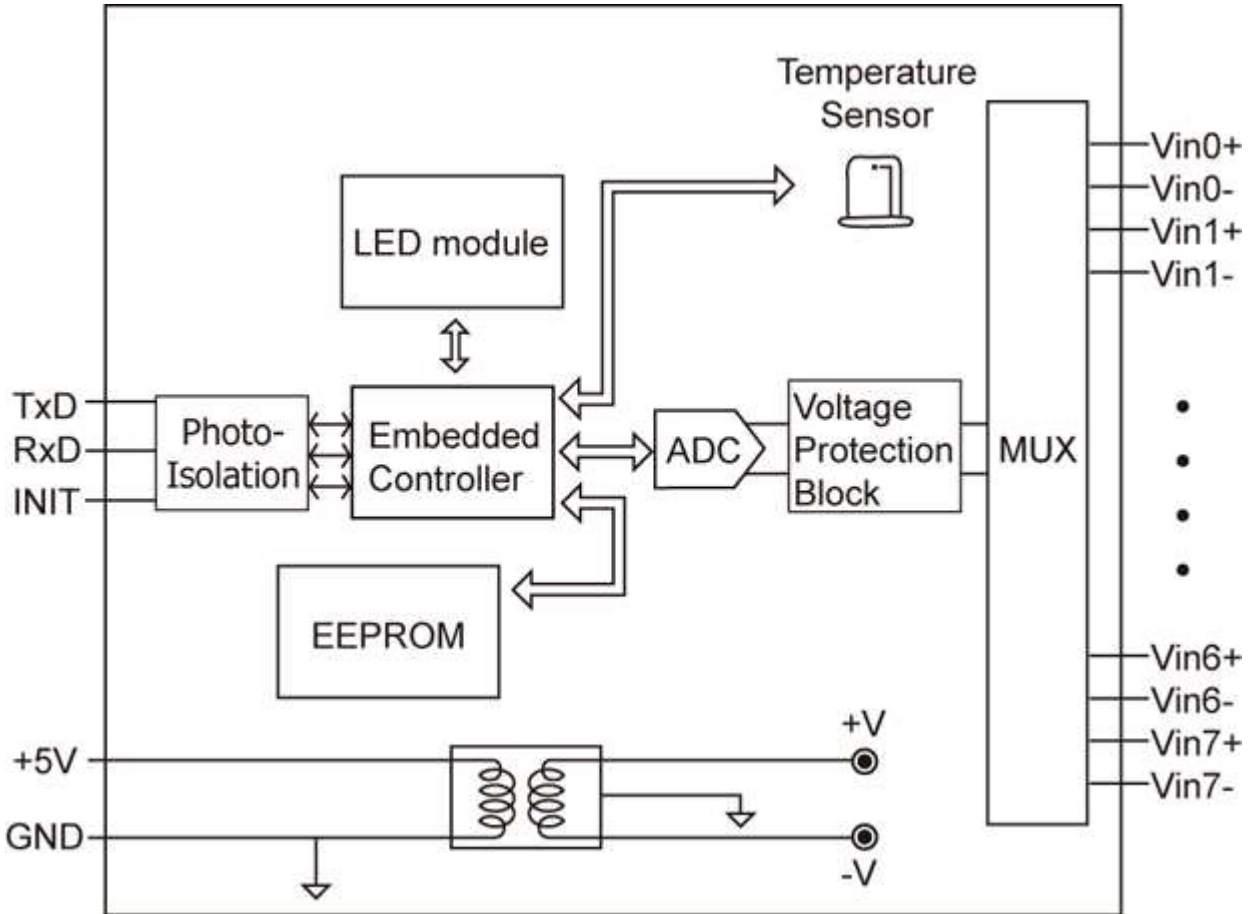
Type Code	Thermocouple Type	Temperature Range °XC
0E	Type J	-210 ~ +760
0F	Type K	-270 ~ +1372
10	Type T	-270 ~ +400
11	Type E	-270 ~ +1000
12	Type R	0 ~ +1768
13	Type S	0 ~ +1768
14	Type B	0 ~ +1820
15	Type N	-270 ~ +1300
16	Type C	0 ~ +2320
17	Type L	-200 ~ +800
18	Type M	-200 ~ +100
19	Type L2 (DIN 43710)	-200 ~ +900

**Ordering information**

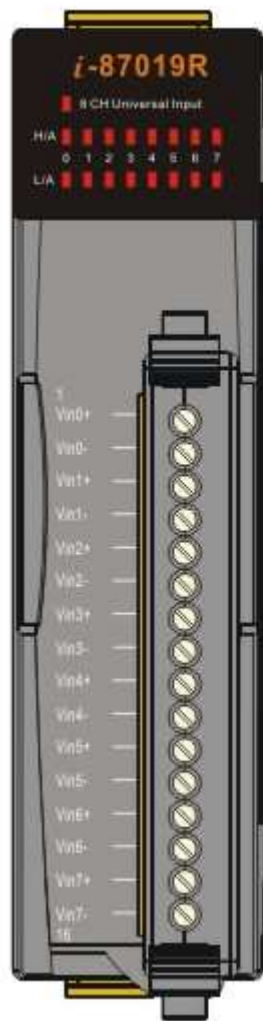
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# I-87019R Hardware

## Internal I/O Structure



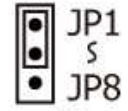
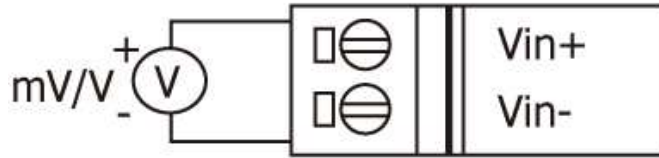
## PIN Assignment



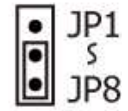
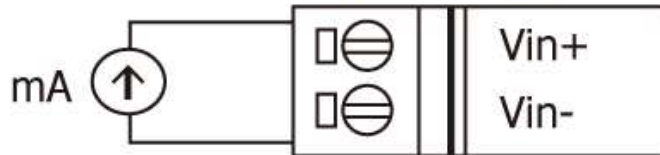
Terminal No.	Pin Assignment Name
01	Vin0+
02	Vin0-
03	Vin1+
04	Vin1-
05	Vin2+
06	Vin2-
07	Vin3+
08	Vin3-
09	Vin4+
10	Vin4-
11	Vin5+
12	Vin5-
13	Vin6+
14	Vin6-
15	Vin7+
16	Vin7-

## Wire Connection

### Voltage Input Wiring



### Current Input Wiring



### Thermocouple Input Wiring

