



SG-3013-G

RTD Input Signal Conditioner

Features

- Three-way Isolation: 1000 VDC
- Accuracy: $\pm 0.1\%$ of full range
- Flexible DIN-rail



Introduction

The SG-3013 is a RTD input to voltage or current output signal conditioning module. It has 1000 Vdc three-way isolation for input, output and power. It also can change the input/output range via internal configuration switches.

It's easy to mount the SG-3013 on a standard DIN rail and can operate in environments with wide temperature range.

Thermocouple Type

Type	α	Temperature Range (°C)
Pt100	0.00385	-200 ~ 600
Pt100	0.003916	-200 ~ 600
Pt1000	0.00385	-200 ~ 600
Ni 120		-80 ~ 300
Cu 100 at 0 °C	$\alpha = 0.00421$	-20 ~ 150
Cu 100 at 25 °C	$\alpha = 0.00427$	0 ~ 200
Cu 1000 at 0 °C	$\alpha = 0.00421$	-20 ~ 150

Applications

- Building Automation
- Machine Automation
- Remote Diagnosis
- Factory Automation
- Remote Maintenance
- Testing Equipment

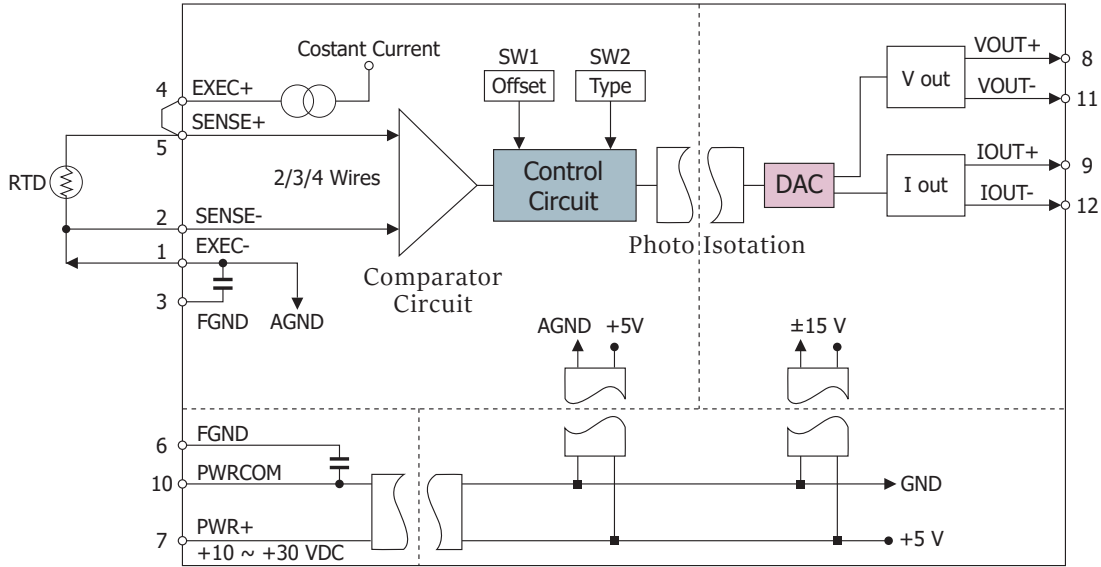
System Specifications

Isolation	
Three-way Isolation	1000 VDC
Power	
Reverse Polarity Protection	Yes
Input Range	+10 ~ +30 VDC
Consumption	1.2 W
Mechanical	
Dimensions (W x L x H)	25 mm x 114 mm x 70 mm
Environment	
Operating Temperature	-25 ~ +75 °C
Storage Temperature	-30 ~ +75 °C
Humidity	5 ~ 95% RH, Non-condensing

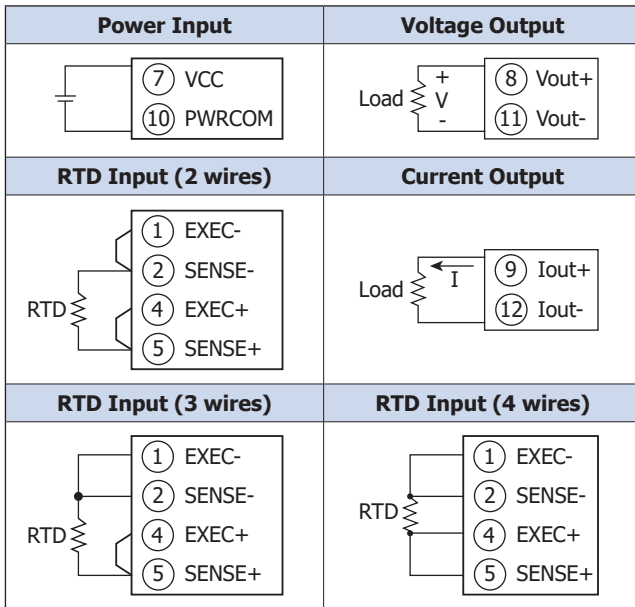
I/O Specifications

Analog Input	
Channels	1
Type	Pt100 $\alpha = 0.00385$ Pt100 $\alpha = 0.003916$ Ni 120 Pt1000 $\alpha = 0.00385$
Accuracy	$\pm 0.1\%$ of FSR
Response Time	100 ms
Analog Output	
Channels	1
Range	Voltage: 0 ~ 5 VDC, 0 ~ 10 VDC Current: 0 ~ 20 mA, 4 ~ 20 mA
Current Load Resistance	0 ~ 500 Ω (Source)

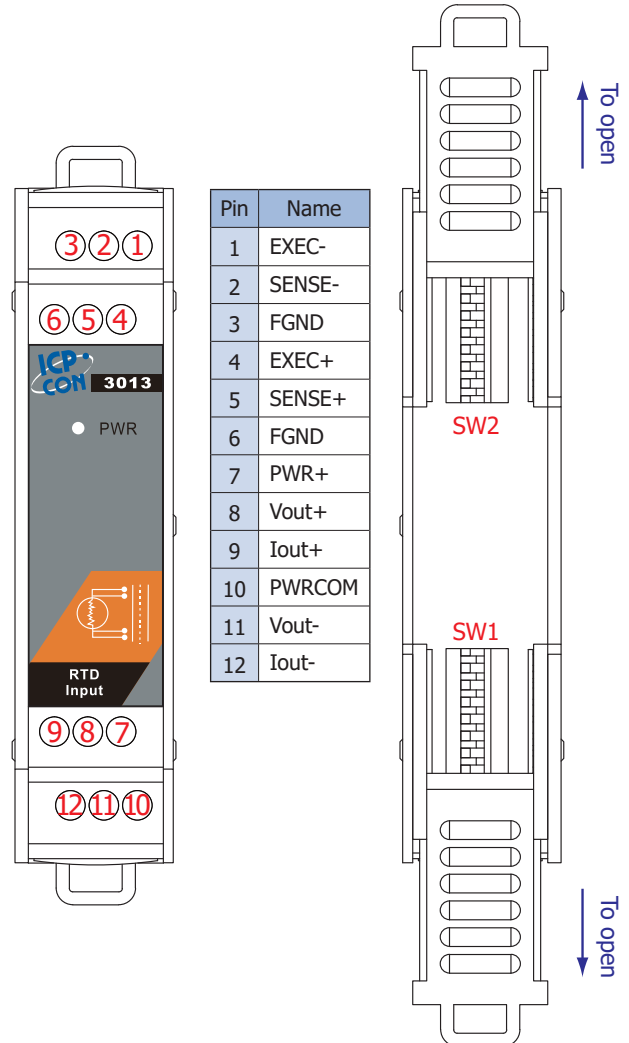
Internal I/O Structure



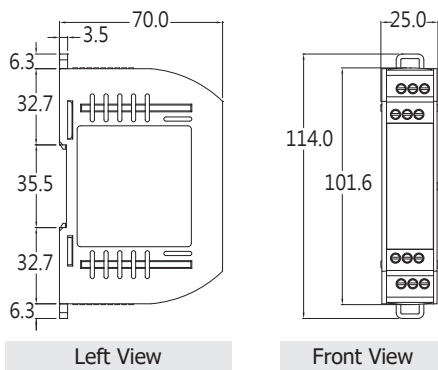
Wire Connections



PIN Assignments



Dimensions (Units: mm)



Ordering Information

SG-3013-G CR	RTD Input Signal Conditioner (RoHS)
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