



## SG-3081-G

DC Current Input Signal Conditioner

### Features

- Three-way Isolation: 1000 VDC
- Accuracy:  $\pm 0.1\%$  of full range
- Easy to configure input/output range
- Three VRs for calibrating accuracy of the input/output range
- Flexible DIN-rail



### Introduction

The SG-3081 is a current 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. The SG-3081 has an LED display to show whether the SG-3081 is functioning correctly and has two VRs (Zero, Span) to calibrate accuracy of the input/output range. The bandwidth of the SG-3081 is typically 1 KHz. It is easy to mount the SG-3081 on a standard DIN rail and operate in environments with wide temperature range.

### Applications

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

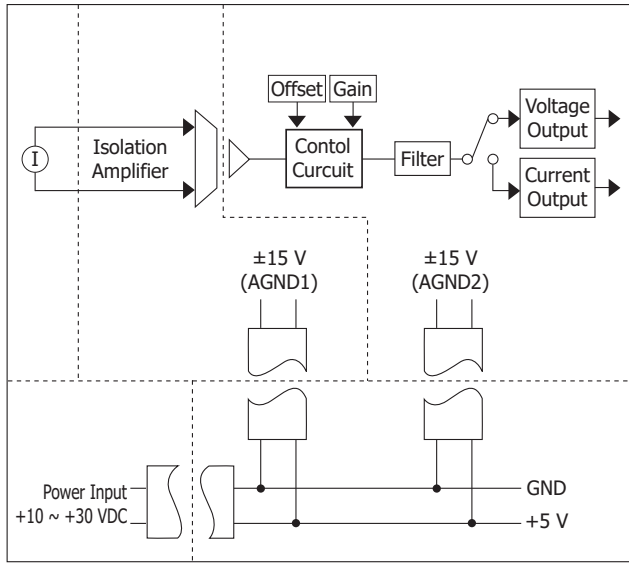
### System Specifications

Isolation	
Three-way Isolation	1000 VDC
Power	
Reverse Polarity Protection	Yes
Input Range	+10 ~ +30 VDC
Consumption	1.61 W (Voltage Output), 2.10 W (Current Output)
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

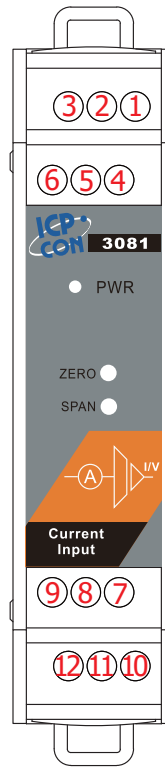
### I/O Specifications

Analog Input	
Channels	1
Type	0 ~ 20 mA, 4 ~ 20 mA (Unipolar)
Accuracy	$\pm 0.1\%$ of full range
Bandwidth	1 kHz
Input Impedance	250 $\Omega$
Analog Output	
Channels	1
Range	Voltage: 0 ~ 5 VDC, 0 ~ 10 VDC Current: 0 ~ 20 mA, 4 ~ 20 mA
Current Load Resistance	0 ~ 500 $\Omega$ (Source)

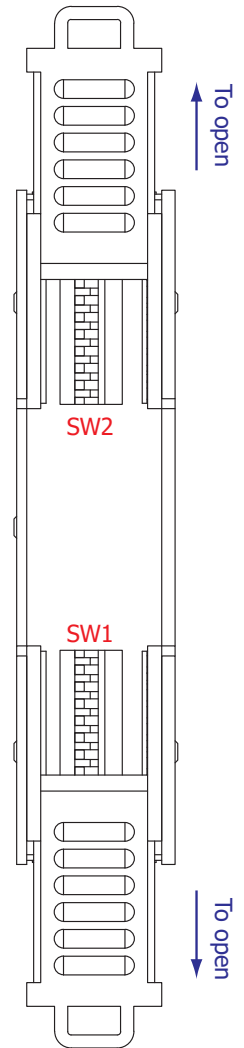
## Internal I/O Structure



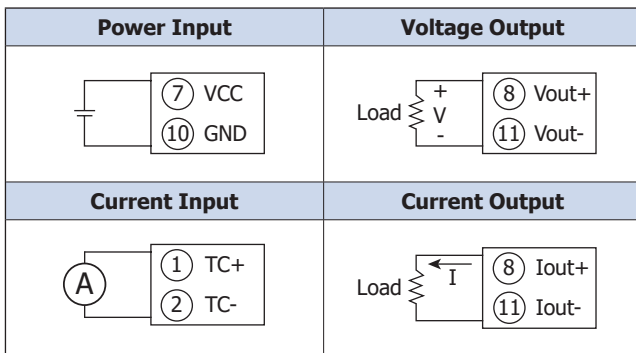
## PIN Assignments



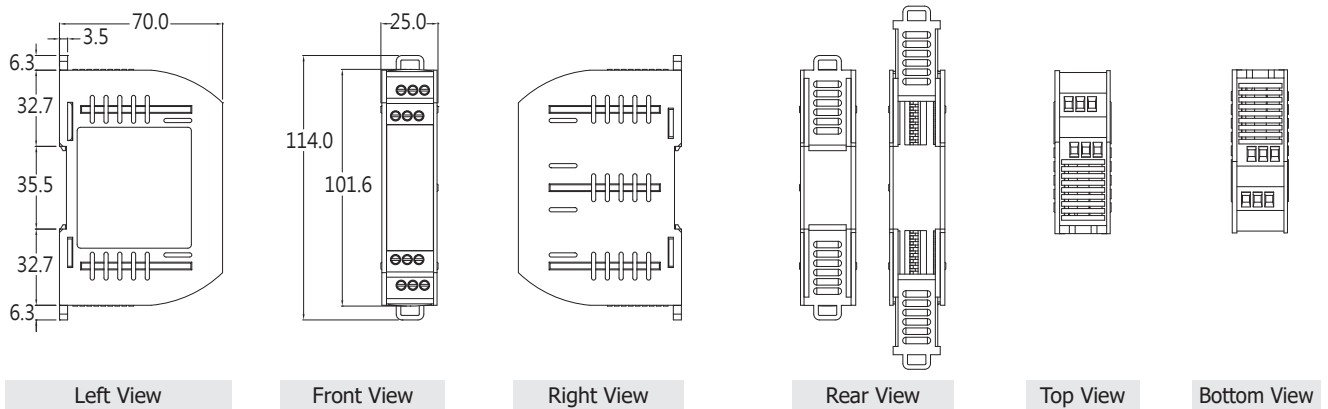
Pin	Name
1	INPUT+
2	INPUT-
3	FGND
4	Reserve
5	Reserve
6	Reserve
7	VCC
8	OUT+
9	VCC
10	GND
11	OUT-
12	GND



## Wire Connections



## Dimensions (Units: mm)



## Ordering Information

**SG-3081-G CR** DC Current Input Signal Conditioner (RoHS)