



SG-3071-G
DC Voltage 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-3071 is a voltage input to voltage or current output signal conditioning module. It can access either bipolar or unipolar voltage input range. It has 1000 Vdc three-way isolation for input, output and power. It can change the input/output range via internal configuration switches. The SG-3071 has an LED display to show whether the SG-3071 is functioning correctly and has two VRs (Zero, Span) to calibrate accuracy of the input/output range. The bandwidth of the SG-3071 is typically 1 KHz. It is easy to mount the SG-3071 on a standard DIN rail and operate in environments with wide temperature range.

■ Applications

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

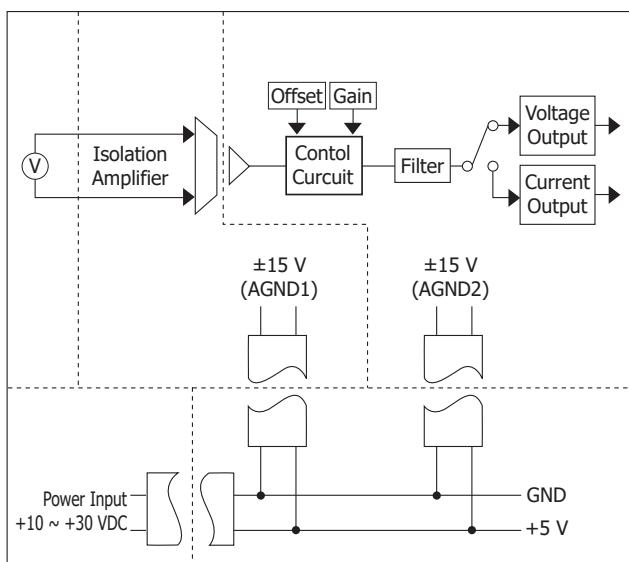
■ System Specifications

Isolation	
Three-way Isolation	1000 VDC
Power	
Reverse Polarity Protection	Yes
Input Range	+10 ~ +30 VDC
Consumption	1.80 W (Voltage Output) 2.30 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

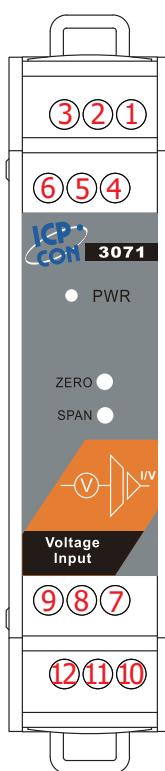
■ I/O Specifications

Analog Input	
Channels	1
Type	±5 VDC, ±10 VDC (Bipolar) 0 ~ 5 VDC, 0 ~ 10 VDC (Unipolar)
Accuracy	±0.1% of full range
Bandwidth	1 kHz
Input Impedance	1.6 MΩ
Analog Output	
Channels	1
Range	Voltage: ±5 VDC, ±10 VDC Current: 0 ~ 20 mA, 4 ~ 20 mA
Current Load Resistance	0 ~ 500 Ω (Source)

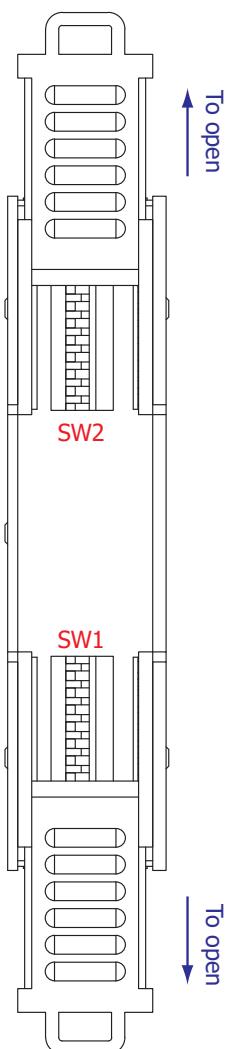
Internal I/O Structure



PIN Assignments



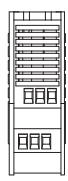
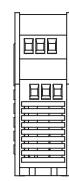
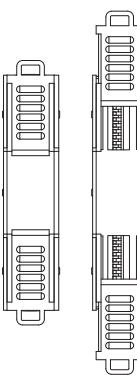
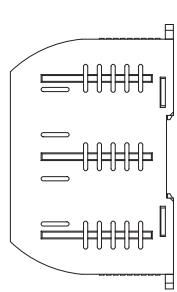
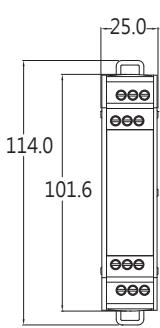
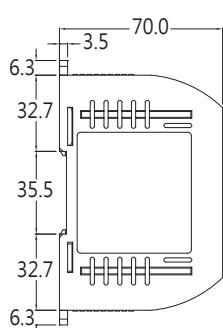
Pin	Name
1	INPUT+
2	INPUT-
3	FGND
4	Reserve
5	Reserve
6	Reserve
7	VCC
8	OUT+
9	VCC
10	GND
11	OUT-
12	GND



Wire Connections

Power Input	Voltage Output
	Load Vout+ Vout-
Voltage Input	Current Output
	Load Iout+ Iout-

Dimensions (Units: mm)



Ordering Information

SG-3071-G CR DC Voltage Input Signal Conditioner (RoHS)