Signal Conditioning Modules

SG-3071

Isolated DC voltage input / output module

Functional Description

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 3000Vdc 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 3KHz. It is easy to mount the SG-3071 on a standard DIN rail and operate in environments with wide temperature range.

Applications
- Input/output signal conditioning
- Input, output or power isolation

Specifications

Voltage Input
- Bipolar: ±5V, ±10V
- Unipolar: 0~5V, 0~10V
- Input impedance: 2MΩ
- Input bandwidth: 3KHz (typical) @-3dB

Voltage Output
- Bipolar: ±5V, ±10V
- Drive: 10 mA (max)
- Output impedance: <50Ω

Current Output
- Current: 0 ~ 20 mA, 4 ~ 20 mA
- Current load resistance: 0~500 Ω (Source)

Supply Voltage
- Input Range: 10~30Vdc

Features
- 3000Vdc isolation (three-way)
- Wide input/output range
- Stable voltage or current output
- Easy to configure the input/output range
- Two VRs for calibrating accuracy of the input/ output range
- Flexible DIN-rail mounting
- LED indicator

- Consumption: 1.80W (voltage output)
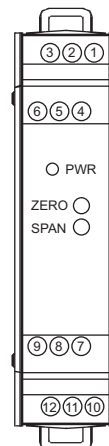   2.30W (current output)

General Specifications
- Three-way isolation: 3000Vdc
- Accuracy: ±0.1% of full scale range (typical)
- Operation bandwidth: 3KHz
- Operating temperature: -25 ~ 75°C
- Storage temperature: -30 ~ 85°C
- Weight: 94 grams
- Dimensions: 113 mm x 70.5 mm x 24.5 mm

Block Diagram
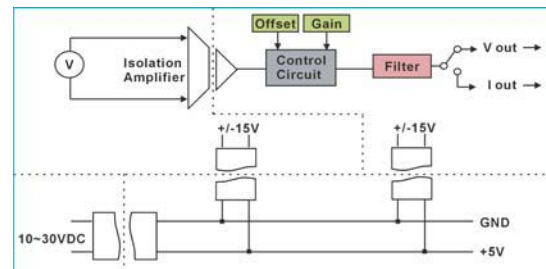
Pin Assignment

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

Ordering Information

Standard

SG-3071: Isolated DC voltage input / output module