



## SG-3016-G/SG-3016-80-G

Strain Gauge 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-3016/SG-3016-80 is a voltage 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-3016/SG-3016-80 has an LED display to show whether the SG-3016/SG-3016-80 is functioning correctly and has three VRs (Zero, Span, Exci) to calibrate accuracy of the input/output range.

The bandwidth of the SG-3016 is typically 600 Hz. The bandwidth of the SG-3016-80 is typically 80 Hz. It is easy to mount the SG-3016/SG-3016-80 on a standard DIN rail and operate in environments with wide temperature range.

### Applications

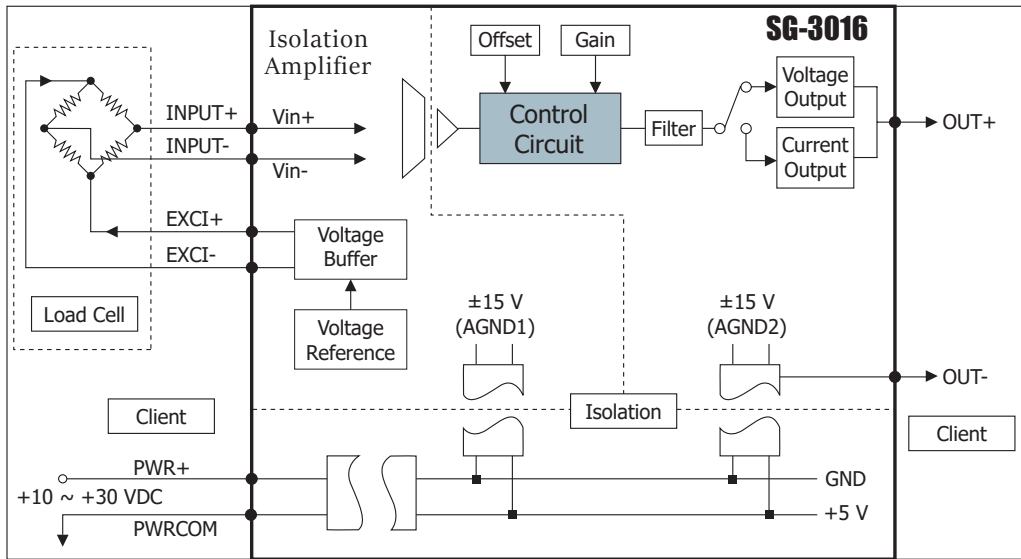
- Building Automation
- Machine Automation
- Remote Diagnosis
- Factory Automation
- Remote Maintenance
- Testing Equipment

### Specifications

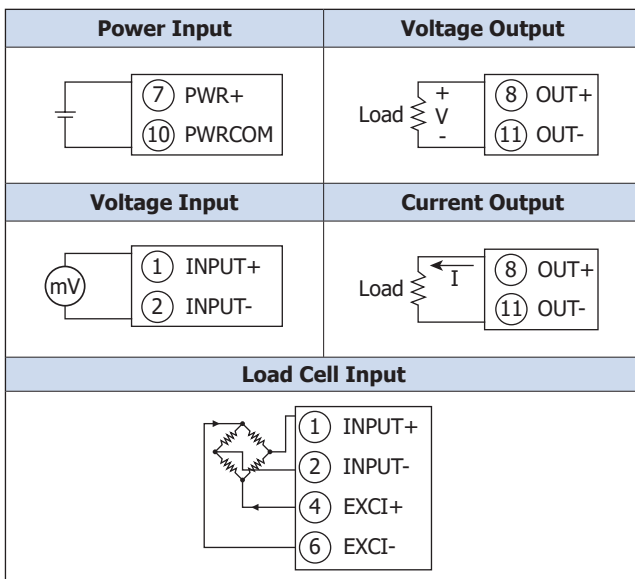
Model Name	SG-3016	SG-3016-80
<b>Isolation</b>		
Three-way Isolation	1000 VDC	
<b>LED Indicators</b>		
Status	Yes, 1 as Power/Communication Indicator	
<b>Analog Input</b>		
Channels	1	
Type	$\pm 10$ mV, $\pm 20$ mV, $\pm 30$ mV, $\pm 50$ mV, $\pm 100$ mV	
Accuracy	$\pm 0.1\%$ of full range	
Bandwidth	<600 Hz	<80 Hz
<b>Analog Output</b>		
Channels	1	
Range	Voltage: 0 ~ 5 VDC, 0 ~ 10 VDC, $\pm 5$ VDC, $\pm 10$ VDC Current: 0 ~ 20 mA	
Current Load Resistance	0 ~ 500 $\Omega$ (Source)	
<b>Excitation Voltage Output</b>		
Channels	1	
Range	1 ~ +10 VDC	
Max. Load Current	+20 mA	

Model Name	SG-3016	SG-3016-80
<b>Power</b>		
Reverse Polarity Protection	Yes	
Input Range	+10 ~ +30 VDC	
Consumption	1.44 W (Voltage Output), 1.74 W (Current Output)	
<b>Mechanical</b>		
Dimensions	25 mm x 114 mm x 70 mm (W x L x H)	
<b>Environment</b>		
Operating Temperature	-25 °C ~ 75 °C	
Storage Temperature	-30 °C ~ 75 °C	
Humidity	5 ~ 95%, non-condensing	

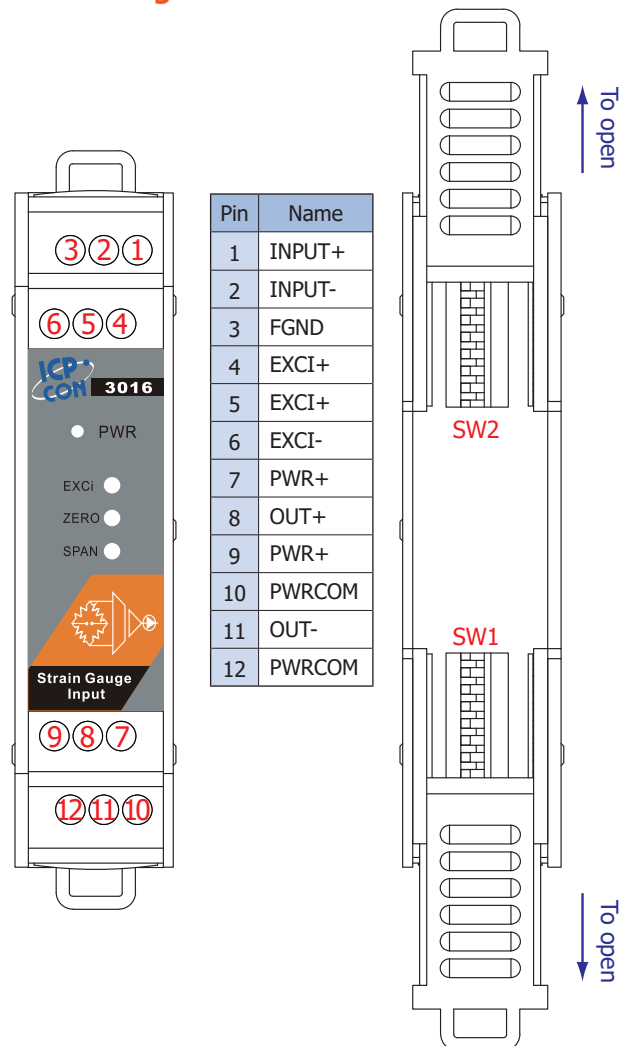
## Internal I/O Structure



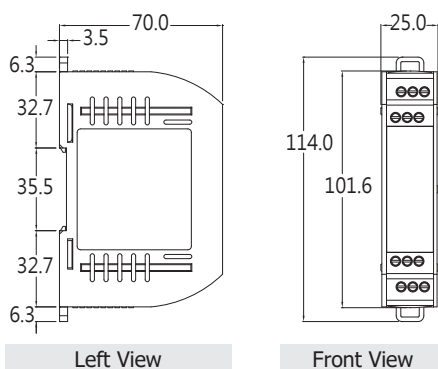
## Wire Connections



## PIN Assignments



## Dimensions (Units: mm)



## Ordering Information

<b>SG-3016-G CR</b>	Strain Gauge Input Signal Conditioner (RoHS)
<b>SG-3016-80-G CR</b>	Strain Gauge Input Signal Conditioner with 80 Hz Low Pass Filter (RoHS)