

SG-3383

3-channel DC Current Signal Splitter

Features

- One 4 to 20 mA Input to Three 4 to 20 mA Outputs
- Zero and Span Adjustments for Each Output
- Full 3000 V Isolation for Input/Output/Power
- Built-In Loop Power Supplies for Sink/Source I/O
- Split, Convert, Boost, and Rescale Process Signals
- Split Process Signals for Control and Validation
- Interface a Process Signal with Multiple Panel Meters, PLCs, Recorders, Data Acquisition, DCS, and SCADA Systems
- 8 kV ESD Protection
- 4 kV EFT Protection for Power Line
- Flexible DIN-Rail Mounting

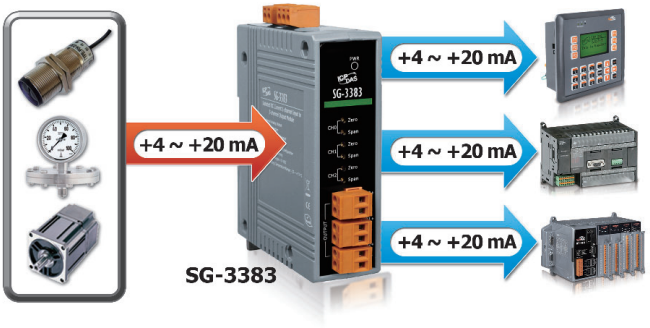
Introduction

The SG-3383 DC current signal splitters accept one 4 to 20 mA current input and provide three optically isolated 4 to 20 mA current outputs that are linearly related to the 4 to 20 mA current input. This provides an economical solution when one signal must be sent to three different devices. Typical applications include isolation, output splitting, output device separation and redundancy (i.e. to prevent failure of the entire loop if one device fails), or a combination of these. The input signal is filtered, amplified, split, and then passed through an opto-coupler to the output stages. Full 3-way isolation (input, output, power), 4 kV EFT Protection for Power Line and 8 kV ESD Protection make this module useful for ground loop elimination, common mode signal rejection,and noise pickup reduction.

The SG-3383 includes an LED display that can be used to indicate whether the module is functioning correctly, and also includes VRs (Zero, Span) that can be used to calibrate the output range accuracy. The input bandwidth of the SG-3383 is typically 2.5 kHz.

Applications

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



System Specifications

LED Indicators/Display	
System LED Indicator	Yes, 1 as Power/Communication Indicator
Isolation	
3-way Isolation	3000 VDC
EMS Protection	
ESD (IEC 61000-4-2)	±8 kV Contact for each Terminal
EFT (IEC 61000-4-4)	±4 kV for Power Line
Power	
Reverse Polarity Protection	Yes
Input Range	+10 ~ +30 VDC
Consumption	2.5 W
Mechanical	
Dimensions (W x L x H)	33 mm x 127 mm x 99 mm
Installation	DIN-Rail or Wall Mounting
Environment	
Operating Temperature	-25 to +75°C
Storage Temperature	-40 to +85°C
Humidity	10 to 95% RH, Non-condensing

I/O Specifications

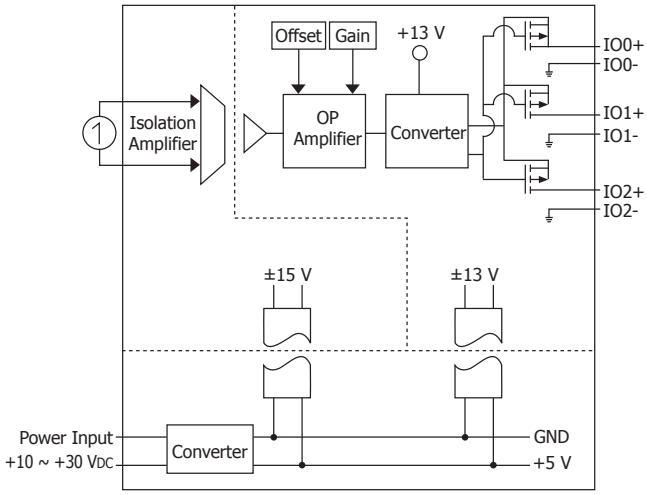
Analog Intput	
Channels	1
Range	+4 ~ +20 mA
Input Bandwidth	2.5 kHz
Input Impedance	125 Ω
Analog Output	
Channels	3
Range	+4 ~ +20 mA
Accuracy	±0.1% of FSR (typical)
Current Output Wiring	Source
Current Output Capacity	500 Ω

Ordering Information

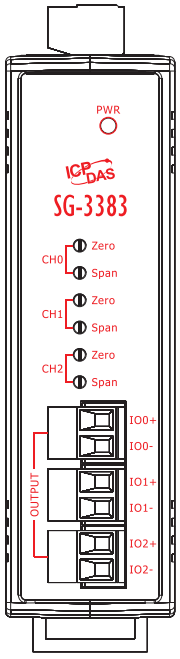
SG-3383 CR	3-channel DC Current Signal Splitter (RoHS)

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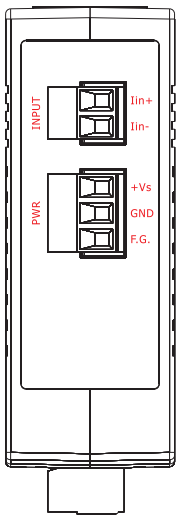
Internal I/O Structure



Pin Assignments

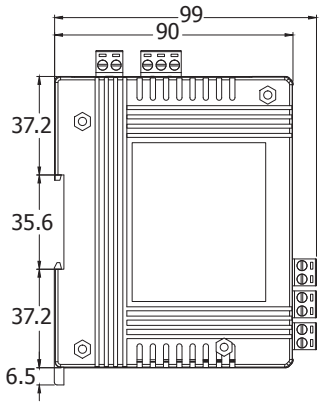


Front View

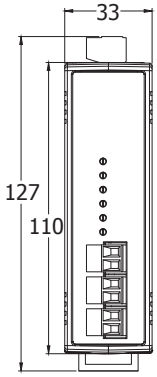


Top View

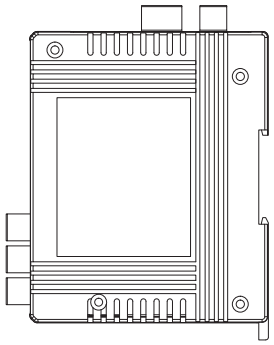
Dimensions (Units: mm)



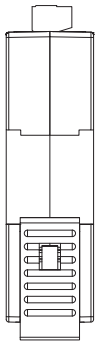
Left View



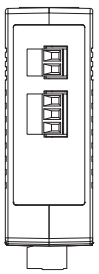
Front View



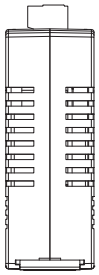
Right View



Rear View



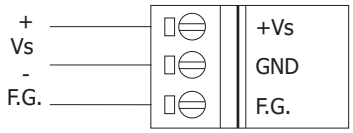
Top View



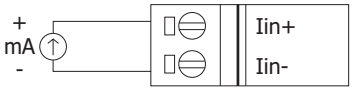
Bottom View

Wire Connections

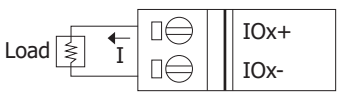
Power Input



Current Input

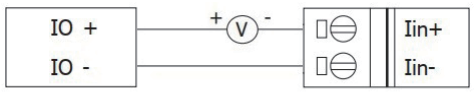


Current Output

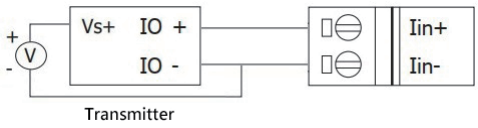


Transmitter Input

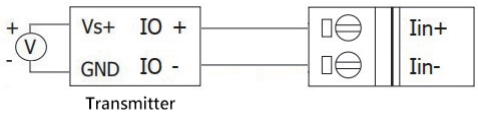
2-Wire



3-Wire



4-Wire



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