

# SEM1000 Loop Splitter

1 Channel process signal isolator 4 to 20mA Output



The SEM1000 isolator is designed to be series connected into a new or existing 4 to 20 mA current loop and provide an isolated 4 to 20 mA signal capable of driving into a 300 Ω load. The output is powered from the input loop. Minor adjustments can be made to the calibration of the device by means of the two front panel accessible calibration potentiometers.

## Specification

**Input Type** Current input 2 wire Loop powered  
**Range** 4 to 20 mA (30 mA MAX)  
**Protection** Reverse connection  
**Voltage Drop** 5.0 V typical, 5.5 V Maximum  
 (Plus output load) 5.5 + (load \* 0.02)  
**Maximum Loop Supply** 35 Volts

**Output Type** 4 to 20 mA source (Powered from input)  
**Load** 0 to 300 Ω (Open circuit limits at approximately 15 V)

**Connection** Captive clamp screws  
**Cable Size** Maximum 4 mm sq solid / 2.5 mm sq stranded  
**Case Material** Grey Polyamide  
**Flammability** To UL94-VO VDE 0304 Part 3, Level IIIA  
**Dimensions** 60 x 60 x 12.5 mm (67.5 above rail)  
**Mounting** Snap on "top hat" rail (DIN EN 50022-35)

**Isolation** 500 V DC (flash tested @ 1 kV)  
 (Isolation method, opto coupler / transformer)

**Electrical Safety** BS EN61010-1 POLLUTION DEGREE 2;  
 INSTALLATION CAT II ; CLASS I

**Ambient** 0 to 70 °C ; 10 to 95 % RH non condensing  
**Accuracy** 0.05 % full range output  
**Stability** 0.01 % / °C

**Response Time** Less than 100 mS to reach 63 % of final value.

**EMC** Tested to BS EN 61326  
**Adjustments** Zero and Span Adjustment

