

PROCESS SIGNAL ISOLATORS

SEM1200 LOOP SPLITTER

- Two (4 to 20) mA Outputs
- Galvanic Isolation 500 V DC Flash Tested 1 KV
- High Accuracy 0.05%
- 12.5 mm Wide



INTRODUCTION

The SEM 1200 isolator is a dual output isolator, providing two separate isolated (4 to 20) mA current signals from a primary loop. The output loops must be powered externally. This isolator requires no user adjustment during commissioning, apart from an initial test, to ensure it operates correctly over its full working range. Minor adjustments can be made to the calibration of the device by means of the two front panel accessible calibration potentiometers. Incorrect connection in the loop will not damage the device as long as the specified maximum currents/voltages are not exceeded.

SPECIFICATIONS @ 20 °C

INPUT	TYPE	Current input 2 wire Loop powered
	RANGE	(4 to 20) mA (30 mA MAX)
	PROTECTION	Reverse connection
	VOLTAGE DROP	5.0 V Maximum
OUTPUT 1 & OUTPUT 2 @ 15 V dc		
	TYPE	2 Wire current sink (4 to 20) mA
	LOOP VOLTAGE	(5 to 32) V d.c. (reverse protected) *
	Loop volt drop = 5 V	Load = 900 ohm @ Vs = 24 V Load = 1200 ohm @ Vs 30 V

Loop must be > 250 R for ambients > 50 °C

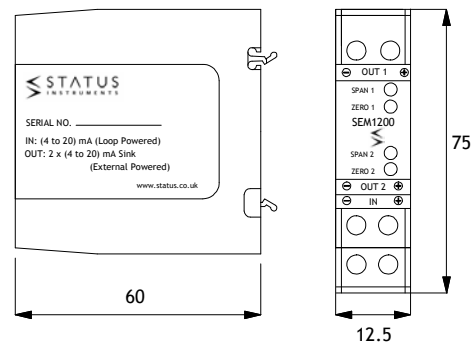
GENERAL SPECIFICATION

ISOLATION	500 V DC (flash tested @ 1 kV) between each port (Isolation method, opto coupler / transformer)
ENVIRONMENT	BS EN61010-1 POLLUTION DEGREE 2; INSTALLATION CAT II; CLASS I
AMBIENT	(0 to 70) °C ; (10-95) % RH non condensing
ACCURACY	±0.05 % (±0.008 mA) of full range output
STABILITY	0.01 % / °C
RESPONSE TIME	Less than 100 mS to reach 70 % of final value.
EMC Tested to	BS EN 61326
ADJUSTMENT	Front Entry Fine Zero and Span Adjustment for each channel

MECHANICAL DETAILS

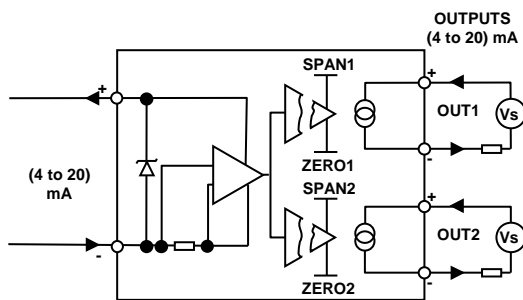
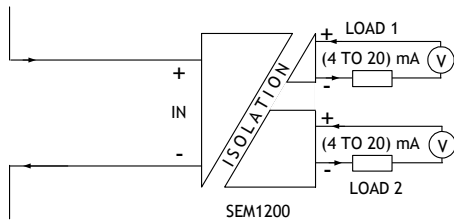
CONNECTION	Captive clamp screws
CABLE SIZE	Maximum 4 mm sq solid / 2.5 mm sq stranded
CASE MATERIAL	Grey Polyamide
FLAMMABILITY	To UL94-VO VDE 0304 Part 3, Level IIIA
DIMENSIONS	Case C: (60 x 75 x 12.5) mm (67.5 above rail)
MOUNTING	Snap on "top hat" rail (DIN EN 50022-35)

(All dimensions in mm)



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SCHEMATIC



ORDER CODE: SEM1200