PROCESS SIGNAL ISOLATOR / CONVERTOR

SEM1603i

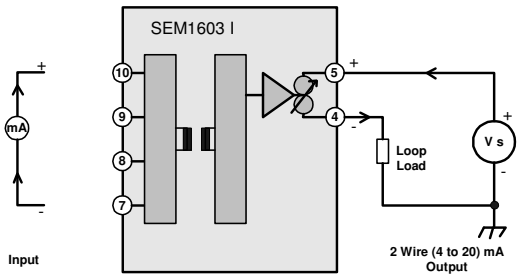
- CONFIGURATION USING USB PORT POWERED CONFIGURATOR
- ACCEPTS ANY mA INPUT BETWEEN (-10 to 25) mA
- ISOLATED INPUT
- CAN BE USED AS A LOOP BOOSTER, INPUT SIGNAL CONVERTER, INVERTER
- (4 to 20) mA TWO WIRE OUTPUT

INTRODUCTION

The SEM1603i is a DIN Rail process current convertor. It accepts any input between (-10 to 25) mA, even inverted inputs and provides the user with a standard two wire (4 to 20) mA output signal. Isolation is provided between input and output and all temperature ranges are linear to temperature.

Designed for ease of use, the SEM1603i is configured with our USB port powered configuration module. The module interfaces a PC USB port to the SEM1603, using the (4 to 20) mA loop to communicate. Using our free configuration software, you will be able to read the existing configuration data and perform any changes you wish to make to the configuration. To further help save time, the SEM1603 and module do not need to be wired to a power supply during the configuration process, both are powered by the USB interface on your PC.
The following parameters in blue are configurable :-

MODEL	INPUT TYPE	UNITS	Input	BURNOUT
SEM1603i	mA	mA	(-10 to 25) mA (4 to 20) mA Capability	Up / Down



STATUS INSTRUMENTS

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SPECIFICATION @ 20 °C

INPUTS

INPUT	RANGE	ACCURACY (Note 1)	IMPEDANCE (Note 2)	STABILITY (Note 3)
mA	(-10 to 25) mA	± 0.008 mA	2.7 Ω	± 0.04 % FSR / ℃

Notes
1. Impedance – not including 0.2 uA open circuit detect bias current effect.
2. Maximum current over load ± 100 mA
3. Ambient (-10 to 50) ℃

OUTPUT

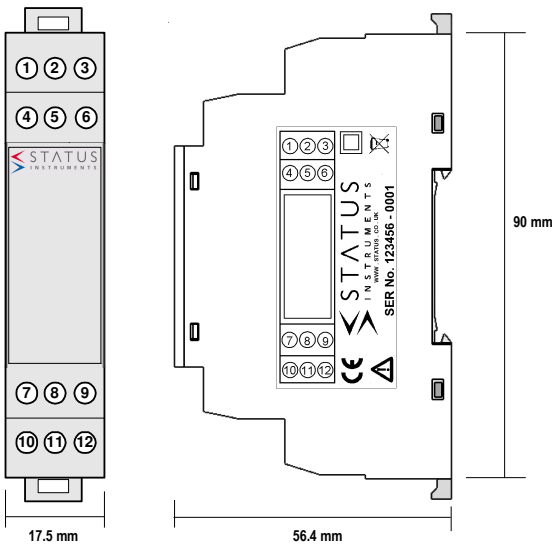
Type Two wire current sink; signal range (4 to 20) mA; full range (3.8 to 24) mA
Supply (11 to 30) V dc , 24 V nominal giving Max loop load of 600 R @ 24 V
Response time < 500 ms to reach 95% of final value ; Start up time < 3 s
Calibration Accuracy ± 5 uA
Loop Effects Loop ripple 0.03 % of full scale range; Supply sensitivity 0.05 uA / ℃ ; supply ripple rejection < ± 5 uA error @ 1 V rms 50 Hz ripple
Protection Reverse connection and over-voltage protection. Max over voltage current 100 mA.
Stability ± 5 µA / ℃

GENERAL

Isolation Input to output tested at 500 V dc.
Ambient operating (-20 to 70) ℃ (10 to 95) % RH non condensing. Storage (-40 to 85) ℃
Approvals CE tested to BS EN 61326

MECHANICAL

Material Polmide 6.6
Self extinguishing
Terminals Screw terminal
Cable 2.5 mm Max.
Colour Grey



CE

REFER TO INSTRUCTION MANUAL BEFORE USE

ORDER CODE : SEM1603 / i

ASSOCIATED PRODUCTS	ORDER CODES
USB CONFIGURATOR SUITE	USB-kit
USB CABLE A/M TO MINI B/M	48-200-0001-01
USB Link Software	F0C @ www.status.co.uk Downloads

SEM1610	UNIVERSAL DIN RAIL TRANSMITTER
SEM1620	UNIVERSAL DIN RAIL TRANSMITTER VOLTAGE OUTPUT
SEM1630	UNIVERSAL DIN RAIL TRIP AMPLIFIER

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