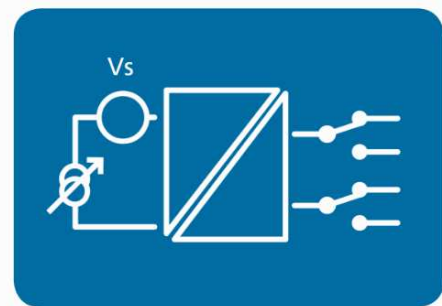


# SEM1636 (4 to 20) mA LOOP POWERED DUAL TRIP AMPLIFIER

- > **DUAL INDEPENDENT RELAY OUTPUT**
- > **FAIL-ON OR FAIL-OFF RELAY ACTIONS**
- > **FILTER AND USER-LINEARISATION FUNCTIONS**
- > **PC CONFIGURATION USING USB PORT**
- > **LIVE DATA CAN BE VIEWED ON AN ANDROID PHONE OR TABLET**

## > **INTRODUCTION**

The SEM1636 monitors a (4 to 20) mA loop and provides two independent change-over trip contacts set to alarm at any point within the (4 to 20) mA range. The SEM1636 requires no additional power connection as power is derived from the (4 to 20) mA loop. Relay outputs are independently configured for action and set-point, dead-band. Six actions are provided: normal, High/Low/Deviation and inverted High/Low/Deviation. Additional maths, filter and user-linearisation functions are provided.



## > **FEATURE HIGHLIGHTS**

### **ALARM OPTIONS**

Both relays are independently settable with multiple alarm options. High, low, inverted and deviation band alarms are available with set-point and dead-band adjustment.

### **MATHS FUNCTIONS**

The SEM1636 in addition to input scaling, has power and root functions, as well as a 22-point user-linearisation tool.

### **LED INDICATION**

Relay 1 and Relay 2 each have an alarm indication LED on the front of the device.

### **LOW POWER**

Powered from the (4 to 20) mA loop with a voltage burden of less than 5 volts.

### **USB PC CONFIGURATION**

The SEM1636 is quick and easy to configure using a standard-type USB lead and the free-of-charge USBSpeedLink Windows software.

### **USB ANDROID VIEW**

The SEM1636 can be connected to an android phone or tablet using an OTG USB adaptor. Running a free App the Android device can then be used to view live data from the SEM1636

# SEM1636 (4 to 20) mA LOOP POWERED DUAL TRIP AMPLIFIER

INPUT (4 to 20) mA Loop		SPECIFICATIONS @20°C
Type/Function	Range/Description	Accuracy/Stability/Notes
Maximum volt drop	Across input pins	5 Vdc
Working mA	(3.8 to 22) mA	± 0.02 % of full-scale
Protection		Reverse connection and over-voltage
Temp. Coefficient		±0.002 % / °C
Maximum current without damage (-50 to 50) mA		

OUTPUT Dual relays		SPECIFICATIONS
Type/Function	Range/Description	Accuracy/Stability/Notes
Independent relays	Relay 1, Relay 2	Form C contacts
Contact rating	250 V ac rms @ 1A 30 V dc @ 1 A	Resistive Load
Protection	Use externally fitted 2.0 A (T) fuse	
Latching type relays are used; on loss of input signal/power, a set-low alarm will be recognised and held.		

USB USER INTERFACE		
Type/Function	Range/Description	Notes
Configuration hardware	USB Lead	A to Mini B
Configuration software	USBSpeedLink	Download from <a href="http://www.status.co.uk">www.status.co.uk</a>
Input configuration	Linear User-linearisation Maths function Filter, adjustable time constant Process units	(4 to 20) mA to process values 22-point $\wedge(1/2)$ , $\wedge(1/3)$ , $\wedge(3/2)$ , $\wedge(5/2)$ , $\wedge 2$ , $\wedge 3$ (0 to 100) s Any user-set, 4 Character
Output configuration Relay 1, Relay 2	Action  Set-point Dead band	High, inverted high, low, inverted low, inside band, outside band. Process units Process units
Tag		20 Character
Read live data	Signal Maths Signal Process value Relay1, Relay2	mA Process units Process units On, Off
Save/Open configuration		To/From file
Default configuration	Linear, (0 to 100) %, Relay1&2, High alarm 50%, dead band 0.1%	

ANDROID USER INTERFACE		
Type/Function	Range/Description	Accuracy/Stability/Notes
Hardware	USB Lead	OTG plus A to Mini B
Software	USBVeiwLink	Download from Google play store
Read live data	Signal Maths Signal Process value Relay1, Relay2	mA Process units Process units On, Off

# SEM1636 (4 to 20) mA LOOP POWERED DUAL TRIP AMPLIFIER

GENERAL	
Function	Description
Galvanic isolation	3750 Vac relays to input; Relay 1 to Relay 2
Response time	300 ms
Start-up time	Start-up time < 3 s
Protection	Reverse connection and over-voltage protection. Max over-voltage current 100 mA
LED (State)	Off = OK On (Red) = Input/output error plus trim function: refer to manual.

ENVIRONMENTAL	
Function	Description
Ambient temperature	Operating/Storage (-20 to 70) °C
Ambient humidity	Operating/Storage (10 to 95) %RH non-condensing
Protection requirement	>= IP65 recommended
USB configuration ambient	(10 to 30) °C

MECHANICAL	
Function	Description
Dimensions	17.5 mm width, 56.4 mm depth from rail, 90 mm height
Enclosure	DIN rail mount
Material	Polymide 6.6 self-extinguishing: Grey
Connections	Screw terminals 2.5 mm wire maximum
Weight	60 g approximate

APPROVALS	
EMC	BS EN 61326
Ingress protection	BS EN 60529
ROHS	Directive 2011/65/EU
The product is classed as "PERMANENTLY CONNECTED EQUIPMENT"	

ACCESSORIES	
Configuration software	USBSpeedLink (free of charge from <a href="http://www.status.co.uk">www.status.co.uk</a> )
Android live data view	USBViewLink (free of charge from Google play store)
USB Leads	Contact sales@status.co.uk
(4 to 20) mA Display options	Please refer to <a href="http://www.status.co.uk">www.status.co.uk</a>

# SEM1636 (4 to 20) mA LOOP POWERED DUAL TRIP AMPLIFIER

## MECHANICAL

