UNIVERSAL DIN RAIL TRANSMITTER

SEM1630

> SIMPLE CONFIGURATION VIA USB PORT

UNIVERSAL PT100, THERMOCOUPLE, mV, mA Input

> ISOLATED INPUT

DUAL RELAY OUTPUTS 250 V AC 1A

> RELAY ISOLATED FROM EACH OTHER

> 10 YEAR WARRANTY



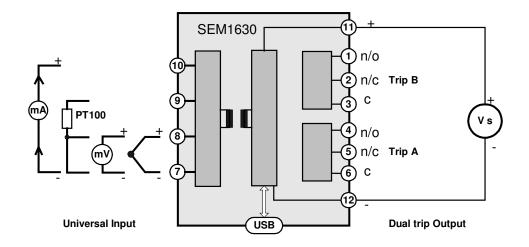
INTRODUCTION

The SEM1630 is the new generation DIN rail mounted temperature amplifier from Status Instruments. It has been designed to accept most common process and temperature sensor inputs and provide the user with a dual trip output. Isolation is provided on all three ports. All temperature ranges are linear to temperature.

Designed for ease of use, our latest USB interface is fitted for quick and easy configuration. Just connect a standard USB cable between the SEM1630 and your PC. Using our free configuration software, your PC will automatically upload the existing configuration data and guide you through any changes you wish to make. To further help save time, the SEM1630 does not need to be wired to a power supply during the configuration process, it is powered via the USB interface from your PC. The following parameters are configurable:-

INPUT TYPE	UNITS	TRIP A Level	TRIP A Setpoint	TRIP A Hysteresis	TRIP B Level	TRIP B Setpoint	TRIP B Hysteresis
PT100							
T/C K, J, E, N, T, R, S	°F, °C, mV & mA	High Low	Set in units	Set in units	High Low	Set in units	Set in units
mV							
mA							

The range led indicates out of range input during normal operation. Alarm LEDs are provided for each trip.





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SPECIFICATION

INPUTS

INPUT	RANGE	ACCURACY (Note 1)	STABILITY	O/C	CJ (Note 3)	Sensor excitation (Note 4)	IMPEDANCE
K	(-200 to 1370) °C	0.1 % of FSR ±0.5 ℃	± 0.01 % of FSR	Yes	Yes	-	1 ΜΩ
J	(-100 to 1200) °C	(type T 0.2 % FSR. ± 0.5 ℃)					(Note 5)
E	(-100 to 1000) ℃						
N	(-180 to 1300) ℃						
Т	(-100 to 400) ℃						
R	(-10 to 1760) ℃	± 0.5 ℃ ±0.1 % of FSR (Note 2)					
S	(-10 to 1760) ℃	± 0.5 ℃ ±0.1 % of FSR					
		(Note 2)					
m۷	(-40 to 75) mV	± 0.04 mV					
P	(-200 to 850) ℃	± 0.1 ℃ / ±0.05 % of rdg	± 0.005 % of FSR		1	<450 uA	-
mA	(-10 to 25) mA	± 0.008 mA	± 0.01 % of FSR	-	-	-	2.7 R (Note 6)

Key Rdg = Reading; FSR = Full Scale Range; O/C = programmable open circuit sensor detect; CJ = Cold junction error

1. Accuracy for PT100 and T/C do not include sensor and cold junction errors. Notes

2. Only over the range (800 to 1600) ℃

3. Cold junction range (-20 to 70) °C, Accuracy ± 0.5 °C, Tracking ± 0.05 °C 4. PT100 input Maximum lead resistance 20 R, Lead effect 0.015 °C / Ω. 5. Impedance - not including 0.2 uA open circuit detect bias current effect.

6. Maximum current over load ± 100 mA.

OUTPUT

Ranges

Type Dual Form C relay contacts 24 V dc ± 5 % @ 40 mA Max Supply

Response time < 500 ms to reach 95 % of final value; Start up time < 3 s Contact rating 250 V ac rms @ 1A ; 30 V dc @ 1 A resistive load

Individual trips A & B may be set at high or low level, full range setpoint plus adjustable hysteresis Trip Type

Setpoint programmed on units, covering full range of input.

Hysteresis

Protection Reverse connection and over-voltage protection. Max over voltage current 100 mA.

GENERAL

Isolation Input to output tested at 500 V dc.

Polmide 6.6

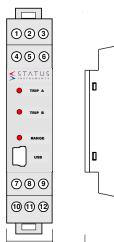
operating (-20 to 70) °C (10 to 95) % RH non condensing. Storage (-40 to 85) °C **Ambient**

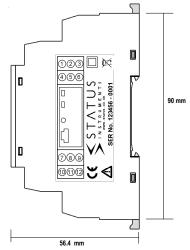
Approvals CE tested to BS EN 61326

MECHANICAL

Material

Self extinguishing **Terminals** Screw terminal Cable 2.5 mm Max. Colour Grey









REFER TO INSTRUCTION ΜΔΝΙΙΔΙ **BEFORE USE**

ORDER CODE: SEM1630

ASSOCIATED PRODUCTS

USB CABLE A/M TO MINI B/M 48-200-0001-01 M-CONFIG 2.3 S/W

48-605-1150-07

SEM1603P/TC/I LOW COST SINGLE I/P DIN RAIL TRANSMITTER UNIVERSAL DIN RAIL TRANSMITTER (4 to 20) MA O/P UNIVERSAL DIN RAIL TRANSMITTER VOLTAGE OUTPUT SEM1610 SEM1620

Status Instruments Ltd Green Lane Business Park Green Lane, Tewkesbury Gloucestershire, UK GL20 8DE

17.5 mm

Tel: +44 (0)1684 296818 Fax: +44 (0)1684 293746 Email: sales@status.co.uk Website: www.status.co.uk D2446-01-03 sem1630 data sheet

