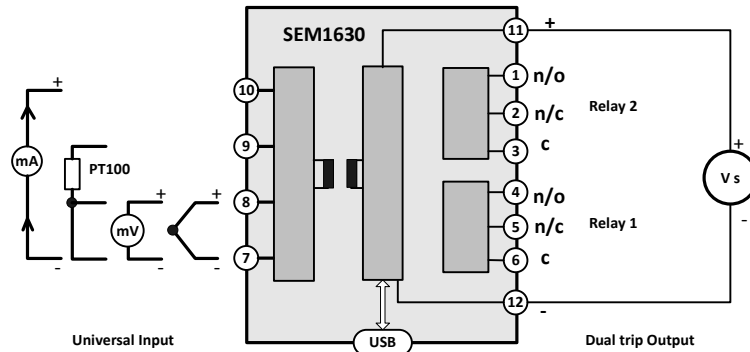


SEM1630 USER GUIDE

DIN RAIL MOUNTED TRIP AMP
UNIVERSAL INPUT
DUAL Form C OUTPUT



Important - Potentially Hazardous situations. Persons responsible for the installation and operation of this equipment must be fully aware of all aspects of this guide. Failure to follow the instructions can cause severe injuries and damage.

Every effort has been taken to ensure the accuracy of this document, however we do not accept responsibility for damage, injury, loss or expense resulting from errors and omissions, and we reserve the right of amendment without notice.



IMPORTANT - CE & SAFETY REQUIREMENTS

This product is suitable for environment Installation category II pollution degree.
The product is classed as "PERMANENTLY CONNECTED EQUIPMENT".
Product must be DIN rail mounted, inside a suitable enclosure providing environmental protection to IP65 or greater.
Dc supply must be derived from a local supply and not a distribution system.
Max relay contact rating 250 V AC @ 1 A (30 V DC @ 1A). Any circuit connected to a contact must be fused with a 2A (T) fuse.
To maintain CE EMC requirements , input and supply wires must be less than 30 metres.
The product contains no serviceable parts , or internal adjustments. no attempt must be made to repair this product. Faulty units must be returned to supplier for repair.
This product must be installed by a qualified person. All electrical wiring must be carried out in accordance with the appropriate regulations for the place of installation.
Before attempting any electrical connection work, please ensure all supplies are switched off.

ABSOLUTE MAXIMUM CONDITIONS (To exceed may cause damage to the unit):-

Supply Voltage	± 30 V dc (Protected for over voltage and reverse connection)
Current with over voltage	± 200 mA
Input Voltage	± 5 V between any terminals
Input Current	± 100 mA between terminals 7 & 10
Ambient	Temperature (-30 to 75) °C Humidity (10 to 95) % RH (Non condensing)

PRODUCT SPECIFICATION

Please refer to the product data sheet for full specification, available to download at www.status.co.uk.

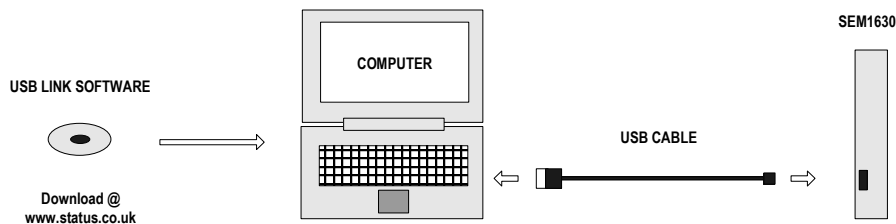
RECEIVE AND UNPACKING

Please inspect the packaging and instrument thoroughly for any signs of transit damage. If the instrument has been damaged, please notify your supplier immediately.

CONFIGURATION



IMPORTANT The SEM1630 can be configured whilst connected and powered, but a portable battery powered computer must be used to avoid the effects of ground loops.



The following parameter can be configured by simply entering as prompted by the software package.

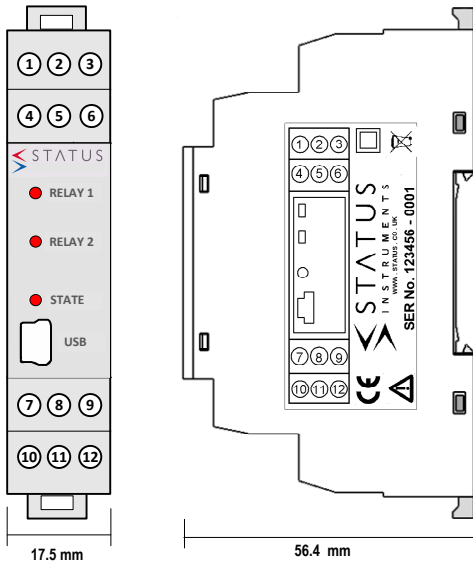
- Input type (K,J,E,N,T,R,S,mV,PT100,mA)
- Setpoint Relay 1 & 2
- Hysteresis Relay 1 & 2
- Units (°C, °F, mV, mA)
- Relay 1 & 2 Type (High or Low)

Factory default:

Input type	= P
Units	= °C
Relay 1	= H
Setpoint Relay 1	= 50
Hysteresis Relay 2	= 1
Relay 2	= H
Setpoint Relay 2	= 50
Hysteresis Relay 2	= 1

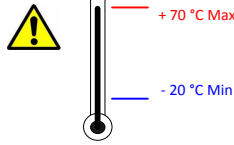
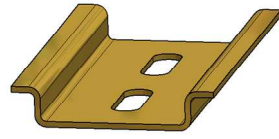
Note: The power supply and USB port of this device share the same ground , care must be taken to ensure isolation between PC and ground. This is best achieved by using a portable laptop or notebook PC.

MECHANICAL INSTALLATION



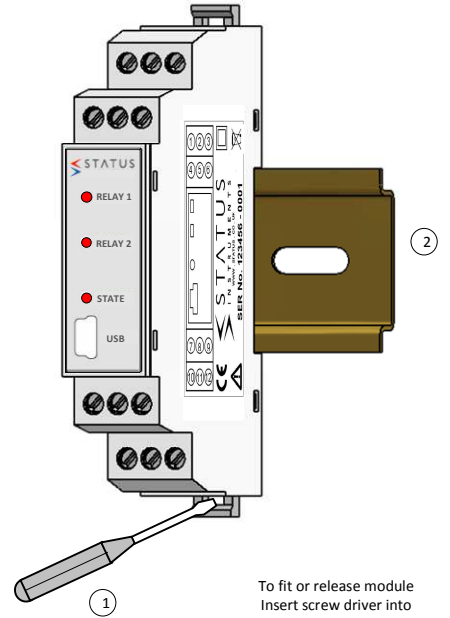
MOUNTING

- 1 Screw driver
- 2 EN50022 DIN RAIL



SEM1630 Enclosure

Style DIN 43880 (1 module width)
 Material Polyamide 6.6 self extinguishing
 Terminals Screw terminal
 Cable 2.5 mm Max
 Colour Grey



To fit or release module
 Insert screw driver into
 slot and lever latch
 away from body

ELECTRICAL INSTALLATION

Screened Cable



Twisted Pair Cable



TC Compensation Cable Screened



Screw Driver



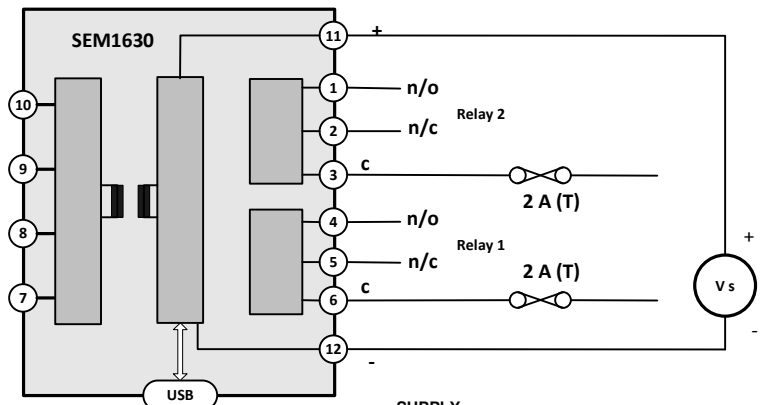
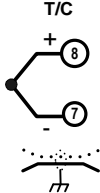
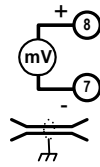
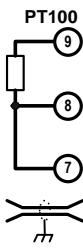
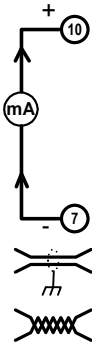
1.0 TURN OFF SUPPLY BEFORE WORKING ON ANY ELECTRICAL CONNECTION.

2.0 FUSE CONTACT CIRCUITS 2 A (T).

3.0 MAX CONTACT RATING 250 V ac (30 V dc) @ 1 A

UNIVERSAL INPUT CONNECTION

For cable length < 3 Metres no screen or twist pair required. Thermocouple inputs must use correct compensation cable. PT100 inputs all three wire must be equal length (resistance). Use recommended types for cable length (3 to 30) metres.



SUPPLY
 Max cable length 30 metres

FRONT PANEL INDICATION

Relay 1 alarm LED on in alarm state

Relay 2 alarm LED on in alarm state

State LED on when input is out of range

USB configuration port



Note: The Relays are inverted on power up, the side label shows the powered condition. In a non-alarm condition loss of power to the SEM1630 will cause the relay to change state.