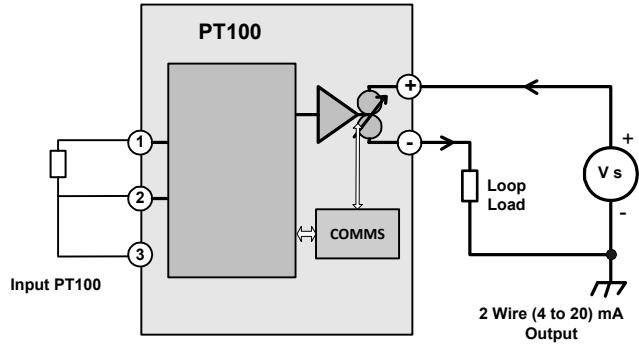


USER GUIDE

SMART PCB TRANSMITTER INPUT PT100
TWO WIRE (4 to 20) mA



Important - Please read this document before any installing.



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, UKCA & SAFETY REQUIREMENTS

Product must be mounted, inside a suitable enclosure providing environmental protection to IP65 or greater.

To maintain CE EMC requirements, input wires must be less than 3 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	± 100 mA
Input Voltage	± 3 V between any terminals
Ambient	Temperature (-40 to 85) °C Humidity (10 to 95) % RH (Non condensing)



Important – Read this document before installing.

PRODUCT SPECIFICATION

Please refer to the product data sheet for full specification.

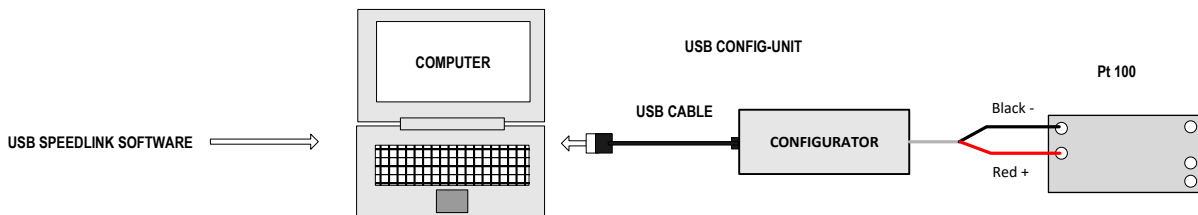
RECEIVE AND UNPACKING

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 Do not attempt to configure the Transmitter when connected to a loop supply.



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

- Low range
- High range
- Units (°C, °F)
- Burnout (direction of output current on sensor burnout)

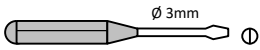
Factory default:
 Low Range = 0
 High Range = 100
 Units = °C
 Burnout = UPSCALE

ELECTRICAL INSTALLATION



TURN OFF SUPPLY BEFORE WORKING ON ANY ELECTRICAL CONNECTION

Screw Driver

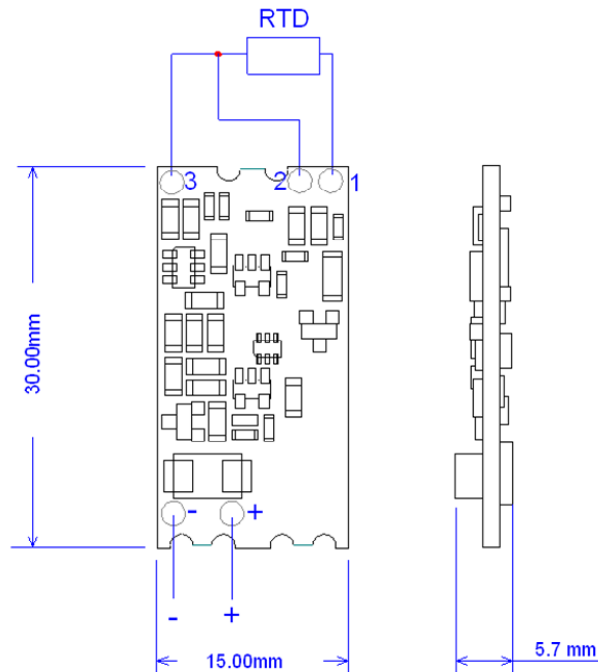
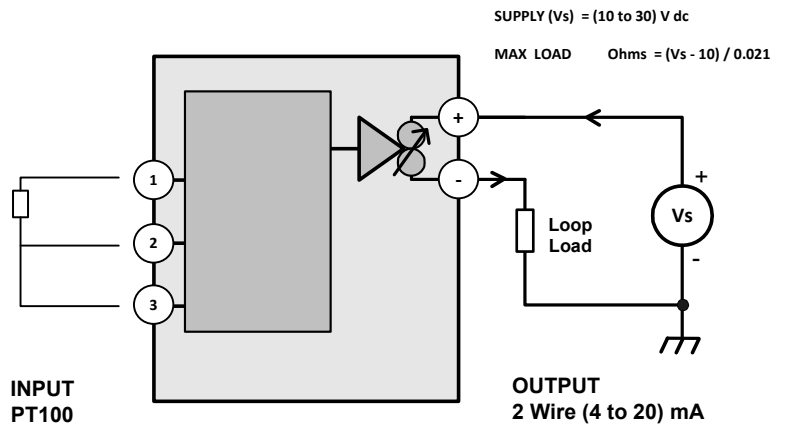


INPUT CONNECTION

PT100 wire must be equal length and type .
To maintain CE compliance cable length must be less than 3 Metres.

OUTPUT CONNECTION

Use twisted pair or screened cables for cable lengths greater than 30 Metres. Max cable length 1000 Metres. Ensure loop is grounded at one point.



OEM Installation

1. During use, the circuit board ambient temperature must be maintained between -40 to 85 Deg C regardless of the process temperature being measured. The enclosure / housing design must be designed to achieve this.
2. When handling the circuit board suitable antistatic handling precautions must be followed.
3. When soldering leads to the board, it is recommended IPC-A-610 acceptability of electronic assemblies, is followed.
4. We recommend encapsulating the circuit board with potting compound. We recommend Robnor RL240C HL240CNC. Bearing in mind, this part of the housing should not exceed 85 Deg C see 1 above.
5. When fitting inside of metal or other electrically conductive housings;
 - a. we recommend the housing is grounded to minimize electrical noise.
 - b. Precautions should be taken to insulate the PCB from the housing.
6. We recommend that the loop is grounded at a single point, usually at the power supply negative terminal.

Failure to follow these guidelines may render the warranty on the SEM106P circuit board invalid.