SEM160i SERIES USER GUIDE

WALL/DUCT MOUMT %RH AND TEMPERATURE
SINGLE OR DUAL CHANNEL

Important - Please read this document before 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, higher is recommended.
To maintain CE, UKCA EMC requirements, input wires are recommended to 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) SELV
Current with overvoltage	± 200 mA
Ambient	Temperature (- 30 to 70) °C RH (10 to 95) % non-condensing

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1~DESCRIPTION.

he SEM160I is a low-cost single or dual channel RH and temperature transmitter for industrial and BMS/HVAC applications. Single point alignment is provided for both temperature and humidity ranges. The configuration software also provides data readings together with a basic logger function for diagnostics when connected to the USBSpeedLink software.

2~RECEIVING 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.

3~SPECIFICATION.

Refer to data sheet for full specification. Download at www.status.co.uk

Configuration	
Factory default	Ch1 (0 to 100) %RH, upscale burnout, 0.0°C offset Ch2 (0 to 50) °C, upscale burnout, 0.0°C offset or TH bead on single mA versions

4~INSTALLATION AND WIRING

Important safety requirements

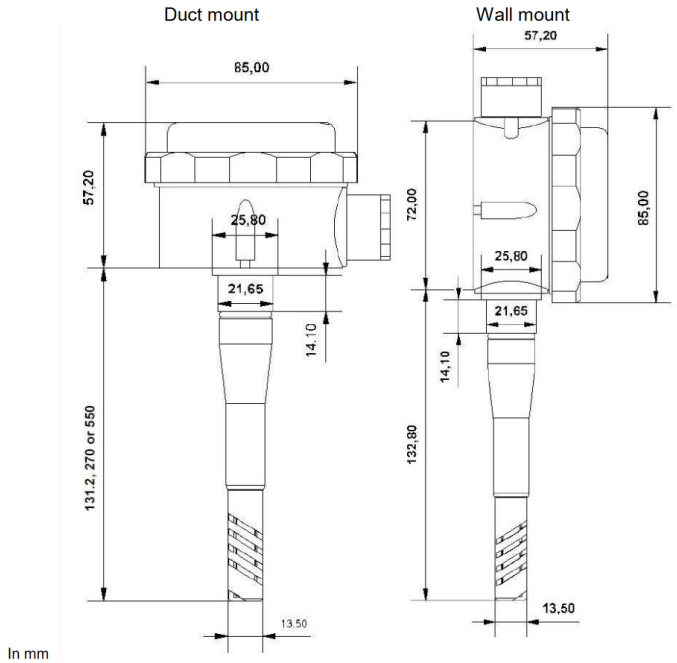
4.1~MECHANICAL.

In order to ensure correct operation, the following must be observed:
The product must be stored in a dry clean environment and remain in original packaging prior to installation.

The instrument must not be installed adjacent to electro-mechanical starters, controllers, thyristor power units or electrical switch gear.

The equipment surfaces may be cleaned with a damp cloth. Use a mild detergent/water. Ensure the supply is OFF before cleaning and, on completion of cleaning, the equipment is completely dry before the supply is turned back ON.

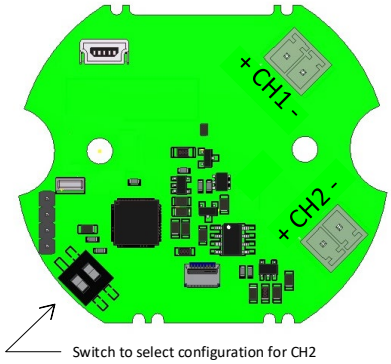
If the sensor element located in the tip of the probe becomes contaminated with dirt or chemicals, the instrument may fail to work correctly.



4.2~ELECTRICAL

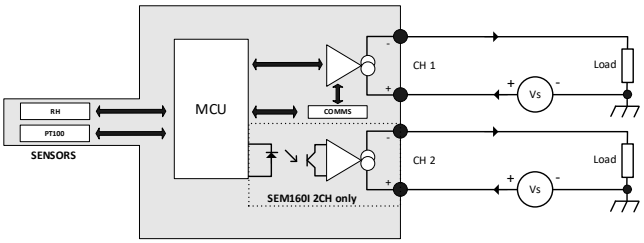
CONNECTIONS. For wiring connections refer to SEM160i instrument and this document.

Connections for cable length >3 metres, use screened and/or twisted pair cables. Maximum cable run = 1000 metre. The output loop should be grounded at a single point.

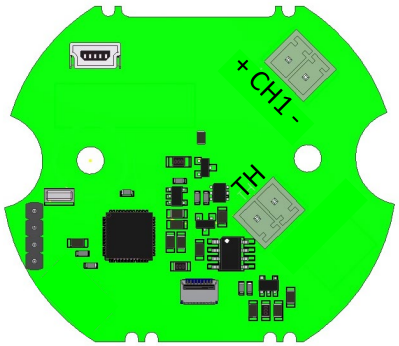


Dual mA output versions

SEM160i/W/HP
SEM160i/D/HP

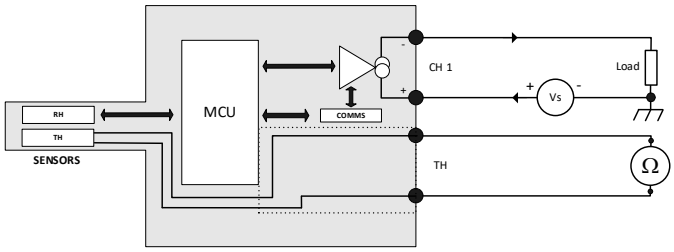


If Channel 2 is to be used, Channel 1 must also be powered.



Single mA output version
With a thermistor bead for CH2

SEM160i/W/H
SEM160i/D/H



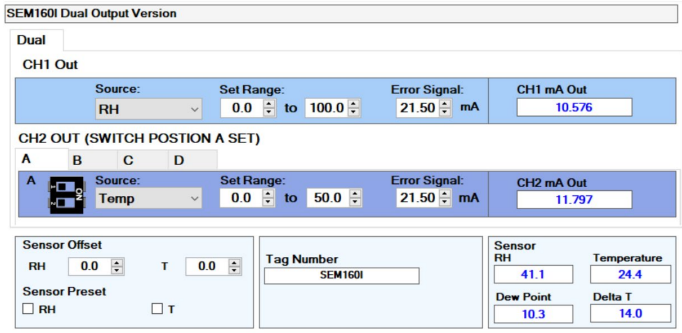
Refer to Status Instruments for TH data if required.

5~USER-CONFIGURATION.

IMPORTANT READ COMPLETE SECTION

The SEM160i can be configured whilst connected and powered, but a portable battery-powered computer or USB isolator must be used to avoid the effects of ground loops.
Observe any warning information given in the configuration software.

PC Configuration steps		
1	Download and install USB-SpeedLink software from www.status.co.uk Ensure the PC is web-enabled during installation.	
2	Run the software and open to the correct screen for the SEM160i	
3.2	Connect to the PC using an A to Mini B USB lead.	
3.1	Check switch position for dual channel versions	
4	Use the "Read Configuration" button to view current configuration	
5	Configure the device to the required settings for operation.	
5.1	Standard configuration options. For each Channel.	
	Input type. Offset Preset value Tag Error signal, Burnout	%RH, Temperature, Dew Point, Delta °C %RH, °C %RH, °C Free type field Adjustable mA
6.0	Read live data	
	%RH Temperature Dew Point Delta °C	
7	Write/Save the configuration to the device. The configuration is not saved onto the device unless the configuration screen is sent using the "Send Configuration" button.	



Screen shot of USB-SpeedLink connected to a SEM160i.

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