# **EUROLEC INSTRUMENTATION LTD**

# RT163 - PRECISION THERMOMETER

# **OPERATING INSTRUCTIONS**

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The RT163 precision thermometer gives a 0.01 resolution between -19.99 and + 99.99 and operates from a mains supply of 100 - 240V AC. There is a mains lead supplied with each instrument.

#### Probe Insertion

Insert the probe plug into the socket at the back of the Instrument, by aligning it up correctly, and pushing it fully into place.

**NOTE:** Probes must be handled with care.

- Do not twist the cable when connecting or disconnecting the plug as this may lead to damage within the plug.
- For safety, do not bring probe into contact with any surface connected to a hazardous voltage i.e. above 50Volts.
- Always ensure probes are used for the correct purpose, they should not be used to bore or lever openings in or between frozen matter for example.

### Operation:

Switch the thermometer on, by the On/Off switch at the front of the instrument.

Apply probe tip to the surface being measured, and allow reading to stabilise.

The temperature display units can changed from  ${}^{\circ}$ C to  ${}^{\circ}$ F by pressing the scroll button (the button on the left hand side) on the temperature indicator, until the display shows "unit", then pressing the up  $\blacktriangle$  or the down  $\blacktriangledown$  arrow buttons to change between units, then press the scroll button again to select.

### Sensor or cable breakage:

If sensor, probe cable or plug, are damaged, the instrument display will flash with the error message "SbEr".

### **Specification**

Thermometer:  $\pm 0.05^{\circ}$ C From -20 to +100 °C,  $\pm 0.2^{\circ}$ C elsewhere

Probe:  $\pm 0.03^{\circ}\text{C} \pm 0.07\%$ 

#### **Communications:**

The RT163 has an RS232C serial output port for PC connectivity. The following settings are required for communication.

Baud rate: 9600, Data bits: 8, Stop bits: 1, Parity: None.

#### Warranty

This instrument has been carefully assembled and tested, and is warranted against faulty workmanship and materials for 24 months from the date of purchase.

During the warranty period any defective instrument will be repaired or replaced at the discretion of the manufacturer. This warranty does not cover damage or failure resulting from misuse or accident.

Modification, adjustment or any alteration with the internal arrangement of the instrument shall absolve the manufacturer from any liability in respect of the instrument. If the tamperproof seal is broken, this will make the warranty void.

Any instrument to be repaired should be forwarded to the manufacturer, carriage paid and at the owner's risk. A brief description of the fault should be included.

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Please see other Pressure & Temperature instruments on the Eurolec web site www.eurolec-instruments.com