Thermo Scientific
Smart-Vue Wireless Monitoring Solution

Technical Data Sheet: PT100 External Sensors or Ovens and High-Temperature Incubators

Application

Module and sensor used for monitoring high temperature incubators (>100°C) and ovens up to +350°C.

General

• Measured temperature range: Incubators from 100°C ; Ovens up to 350°C.
• Wireless module cable length: 1.5 meter
• Size: 132.74 x 64.15 x 34 mm (5.2 x 2.5 x 1.3 in)
• Weight: 150 g (5.3 oz)
• Module Holder Mounting Options: Velcro*, magnetic, or fixed
• Battery Life / Power: Battery life dependent on customer use and size of monitoring size; recommend changing every year with standard default software settings (battery type: 3.6V Lithium)
• Warranty: 1 year on all hardware (see warranty terms & conditions for details on coverage)

Wireless Technology

• Industrial Scientific Medical (ISM) band frequencies: 4 different bands available for worldwide use based on location
• Wireless Range: up to 700 meters (2,300 ft.) in open space, from 25 meters (82 ft.) to 100 meters (330 ft.) indoors, and up to 400 meters (1,312 ft.) indoors with 3 repeaters
• Wireless Power Output: 25mW (check with your sales representative for international product availability and radio signal strength

Sensor Information

• Sensor type: 3-wire PT100 sensor, class B, glass silk cable with stainless steel braiding.
• Dimensions of the sensor: 150 mm x 3 mm stainless steel. Sensor cable length, 2 meters.
• Connector with 3 gold-plated pins between sensor and module.
• Measurement uncertainty: +/- 0.5°C after calibration.
• Resolution: 0.07°C
• Calibration Certificate: 3 point sensor calibration performed with reference standard at; +100°C, +200°C and +347°C
• Other calibration points available upon request
• Protection index: IP67

Memory

• 3,000 data measurement points
• Sampling rates: minimum every 1 minute to maximum every 24 hours

Alarm

• Smart-Vue Siren • Phone call • SMS Text • Email • Fax • Print
• Programming: Programmable high and low alarm limits with delay option; visual pre-alarm; visual and local audible settings for alarm limits
• Sensor Failure Protection: Spontaneous alarm emission for technical failures (sensor or receiver based); low battery alarm

Software

• Software Design: Cognitive ergonomic design to optimize user's work, reduce risk of error and provide additional system security
• Server/Client Relationship: Single server installation with unlimited client installation license agreement
• Scalability: Single software package manages all system sizes
• Report files require Microsoft* Word* and/or Excel* to handle data files exported in these formats

Standards and Regulations

• 915 MHz systems compliant with FCC Part 15 for non-interference with existing Wi-Fi network and other wireless devices

Environmental Conditions

• Temperature range for exposure of the module (functioning of the electronics of the module): 0°C to 50°C (32° to 122°F). 0 to 90% RH non-condensing.

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