

RFBug



Slim Line temperature and humidity recording for the subtle monitoring approach

Temperature and humidity are closely interrelated. Some independent effects of high temperature include increased biological activity, and acceleration of chemical deterioration processes. Unacceptable levels can contribute significantly to the breakdown of materials. Heat accelerates deterioration and high relative humidity provides the moisture necessary to promote harmful chemical reactions in materials.

In high relative humidity conditions insects and moulds thrive and reproduce, metals corrode, dyes and textiles fade and deteriorate more quickly, organic materials such as wood and leather swell or change shape, and gelatine emulsions and adhesives become sticky.

Temperature and humidity levels need to be monitored in order to control these effects within an environment.

The RFBug has been specifically designed with size in mind for museums and galleries to monitor temperature and humidity parameters within confined spaces either within cabinets or behind paintings.

Typical Applications

- Display cabinets
- Museums
- Galleries
- Exhibitions
- Environmental monitoring





Issue 3



Hanwell's RFBug is part of the advanced temperature and humidity radio transmitters. They allow wire-free monitoring of a site, with real time alarm notification and historical analysis of data. Each unit reads its on-board sensors providing accurate and reliable information about environmental conditions. This data is transmitted, at user-defined intervals, to the Radiolog system where it is filed for analysis.

The RFBug has a precision temperature sensor and a high quality humidity sensor.

Transmitter ID number and transmission rate are set using dip switches accessible through the back of the case

The moulded case allows easy access to the battery.

The RFBug has been designed to comply with the RoHS and WEEE EU directives, and carries the CE mark.

Disclaimer

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Product Code

RFBug-xxx.xxx – Temperature & humidity with integral sensors

Instrument

Dimensions: 105 x 65 x 19 mm

Weight: 100 grams without battery

Power Supply: 2 x AAA Alkaline

Battery: Up to 2 years at 3 min intervals

Case Materials: ABS

N.B. Instrument operating range -20°C to +60°C in a non-condensing RH environment

Sensors

Temperature

Sensor: Precision Thermistor

Range internal: -20°C to +55°C

Accuracy: +/- 0.2°C

Resolution: 0.1°C

Humidity

Sensor: Capacitive

Range: 5% to 100% non condensing

Accuracy: +/- 3%

Resolution: 0.1% RH

Radio

Radio Frequency: 434.075MHz or, 433.920MHz

Radio Power: 10 mW

Radio Range: 3 km over open ground

Accessories:

88715 AAA cell battery

CAL-S 3 point non-traceable calibration certificate

Y125 Wall mounting bracket

