



Left: Shown with Y300 probe

Above: Detail of USB socket

Below: Optional wall mounting security bracket

The rl4001 & rl4002 are precision thermistor temperature measuring and radio transmission devices. The rl4001 has a single channel the rl4002 is dual channel. The sensors are connected via 2 pin Lemo plugs and sockets. They allow wire-free monitoring of a site, with real time alarm notification and historical analysis of data. Each 4000 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.

rl4000 series transmitters can be used in accordance with GAMP and FDA regulations. The transmitters and sensors can be calibrated by the either user or Hanwell staff on-site or at Hanwell's in-house calibration laboratory.

Transmitter ID number and transmission rate are set in the transmitter using a simple software program (free to download) and a USB cable. Each unit has an LCD screen simultaneously displaying the most recent readings taken and the predicted battery life. The transmitter is powered by a single 3.6V AA Lithium battery, which can be fitted by the user.

The battery life will be dependent on the transmission rate set. An indicator on the LCD will warn when the battery is low, and the transmitter maintains a

record of when the battery was last changed.

Each 4000 series radio transmitter has enough internal memory to store up to 100000 readings and is in fact continually logging guaranteeing 100% validity of the data. The 4000 series unit can be downloaded via the high speed USB connection directly into the PC software (V8.4 or later only). The data logged will be added to the radio data, providing a continuous history for that transmitter.

The moulded case allows easy access to the battery and USB socket, as well as having slots to fit onto secure wall brackets.

CFR21 part 11 compliant software is available. OQ & IQ templates are included, full on-site validation services are available.

The 4000 range has been designed to comply with the RoHS and WEEE EU directives, and carries the CE mark.



Single channel thermistor

Product Code RL4001-434.075* &
RL4002-434.075*
Series rl4000

Typical Applications

Monitoring in:
 ° Fridge/Freezer monitoring
 ° Laboratories
 ° Hospitals
 ° Pharmaceutical
 ° Warehousing

Instrument

Dimensions: 110 x 80 x 35 mm
Weight: 200 grams
Power Supply: 3.6 Volt AA Lithium battery
Battery Life: 18 months
Case Materials: ABS & PC
Memory Capacity: 100000 readings
N.B. Instrument operating range -10 to +70°C in a non-condensing RH environment

Sensors

Temperature

Sensor: Precision thermistor
Range: -40 to +70°C
Accuracy: +/- 0.1°C between
-25 to +50°C +/-0.3 elsewhere
Resolution: 0.1°C

Radio

***Radio Frequency:** 434.075MHz
433.920MHz (fixed)
433.875 - 434.650MHz
in 25KHz increments
(synthesised)
Radio Power: 10 mW
Radio Range: 3 km over open ground

Accessories

Code:
 Y119 Wall mounting security bracket
 Y055 Setup communications cable
 G129 Replacement battery
 CAL-T 3 point calibration between
-20 and +110°C (single Ch)
 CAL-T-2 3 point calibration between
-20 and +110°C (dual Ch)
 Y300 Plug-in temperature probe
 J095-05 Remote temperature probe