



**Above:**  
*Detail of USB socket*

**Below:**  
*Optional wall mounting security bracket*

The rl4102 is part of the 4000 range of 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 rl4102 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 rl4102 has a precision temperature sensor and a high quality humidity sensor. These sensors are housed in a remote probe for discrete mounting in a showcase. The sensors can be mounted in the case in two ways. The sensor can be supplied with an integral Lemo plug or cable mounted via a cable gland. Using the integral plug version a matching socket can be fitted to the base plate of the showcase. Using the cable mounted version the sensor can be fed in from beneath the case through a standard tank fitting. Both methods provide an air tight solution. The sensors can easily be removed for calibration, using the cable mounted method usually means that the sensor can be removed without opening the case.

Transmitter ID number and transmission rate are set in the rl4102 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 rl4102 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 rl4102 maintains a record of when the battery was last changed.

The moulded case allows easy access to the battery and USB socket, as well as having slots to fit onto secure wall brackets and a plain front panel to hide the LCD if more discreet monitoring of public areas is desired.

The rl4000 range has been designed to comply with the RoHS and WEEE EU directives, and carries the CE mark



## Temperature & humidity

**Product Code** RL4102-434.075\*  
**Series** rl4000

### Typical Applications

Monitoring in:

- ° Fridge/Freezer monitoring
- ° Laboratories
- ° Hospitals
- ° Pharmaceutical
- ° Warehousing

### Instrument

**Dimensions:** 110 x 80 x 35mm  
**Weight:** 200 grams  
**Power Supply:** 3.6 Volt AA Lithium battery  
**Battery Life:** 18 months  
**Case Materials:** ABS & PC  
**Operating Humidity Range:** 0...100% non-condensing  
**Operating Temp Range:** -10° to +50° C  
**Memory Capacity:** 100000 readings

### Sensors

#### Temperature

**Sensor:** Precision thermistor  
**Range:** -10° to +50° C  
**Accuracy:** +/- 0.1° C  
**Resolution:** 0.1° C

#### Humidity

**Sensor:** Capacitive polymer  
**Range:** 0-100% RH non-condensing  
**Accuracy:** +/- 2%  
**Resolution:** 0.1%RH

### 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:**  
**Y055** Setup communications cable  
**G129** Replacement 3.6V Lithium AA battery  
**CAL-IA** 3 point calibration certificate