

Measurement, Control, and Datalogging Solutions



The ClimaBox3 conveniently monitors temperature, humidity and ${\rm CO}_2$ in one convenient instrument.

Data collected by the Climabox3 can be used to test and improve substandard ventilation systems in offices, hospitals, schools, public buildings etc. where poor indoor air quality results in complaints from visitors and employees alike. The performance of heating and air handling systems can be analysed to improve the efficiency and/or provide diagnostic data for predicting service intervals.

 ${\rm CO}_2$ temperature and RH data is also useful in agricultural, plant growth greenhouse applications and studies.

In today's energy-conscious world everybody is looking for ways to cut down on energy use. A significant saving can be realised by on-demand control of ventilation. By measuring the amount of CO₂ breathed into the air, ventilation systems can be controlled to deliver the exact amount of ventilation required at the right time. For example, when there aren't many occupants in a building, the CO₂ level will be relatively low and this can trigger the ventilation system to provide a lower level of ventilation, the opposite is then true when there are a large number of people present in the building.

By using a Climabox accurate reliable readings can be obtained and in addition there is no need to hard wire through the building as the Climabox communicates wirelessly to either a Hanwell control system or directly to the BMS via a Modbus link.

For the unit to measure accurately, a silent fan draws air in from the ventilation holes on the left hand side of the unit.

This air passes across the sensor and out of the ventilation holes on the right hand

The wireless version of the Climabox3 can also be used as a standalone data logger if required.

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

ClimaBox3

Product Code RL5406-xxx.xxx*
Series ClimaBox

Typical Applications

- ° Ventilation studies
- ° Environmental monitoring
- ° Building monitoring & control
- ° Occupancy studies

Instrument

Dimensions: 197 x 106 x 60 mm

Weight: 300 grams Case Materials: ABS & PC Memory Capacity: 10000 readings Power Supply: External 12V DC

N.B. Instrument storage range -20 to + 70 °C in a

non-condensing RH environment

CO₂ Sensor

Description: E+E Dual Source Infrared System

Range: 0...4000ppm

Accuracy: ±50ppm or ± 3% of measured value

Humidity

Operating Humidity Range non-condensing: 0-100% Accuracy: ± 2%

Operating Temperature Range: -10 to +60 °C Accuracy: + 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

Communications and Software

PC/Logger Interface: Standard USB A/ USB mini-B

PC Software: Radiolog8 V5.3 or later Minimum O/S: Windows NT

