

# CLIMABOX

## DATA SHEET

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The ClimaBox has been designed to monitor CO<sub>2</sub>, temperature and humidity in one instrument. The unit was designed specifically to monitor air quality in terms of carbon dioxide in the air which has been directly linked with sick buildings syndrome (SBS).

Additionally the performance of heating and air handling systems can be analysed to improve the efficiency and/or provide diagnostic data for predicting service intervals.

The Hanwell product technology is established as the most flexible environmental monitoring technology on the market today by allowing users to expand or change systems as and when required.

ClimaBox is available in two formats for standalone applications there is a data logger version and for distributed monitoring and control applications there is a wireless version that can be added to new or existing RadioLog systems.

ClimaBox data loggers gather information and display the data on an LCD screen which can then be downloaded into a local PC via a USB cable. The ClimaBox radio transmitter wirelessly transmits data to a local PC via an SR2 or CR2 base station and provides alarm notifications and automatic data collection.

The CO<sub>2</sub> sensor is located inside the box. 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 side.

## Product Features

- Data logging and radio transmitter formats
- LCD display with data readings and battery life
- Memory capacity 100,000 readings
- Accessible battery and USB socket
- Low power radio for long distance transmission (Over 3km over open ground)
- Superior performance hardware with high accuracy sensors
- Complies with RoHS, EU and WEEE directives
- Carries CE Mark

## Benefits

- Improve work efficiency of staff with optimised air quality
- Reduce level of sick leave
- Ensure a comfortable environment for visitors
- Avoid effects of sick buildings syndrome with discrete monitoring
- Provide optimum CO<sub>2</sub>, temperature and humidity environments at all times and potentially make significant energy savings
- High performance technology with accurate connecting probes

## Format

Indicator	✗
Data Logger	✓
Radio Transmitter	✓



## Data Logger Functions

**Memory:** 256k EEPROM

**Logging intervals:** Programmable from 10 seconds to 24 hours.

**Record Capacity:** 100,000 records

**PC Interface:** USB communications

**Power supply:** External 12V DC with internal clock battery back up

**Software required:** W200 – HanLog 4.5+

**Accessories:** 88706 – 3.7V AA Lithium battery  
Y055 –USB cable

N.B Instrument operating range -10°C to +60°C  
in a non-condensing RH environment

## Radio Transmitter Functions

### Radio Transmitter Functions

**Frequency Options:** A range of frequencies are available between 433-458MHz. Country specific regulations apply.

**Radio Power:** 10mW

**Radio Range:** 3km over open ground

**Battery Life:** Up to 18 months

**Software required:** W400 – RadioLog 8.4+

**Hardware required:** CR2 – Controller

SR2 – Smart Receiver

REP – Repeater

**Accessories:** 88706 – 3.7V AA Lithium battery

N.B Instrument operating range -10°C to +60°C  
in a non-condensing RH environment  
to +60°C in a non-condensing RH environment

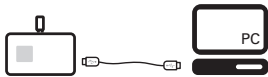
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# In Building Monitoring

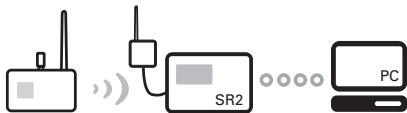
The ClimaBox can be used as a data logger; data can be read using the LCD display in situ and data can also be downloaded via a USB to a local PC. Alternatively data can be automatically transferred to a PC using the wireless radio transmitter option (as illustrated opposite).

## Standalone data logger



## Radio system

(requires radio receiver)



## Technical Specifications


Description	CO <sub>2</sub> , Temperature and humidity data logger or radio transmitter
Data Logger Code	HL5406
Radio Transmitter Code	RL5406-434.075 (other frequencies available)
CO <sub>2</sub> Sensor	E+E Dual Source Infrared System
Range	0...4000ppm*
Accuracy	± 50ppm ± 3% of measured value
Temperature Sensors	Precision Thermistor
Range	-10°C to +60°C
Accuracy	±0.1°C
Resolution	0.1°C
Humidity Sensors	Capacitive Polymer
Accuracy	±2%
Resolution	0.1%

\*10000ppm variant available



The diagram (left) illustrates how a typical radio system is laid out within a building, which can also work alongside other Hanwell monitoring products.

## Parameters

 CO<sub>2</sub>, temperature & humidity



## Instrumentation Specification

**Dimensions:** 197 x 106 x 60mm  
**Weight:** 300 grams  
**Power Supply:** External 12V DC  
**Case Material:** ABS  
**Memory Capacity:** 100,000 readings



Intelligent monitoring and control solutions:  
**In Buildings | In Transit | Outdoor/Remote**

