

# RF Wireless ThermaData™ Loggers

Z.l. Le Trési 6 D - 1028 Préverenges Tél 021 637 12 37 - Fax 021 637 12 38 www.thermolab.ch info@thermolab.ch



## RF Wireless ThermaData<sup>™</sup> Loggers

- ✓ RF wireless temperature recording
- 🗸 up to 16 loggers can be monitored
- reduces time spent taking manual readings
- $\checkmark$  high resolution 0.1 °C, high accuracy ±0.5 °C

The new RF ThermaData wireless loggers consist of a comprehensive range of portable data-loggers utilising the latest in electronic technology. The loggers are a battery powered, cost-effective, temperature monitoring system that records remotely the temperature of appliances and buildings. Via radio frequency each logger can transmit the recorded data to a receiver connected to a PC.

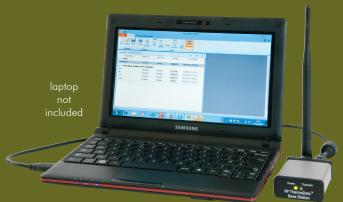
The RF ThermaData wireless data-logging system consists of a number of RF (wireless) data-loggers, a RF base station connected to a PC and software which enables the user to upload data or download programme information to each logger.

The RF loggers are housed in a waterproof, ergonomic case that is designed to meet IP66/67 protection. Each RF logger is a self-contained, battery powered unit that can receive, log, store and transmit data to the RF receiver.

The loggers have a range of up to 100 metres (line of sight), and up to a maximum of 16 ThermaData wireless loggers can be utilised at any one time. Each logger incorporates a red and green LED, the flashing green LED indicates that the logger is active/logging and the flashing red LED indicates that your customised preset alarms have been exceeded.

Options include internal and external temperature sensor/ probe/s. The external probes can be either fixed or detachable via a waterproof three-pin connector. The remote temperature probes are supplied with a one metre PVC/PFA (fixed) or PUR/PVC (detachable) lead.

### **RF** ThermaData Base Station



specification	RF ThermaData Base Station
RF range	<100 metres (line of sight)
display	2 LED's
radio frequency	868 MHz (licence free)
power source	USB connection
current consumption	<100 mA
antenna	50 Ω half wave single band
antenna dimensions	Ø11 x 230 mm
dimensions	27 x 57 x 87 mm
weight	115 grams

#### description RF ThermaData Base Station supplied with a two metre USB lead, start magnet & ThermaData Studio Software

### model WTB

This RF Wireless ThermaData Logger incorporates an internal NTC thermistor sensor.

The model WTB records temperature over the range of -40 to 85 °C and can record up to 16000 readings.

#### model WTB



model WTBF This RF Wireless ThermaData Logger incorporates an external

NTC thermistor probe with a one metre PVC/PFA lead.

The model WTBF records temperature over the range of -40 to 125 °C and can record up to 16000 readings.

model WTB1F

This RF Wireless ThermaData Logger incorporates an

internal and external NTC

thermistor probe with a one metre PVC/PFA lead.

The model WTB1F records

range of -40 to 85 or 125 °C (external) and records up to 8000 readings

temperature

per sensor.

model WTBF

over the

model WTB1F



specification	all models
range	-40 to 85 °C internal or -40 to 125 °C external
resolution	0.1 °C or °F - user selectable
accuracy	±0.5 °C
memory	16000 or 2 x 8000 readings
sample rate	0.1 to 255 minutes
antenna	internal 50 $\Omega$ omni-directional chip
RF range	<100 metres line of sight
transmission rate	0.1 to 255 minutes
radio frequency	868 MHz (licence free)
battery	3.6 volt ½ AA lithium
battery life	approx. 18 months
display	2 LED's
dimensions	Ø76 x 23 mm
weight	80 grams approx model dependant





### model WTBC

This RF Wireless ThermaData Logger incorporates an external NTC thermistor sensor with a one metre PUR/PVC lead and probe connector.

The model WTBC records temperature over the range of -40 to 125 °C and records up to 16000 readings.

#### model WTBC

## model WTB2F

This RF Wireless ThermaData Logger incorporates two external fixed NTC thermistor probes with two one metre PVC/PFA leads.

The model WTB2F records temperature over the range of -40 to 125 °C and records up to 8000 readings per sensor.

> model WTB2F

## model WTB1C

This RF Wireless ThermaData Logger incorporates an internal and external NTC thermistor probe with a one metre PUR/PVC lead and probe connector.

The model WTB1C records temperature over the range of -40 to 85 or 125 °C (external) and records up to 8000 readings per sensor.

> model WTB1C

### Accessories

The RF ThermaData Loggers are supplied with black seals but customers can purchase coloured seals, available in packs of seven colours: black, blue, brown, green, red, white and yellow.



An optional protective silicone boot is also available.

description coloured seals - pack of 7 protective silicone boot

## ThermaData<sup>™</sup> Studio Software

- ✓ reliable & secure
- easy to produce graphs & reports
- ✓ up to 32 traces can be displayed
- ✓ easy access to current & historical records

The ThermaData Studio Software is compatible with all the ThermaData Logger models, including wireless. The software is both powerful yet user-friendly, enabling temperature data to be organised and analysed to provide management information.

The ThermaData Studio Software has the ability to display up to 32 traces on a graph, the trace colours are user selectable. All files can be viewed as thumbnail icons for easy identification.

The software allows the user to programme the logging sample/interval rate (0.1 to 255 minutes), the real-time clock, °C or °F, delayed start (maximum 23 hours, 59 minutes) or select a manual start option. It is also possible to include <u>a 32-character user ID for each logger</u>.

By selecting continuous logging in the software options, it is possible to start the ThermaData Logger only once and never have to reset its parameters again, even if downloaded regularly. Unlike many loggers, the ThermaData Loggers will continue recording during and after downloading the data.

The ThermaData Studio Software features the facility to send a SMS text message, up to four numbers simultaneously from your computer, when alarm limits have been exceeded. This allows the user to receive timely alarm information which may be critical to their business.

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## NTC Thermistor Probes for use with ThermaData<sup>™</sup> Loggers

Data-loggers are only part of the system; of equal importance is the design of the temperature probes used to physically measure the item. ETI manufactures a range of NTC thermistor probes to complement our range of RF Wireless ThermaData-Loggers. The following probes can be used with either the WTBC or the WTB1C loggers.

general purpose probe	This general purpose, stainless steel, penetration probe is suitable for a wide range of remote monitoring applications. Supplied with a one metre PUR/PVC lead and compatible three-pin Binder connector. Response time less than two seconds. Maximum probe temperature 125 °C.	
Ø3.7 x 30 mm with 1000 mm lead	This stainless steel air probe is ideal for measuring air temperature in chill cabinets, fridges/freezers, offices, storage areas etc. The probe incorporates a one metre PUR/PVC lead and compatible three- pin Binder connector. Response time less than one second. Maximum probe temperature 125 °C.	
surface patch probe	This self-adhesive surface patch probe is ideal for measuring the temperature of pipes, radiators and flat surfaces. The probe incorporates a one metre PUR/PVC lead and compatible three-pin Binder connector. Response time less than four seconds. Maximum probe temperature 100 °C.	
food simulant probe	This polypropylene food simulant probe is designed for use in food storage and refrigeration. The probe simulates the temperature of foods in chill cabinets and similar appliances. The probe incorporates a one metre PUR/PVC lead and compatible three-pin Binder connector. Maximum probe temperature 100 °C.	

Please note: the maximum temperatures quoted are probe tip temperatures. The maximum PUR/PVC lead temperatures are 80 °C.

## **Optional UKAS Calibration Certificate**

ETI's in-house UKAS accredited calibration laboratory for temperature can offer UKAS certification for RF Wireless ThermaData Loggers over the measurement range of -40 to 100  $^{\circ}$ C with a best measurement capability of 0.04  $^{\circ}$ C.

Original UKAS Certificates provide proof that the data-loggers have been calibrated against nationally approved standards. Each UKAS Certificate indicates the deviations from standards at three check points (-18, 0 and 40 °C) to an uncertainty of  $\pm 0.04$  °C.





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