

REMOTE TEMPERATURE MONITORING



We have used our vast experience in temperature measurement, together with the latest technology, to create the ThermaData range of small, cost-effective, data-loggers, WiFi loggers and Bluetooth wireless thermometers. All of which have been designed for ease of use and reliability.

APPLICATIONS

There are many uses for data-loggers, WiFi loggers and Bluetooth wireless thermometers for example; to ensure compliance with legislation, to help save costs, to ensure the quality of a product, process, or for research purposes in the following industries:

- Food processing
- Agriculture
- Laboratories
- Refrigeration
- Environmental
- Logistics
- Museum & archives
- Medical

The EC food industry directive suggests that organisations involved in food preparation, storage or transportation should have the ability to verify that the temperature of food has been kept at the correct levels. This is often referred to as due diligence. ThermaData loggers offer organisations a method of complying with food industry legislation by providing traceability from the moment the food is received to the time it is delivered to the customer.

For shippers, data-loggers can verify that conditions inside the transportation vehicles have been maintained within the specified levels.

For growers of fresh produce, ThermaData loggers provide an accurate record of temperatures during the life cycle of a product, from farm to plate, i.e. during growth, preparation and transportation of produce, thus ensuring best quality.

The ThermaData WiFi loggers utilise the latest WiFi wireless technology. The WiFi loggers are a temperature monitoring system that remotely record the temperature of appliances and buildings. Each logger transmits the recorded data to a WiFi router connected to the internet which can be remotely accessed and viewed from a PC, laptop or tablet anywhere in the world.

The Bluetooth wireless thermometers and probes transmit temperature data to your Android, iOS or Bluetooth wireless device via a secure connection. These thermometers and probes have been specifically designed to eliminate the need for wires and connectors which often cause many traditional probes to break or fail.

UKAS CERTIFICATES OF CALIBRATION

Our in-house UKAS calibration laboratory offers certification for both temperature and humidity data-loggers. Each certificate indicates deviations from standards at various temperature or humidity check points. See pages 105 and 106 for more information.

THERMADATA® LITE LOGGER

new

- LED display shows if limits are exceeded
- Customised high/low alarm facility
- Ideal for storage & transportation
- FREE software to download

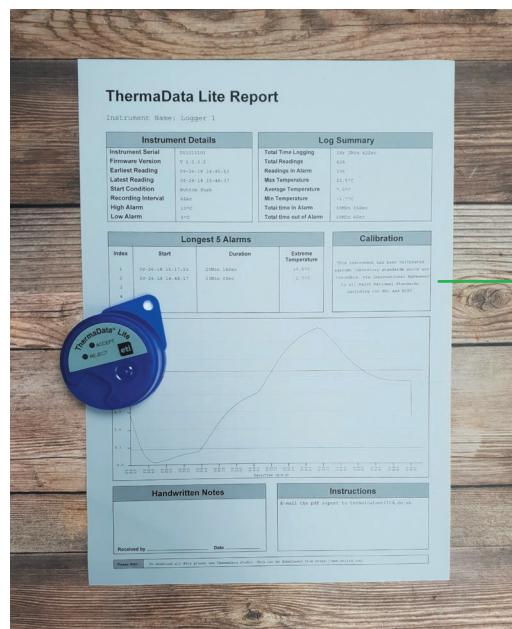
The new ThermaData Lite logger is a cost effective, self-contained temperature data-logger or blind recording thermometer that is designed to record the temperature of the surrounding environment. The ThermaData Lite logger is housed in a water resistant polyethylene case and incorporates two LED status indicators.

The ThermaData Studio software allows the user to programme the logging sample/interval rate (0.1 to 255 minutes), the real-time clock, °C/°F, delayed start (maximum 23 hours, 59 minutes), push-button start, temperature start or time start and a 32-character user ID. The software also incorporates a password protected calibration adjustment feature that allows the user to check the calibration of loggers and make minor adjustments of 0.1 °C (±3 °C).

The user can also set, within the software, high and low alarm values for a specific application. A push of the button will allow a simple visual inspection of the unit to show if either of these limits have been exceeded. A flashing red LED will warn the user that the alarm limits have been exceeded (reject) or a flashing green LED will advise the user that the alarm limits have not been exceeded (accept).

THERMADATA STUDIO SOFTWARE & AUTOMATIC PDF FILE OUTPUT

The ThermaData Studio software is supplied as a FREE download. The ThermaData Lite logger is connected to a PC via a USB-C port lead and by selecting the relevant icon the data can be downloaded and displayed either as a graph, table or summary. The information can then be analysed by zooming in, saving as a Studio File or exporting to other software packages. The new ThermaData Lite produces a report automatically on computer plug-in, this report will detail high and low alarms and also give you various key information for acceptance for deliveries or processes. No software required to download PDF report.



• Colour-coded data-loggers

Available in a variety of coloured cases; blue, yellow, white and black. These colour-coded cases help to prevent cross contamination by allowing the user to allocate a colour to a specific product or application. Other applications include different coloured loggers for easy identification in for example; the building and construction industry where loggers can often blend in with the environment.

• Example of PDF file

The automatic report generated shows key information such as instrument details, log summary and longest alarms. The PDF also displays an intuitive graph for easy visual indication.



Order code	Description
293-010	ThermaData Lite - white
293-020	ThermaData Lite - yellow
293-050	ThermaData Lite - blue
293-070	ThermaData Lite - black
812-510	USB-C lead

Specification	ThermaData Lite
Range	-40 to 85 °C
Resolution	0.1 °C
Accuracy	±0.5 °C
Memory	16000
Sample rate	0.1 to 255 minutes
Battery	3.6 volt ½ AA lithium
Battery life	Minimum 3 years
Dimensions	Ø55 x 25 mm
Weight	40 grams
Optional UKAS Certificate of Calibration available	

REMOTE MONITORING

THERMADATA® LOGGERS

- Waterproof housing offering IP66/67 protection
- Temperature range -40 to 85 °C or 125 °C
- Resolution 0.1 °C, high accuracy ± 0.5 °C
- Meets EN12830, S & T, C & D, 1

The ThermaData logger consists of a comprehensive range of portable data-loggers utilising the latest in electronic technology and housed in waterproof, ergonomic cases designed to meet IP66/67 protection.

The ThermaData logger offers the choice of either blind data-loggers or data-loggers with an LCD display. Other options include internal and external temperature sensors/probes. The remote temperature probes are supplied with a one metre PVC/PFA lead. Other models and options are available on our website.

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.

THERMADATA STUDIO SOFTWARE

The ThermaData logger is connected to a PC via a USB cradle. By selecting the relevant icon the data can be downloaded and displayed either as a graph, table or summary. The information can be analysed by zooming in, saving as a Studio File or exporting as a text (.txt) or Excel (.xls) file to other software packages.

The software incorporates several useful functions, including the ability to display two traces on a graph, the trace colours are user selectable. All files can be viewed as thumbnail icons for easy identification.



REMOTE MONITORING



The ThermaData Studio software will work equally with all ThermaData loggers. The software is both powerful and sophisticated, yet user-friendly enabling temperature data to be organised and analysed to provide management information. 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 and 59 seconds) or select a magnetic start option. It is also possible to include a 32-character user ID for each logger.

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 most low cost loggers, the ThermaData logger will continue recording during and after downloading the data.

The ThermaData Studio software is supplied as a FREE download. **Please note:** when initially ordering loggers it is necessary to order at least one ThermaData logger cradle - see opposite page for details.



TB - BLIND WITH AN INTERNAL SENSOR



- NTC thermistor sensor
- -40 to 85 °C
- Records up to 4000 readings

Order code	Description
295-001	Model TB

TD - LCD WITH AN INTERNAL SENSOR



- NTC thermistor sensor
- -30 to 85 °C
- Records up to 4000 readings

Order code	Description
296-001	Model TD

TBF - BLIND WITH AN EXTERNAL FIXED SENSOR



- NTC thermistor sensor
- Ø3.3 x 100 mm probe, 1 metre PVC/PFA lead
- -40 to 125 °C
- Records up to 4000 readings

Order code	Description
295-101	Model TBF

TDF - LCD WITH AN EXTERNAL FIXED SENSOR



- NTC thermistor sensor
- Ø3.3 x 100 mm probe, 1 metre PVC/PFA lead
- -40 to 125 °C
- Records up to 4000 readings

Order code	Description
296-101	Model TDF

TB2F - BLIND WITH TWO EXTERNAL FIXED SENSORS



- NTC thermistor sensors
- Ø3.3 x 100 mm probe, 1 metre PVC/PFA lead
- -40 to 125 °C (external)
- Records up to 2 x 2000 readings

Order code	Description
295-111	Model TB2F

TD2F - LCD WITH TWO EXTERNAL FIXED SENSORS



- NTC thermistor sensors
- Ø3.3 x 100 mm probe, 1 metre PVC/PFA lead
- -40 to 125 °C (external)
- Records up to 2 x 2000 readings

Order code	Description
296-111	Model TD2F

Specification	All models
Range - internal	-30/-40 to 85 °C - model dependant
Range - external	-40 to 125 °C - model dependant
Resolution	0.1 °C
Accuracy	±0.5 °C (@ ambient -10 to 85 °C)
Memory	4000 or 2 x 2000 readings
Sample rate	0.1 to 255 minutes
Battery	3.6 volt ½ AA lithium
Battery life	Approximately 1.5 years
Display - blind	2 LED's
Display - LCD	10 mm LCD/2 LED's
Dimensions	Ø76 x 23 mm
Weight	71 to 113 grams - model dependant

An optional protective silicone boot (white) is available (830-270) see page 34 for details

USB CRADLE & START MAGNET

Each USB cradle is supplied with a one metre PVC lead complete with a start magnet.



Order code	Description
293-804	Cradle & start magnet

THERMADATA® LOGGERS FOR HUMIDITY

- Display toggles between humidity & temperature
- Records up to a maximum of 16000 readings
- LED display of high & low alarm status
- Choice of internal or remote sensors

The humidity and temperature ThermaData loggers measure and record both temperature and relative humidity (%rh) over the range of -20 to 85 °C and 0 to 100 %rh. At programmable intervals, the loggers will record simultaneously both temperature and humidity, recording up to a maximum of 16000 readings (8000 humidity and 8000 temperature).

With a choice of either LCD or a blind display, both options include an internal or external humidity and temperature sensor with a one metre lead. Each ThermaData logger incorporates two LED's, a flashing green LED indicates that the logger is active/logging and a flashing red LED indicates that your customised preset alarms have been exceeded.

The humidity and temperature ThermaData loggers are suitable for a diverse range of applications which include HVAC climate monitoring, QA monitoring of storage areas etc.

THERMADATA STUDIO SOFTWARE

The ThermaData Studio software is supplied as a FREE download. The ThermaData logger is connected to a PC via a USB cradle. By selecting the relevant icon the data can be downloaded and displayed either as a graph, table or summary. The information can then be analysed by zooming in, saving as a Studio File or exporting to other software packages. **Please note:** When initially ordering these loggers, it is necessary to order at least one ThermaData logger cradle.



Order code	Description
295-061	Blind model HTB - internal sensors
296-061	LCD model HTD - internal sensors
295-062	Blind model HTBF - external sensors
296-062	LCD model HTDF - external sensors
293-804	USB cradle & magnet
890-111	*UKAS 3-point certificate
*Price when purchased with a new instrument	



Specification	Temperature	Humidity
Range	-20 to 85 °C	0 to 100 %rh
Resolution	0.1 °C	0.1 %rh
Accuracy	±0.5 °C (0 to 45 °C) ±1 °C (-20 to 70 °C) ±1.5 °C (70 to 85 °C)	±3 %rh @ 25 °C (10 to 90 %rh)
Hysteresis	N/A	±1 %rh
Sensor type	Silicon bandgap	Capacitance polymer
Memory	2 x 8000 readings	
Sample rate	0.1 to 255 minutes	
Battery	3.6 volt ½ AA lithium	
Battery life	Minimum 2 years	
Display	10 mm LCD - toggles every 6 seconds/2 LED's	
Dimensions	Ø76 x 23 mm	
Weight	80 grams approx. - model dependant	
Optional UKAS Certificate of Calibration available		

STAINLESS STEEL THERMADATA® LOGGERS

- Integral USB interface for setup & download
- High temperature range -20 to 105 °C
- Food grade 316 stainless steel housing
- 5 probe options available

These stainless steel data-loggers are ideal for food, pharmaceutical and other applications where a high temperature data-logger is required. The ThermaData logger is housed in a waterproof, food grade 316 stainless steel case to protect the logger from corrosion, impact and moisture (IP66/67).

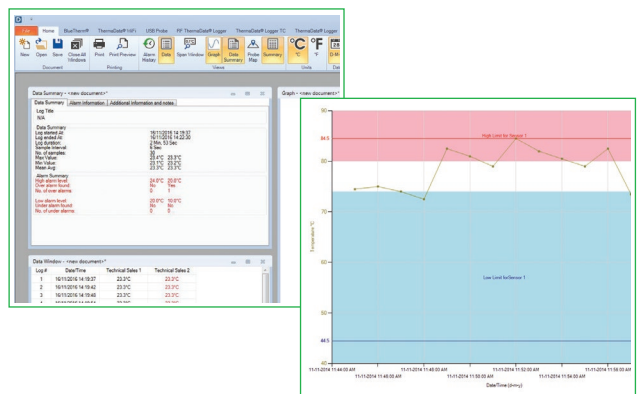
The ThermaData logger software allows the user to programme the logging sample/interval rate (1 to 255 minutes), the real-time clock, °C/°F, delayed start (maximum 23 hours, 59 minutes) and a 12-character user ID. The software also incorporates a password protected calibration adjustment feature that allows the user to check the calibration of loggers and make minor adjustments of 0.5 °C (± 3 °C).

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

The ThermaData logger is available in five options; without a probe, with a Ø3.3 x 50 mm penetration probe or Ø4.5 x 100 mm, Ø4.5 x 150 mm or Ø4.5 x 200 mm penetration probe, all with a Ø3.3 reduced tip. Each logger is supplied with a two metre USB lead and FREE downloadable ThermaData Studio software.

THERMADATA STUDIO SOFTWARE

The ThermaData logger is connected to a PC via the internal USB connector or a USB lead (supplied). By selecting the relevant icon the data can be downloaded and displayed either as a graph, table or summary. The user can also set, within the software, high and low alarm values for a specific application. The information can then be analysed by zooming in, saving as a Studio File or exporting to other software packages.



- **USB connection point**
Simply unscrew the end cap to access the USB port. This allows the user to connect the logger to a PC and upload any data collected.



Order code	Description
293-900	Stainless steel logger - without probe
293-930	Stainless steel logger - 50 mm probe
293-931	Stainless steel logger - 100 mm probe
293-932	Stainless steel logger - 150 mm probe
293-933	Stainless steel logger - 200 mm probe

Supplied with a two metre USB lead & FREE downloadable ThermaData Studio software

Specification	Stainless Steel ThermaData Logger
Range	-20 to 105 °C
Resolution	0.5 °C
Accuracy	± 1 °C (± 0.5 °C with calibration utility)
Memory	2048 temperature readings
Sample rate	1 minute to 255 minutes
Battery	3.6 volt 2/3 AA lithium
Battery life	Minimum 3 years
Dimensions	Ø22.5 x 129 mm (excluding probe)
Weight	170 grams - model dependant

REMOTE MONITORING

THERMADATA® WIFI LOGGERS FOR TEMPERATURE

- Email alerts user when alarm limits are exceeded
- Access temperature data worldwide via internet
- NO ongoing or subscription charges
- Programmable high/low alarm

The ThermaData WiFi loggers utilise the latest WiFi wireless technology. The loggers are a battery powered, cost-effective, temperature monitoring system that remotely records the temperature of appliances and buildings. Each logger transmits the recorded data to a WiFi router connected to the internet which can be accessed and viewed from a PC, laptop or tablet anywhere in the world.

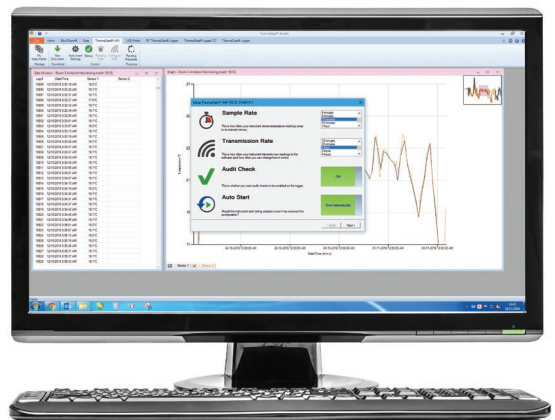
The loggers have a range limited to the specification of the users WiFi router. Each logger has an intuitive LCD displaying; temperature, WiFi and internet connection status, max/min recorded temperatures, alarm status and battery life.



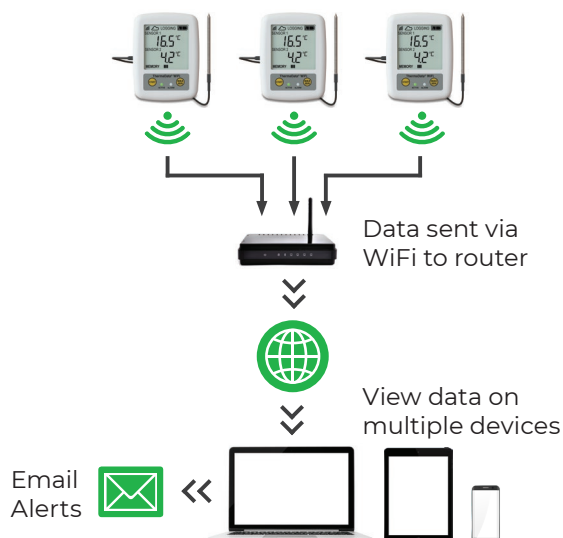
At programmable intervals, the loggers will record temperature from both sensors, recording up to a maximum of 18000 readings (9000 from each sensor). Each logger incorporates a red and green LED. The flashing green LED indicates that the logger is active/logging and the flashing red LED indicates that the customised preset alarms have been exceeded. Each logger communicates directly to the WiFi router at set intervals to push data through the internet into ThermaData Studio. The information is available to be analysed and exported into a report format. Each unit is supplied with a USB lead and FREE wall bracket ThermaData Studio software is available to download FREE from our website and is licence free, no ongoing or subscription charges.

HOW DOES THE THERMADATA WIFI LOGGER WORK?

Using the unique ID of each logger ThermaData Studio creates a secure connection between logger and software, which can be accessed and viewed anytime and anywhere with an internet connection. Each logger communicates directly to the WiFi router at set intervals to push data through the internet into ThermaData Studio. The information is available to be analysed and exported into a report format.



Simple setup & easy to use software makes the ThermaData WiFi loggers perfect for HACCP analysis



THERMADATA STUDIO SOFTWARE

Both powerful and sophisticated, yet user-friendly, the ThermaData Studio software enables 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 330 minutes), communication interval (sync) with PC, real-time clock, °C or °F and a manual start option. It is also possible to include a user ID for each logger.

Please note: WiFi routers have a range of 100 metres depending on the make, model, capabilities and setup of the router. Environmental conditions may also affect the signal strength.

THERMADATA® WIFI ONE/TWO CHANNEL THERMISTOR LOGGERS

The ThermaData® WiFi thermistor loggers can be supplied with one internal sensor or a stainless steel general purpose probe (Ø3.3 x 100 mm) with a one metre PUR/PVC fixed lead. **Please Note:** Model TD1F is supplied with one external remote probe and an internal sensor. Model TD2F is supplied with two external remote probes.

Specification	TD	TD1F	TD2F
Range - internal	0 to 50 °C	0 to 50 °C	N/A
Range - external	N/A	-40 to 125 °C	-40 to 125 °C
Resolution	0.1 °C/°F		
Accuracy	±0.5 °C		
Memory	18000 readings	2 x 9000 readings	
Sample rate	0.1 to 330 minutes		
Battery & life	2 x 1.5 volt AA - approximately 1 year		
Display	12 mm LCD/2 LED's		
Dimensions	29 x 72.5 x 96 mm		
Weight	165 grams model dependant		
FREE traceable certificate of calibration included			



Order code	Description
298-001	Model TD
298-011	Model TD1F*
298-111	Model TD2F*
830-880	Protective boot - black
*Inclusive of thermistor probe(s)	

THERMADATA® WIFI TWO CHANNEL THERMOCOUPLE LOGGERS

The ThermaData® WiFi thermocouple loggers are available in two sensor types, type K and type T thermocouple. **Please Note:** Each logger is supplied exclusive of probes, see below for a small selection of probes available or for alternative designs see pages 75 to 81.










Specification	ThermaData WiFi - Thermocouple
Range - type K	-100 to 1372 °C
Range - type T	-100 to 400 °C
Resolution	0.1 °C/°F to 999.9 thereafter 1 °C/°F
Accuracy	±0.4 °C ±0.1 % of reading
Memory	2 x 9000 readings
Sample rate	0.1 to 330 minutes
Battery & life	2 x 1.5 volt AA - approximately 1 year
Display	12 mm LCD/2 LED's
Dimensions	29 x 72.5 x 96 mm
Weight	165 grams
FREE traceable certificate of calibration included	



General purpose probes (133-158)



Order code	Description
298-121	Model TD2TC - type K
298-721	Model TD2TC - type T
830-800	Magnetic mount
830-880	Protective boot - black
Exclusive of thermocouple probes	

		Order code	
GENERAL PURPOSE PROBE    Ø3.3 x 100 mm	This stainless steel probe is suitable for a wide range of applications. Supplied with a one metre PTFE insulated lead and connector. <ul style="list-style-type: none"> Response time less than 5 seconds Probe temperature range -75 to 250 °C 	133-158	
FOOD SIMULANT PROBE    9 x 100 x 100 mm	This polypropylene simulant probe is designed for use in refrigeration, food storage and chill cabinets. Supplied with a one metre PTFE insulated lead and connector. <ul style="list-style-type: none"> Probe temperature range -20 to 100 °C 	133-350	
HEAVY DUTY PTFE WIRE PROBE    Ø2.4 x 1000 or 2000 mm	This heavy duty, PTFE insulated wire probe is ideal for measuring the air temperature in fridges, freezers, ovens etc. <ul style="list-style-type: none"> Response time less than 1 second Probe temperature range 75 to 250 °C 	133-372 (1000 mm) 133-373 (2000 mm)	

Please note: for type T thermocouple probes, replace the third digit (3) of the order code with the number 7

THERMADATA® PHARM WIFI LOGGERS

- External sensor(s) designed to simulate fridge contents temperature
- FREE software with NO ongoing or subscription charges
- Access recorded data worldwide via internet
- High/low alerts via email

The ThermaData Pharm WiFi loggers are a battery powered, cost-effective, temperature monitoring system that remotely records storage and transportation temperatures of perishable items such as food, vaccines and medication.

Each logger has an intuitive LCD displaying; temperature, WiFi connection status, max/min recorded temperatures, alarm status and battery life. Simple to set up, the logger once up and running will transmit recorded data to a WiFi router connected to the internet which can then be accessed and viewed from a PC, laptop or tablet anywhere in the world.

At programmable intervals, the loggers will record temperature from both sensors, recording up to a maximum of 18000 readings (9000 from each sensor). 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 the customised preset alarms have been exceeded. Each logger communicates directly to the WiFi router at set intervals to push data through the internet into ThermaData Studio. The information is available to be analysed and exported into a report format. Each unit is supplied with a USB lead and free wall bracket. ThermaData Studio software is available to download FREE from our website and is licence free, no ongoing or subscription charges.

Each thermistor probe is encased in a sealed bottle and incorporates a one metre PUR/PVC fixed lead. To begin monitoring, simply unscrew and top up with Glycol solution (50 ml bottle supplied). **Please Note:** Model TD1F Pharm is supplied with one external remote probe and an internal sensor. Model TD2F is supplied with two external remote probes. For more information contact our sales office.

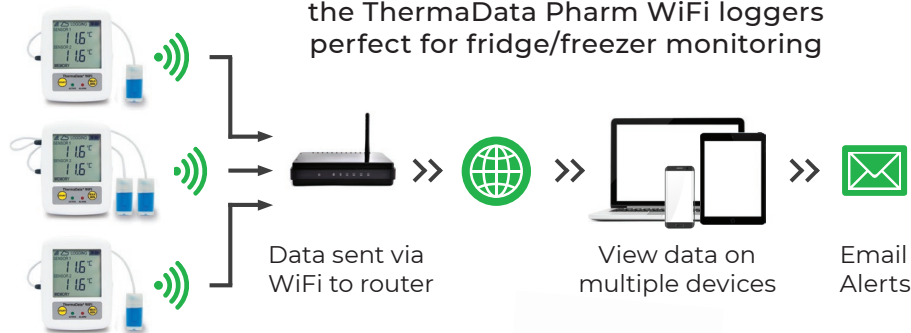


new



REMOTE MONITORING

Simple setup & easy to use software makes the ThermaData Pharm WiFi loggers perfect for fridge/freezer monitoring



Magnetic mount (830-800)



Order code	Description
298-011-PHM	Model TD1F c/w Pharm probe
298-111-PHM	Model TD2F c/w Pharm probes
830-880	Protective silicone boot - black
832-590	ABS wall bracket
830-800	Magnetic mount
816-035	Replacement Glycol solution - 50 ml
Inclusive of thermistor probe(s) & USB lead	

Specification	Model TD1F	Model TD2F
Range - internal	0 to 50 °C	N/A
Range - external	-40 to 70 °C	-40 to 70 °C
Resolution	0.1 °C/°F	
Accuracy	±0.5 °C	
Memory	2 x 9000 readings	
Sample rate	0.1 to 330 minutes	
Battery & life	2 x 1.5 volt AA - approx. 1 year	
Display	12 mm LCD/2 LED's	
Dimensions	29 x 72.5 x 96 mm	
Weight	165 grams	
FREE traceable certificate of calibration included		

Please note: WiFi routers have a range of 100 metres depending on the make, model, capabilities and setup of the router. Environmental conditions may also affect the signal strength.

THERMAGUARD® PHARM THERMOMETER

- External sensor(s) designed to simulate fridge contents temperature
- Two models available - single or dual external sensors
- Optional UKAS Calibration Certificate available
- Programmable high/low audible alarm

The ThermaGuard Pharm has been specifically designed for use in monitoring the storage and transportation temperatures of perishable items such as food, vaccines and medication. Each thermometer features a large LCD display, which simultaneously displays the current and max/min recorded temperatures.

Both units feature programmable audible alarms allowing the user to preset high and low temperature limits. When the alarm is active the LCD will flash. The alarm can be silenced by pressing any button.

Housed in a splashproof IP54 ABS case, which includes Biomaster Antimicrobial Technology to reduce bacterial growth, both ThermaGuard Pharm models feature a CalCheck 0.0 °C (± 0.1 °C) function that allows the user to verify the accuracy of the thermometer at any time, giving confidence that measurements are accurate.

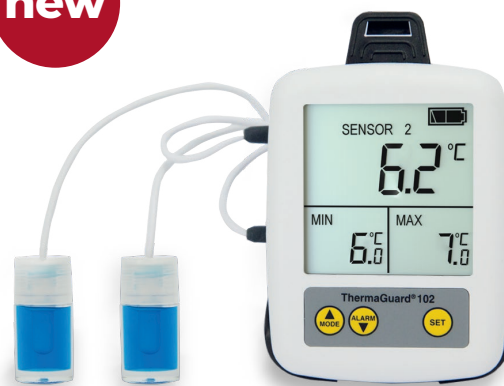
Each thermistor probe is encased in a sealed bottle. To begin monitoring, simply unscrew and top up with Glycol solution (50 ml bottle supplied).

- **Two models available with optional UKAS Certificate of Calibration**

The ThermaGuard Pharm 101 incorporates two temperature sensors; a remote water resistant thermistor probe with a one metre PVC lead for monitoring the product temperature and an internal sensor to monitor room temperature. The ThermaGuard 102 incorporates two remote water resistant thermistor probes, both with one metre PVC leads for monitoring dual applications. An optional two-point UKAS Certificate of Calibration is available. Each certificate indicates deviations from standards at -18 and 0 °C.

- **FREE wall bracket included**

Each ThermaGuard is supplied with an ABS plastic wall bracket that incorporates a built-in foot stand, hook for hanging and screw thread for tripod mounting.



REMOTE MONITORING



OPTIONAL ACCESSORIES:

- Protective silicone boot (830-880)
- Replacement Glycol solution 50 ml (816-035)
- Magnetic mount (830-800)



Order code	Description
226-911	ThermaGuard Pharm 101
226-921	ThermaGuard Pharm 101 & UKAS Cert
226-912	ThermaGuard Pharm 102
226-922	ThermaGuard Pharm 102 & UKAS Cert
830-880	Protective silicone boot - black
832-590	ABS wall bracket
830-800	Magnetic mount
816-035	Replacement Glycol solution - 50 ml
UKAS certificate applies to remote probe(s) only	

Specification	ThermaGuard Pharm
Range - internal	-19.9 to 49.9 °C (101 model only)
Range - external	-39.9 to 49.9 °C
Resolution	0.1 °C/°F
Accuracy	± 0.4 °C
Battery	2 x 1.5 volt AA
Battery life	25000 hours (without alarm)
Sensor type	Thermistor
Display	Custom LCD
Dimensions	29 x 73 x 96 mm
Weight	165 grams
Optional UKAS certificate of calibration available	

THERMADATA® WIFI LOGGER FOR HUMIDITY

- Simultaneously displays humidity & temperature
- Records up to a maximum of 18000 readings
- LED display of high & low alarm status
- No ongoing or subscription charges



These new ThermaData WiFi humidity loggers measure and record both temperature and relative humidity (%rh) over the range of 0 to 50 °C and 0 to 100 %rh. At programmable intervals, the loggers will record simultaneously both temperature and humidity, recording up to a maximum of 18000 readings (9000 humidity and 9000 temperature).

The logger incorporates a large LCD that displays temperature and humidity from the internal sensors. Each ThermaData WiFi humidity logger incorporates two LED's, a flashing green LED indicates that the logger is active/logging and a flashing red LED indicates that your customised preset alarms have been exceeded.

The humidity and temperature ThermaData WiFi loggers are suitable for a diverse range of applications which include HVAC climate monitoring, QA monitoring of storage areas etc.



THERMADATA STUDIO SOFTWARE

Both powerful and sophisticated, yet user-friendly, the ThermaData Studio software enables temperature and humidity data to be organised and analysed to provide management information.

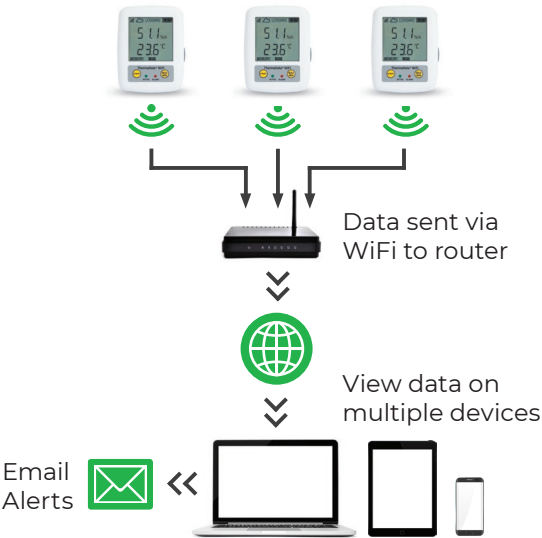
The ThermaData Studio software has the ability to display up to 32 traces on a graph, the trace colours are user selectable. All files can be viewed as thumbnail icons for easy identification.

The software allows the user to programme the logging sample/interval rate (0.1 to 330 minutes), communication interval (sync) with PC, real-time clock, °C or °F and a manual start option. It is also possible to include a user ID for each logger.



Order code	Description
298-621	ThermaData WiFi HTD
830-880	Protective silicone boot - black
830-800	Magnetic mount
890-111	UKAS 3-point certificate available

HOW DOES THE THERMADATA WIFI HTD LOGGER WORK?



Specification	Temperature	Humidity
Range	0 to 50 °C	0 to 100 %rh
Resolution	0.1 °C/°F	0.1 %rh
Accuracy	±0.5 °C (0 to 50 °C)	±2 %rh @ 25 °C (20 to 80 %rh) ±3 %rh @ 25 °C (10 to 90 %rh) ±4 %rh @ 25 °C (0 to 100 %rh)
Hysteresis	N/A	±1 %rh
Sensor type	Thermistor	Capacitance polymer
Memory	2 x 9000 readings	
Sample rate	0.1 to 330 minutes	
Battery & life	2 x 1.5 volt AA - approx. 10 months @ 20 °C	
Display	12 mm LCD/2 LED's	
Dimensions	29 x 72.5 x 96 mm	
Weight	165 grams	

Optional UKAS Certificate of Calibration

THERMOCOUPLE THERMADATA® LOGGERS

- Two channel type K or type T thermocouple input
- Water resistant housing offering IP65 protection
- Wide temperature range -100 to 1372 °C
- Visual display of high & low alarm status

These two input Thermocouple ThermaData loggers are housed in a water resistant, ergonomic case that is designed to meet IP65 protection. Two models are available, either blind or with an LCD display.

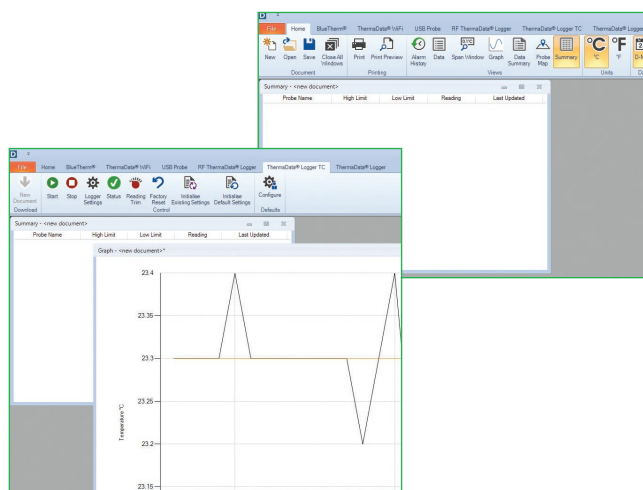
The ThermaData loggers measure temperature over the range of -100 to 1372 °C (type K thermocouple) with a 0.1 °C resolution, auto-ranging to 1 °C over the range of 301 to 1372 °C. At programmable intervals the loggers will record the temperature, up to a maximum of 16000 readings or 2 x 8000 readings.

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. Each logger is supplied with a USB lead, FREE downloadable software and traceable certificate of calibration.

For details of the wide range of interchangeable type K or T thermocouple probes available, see pages 75 to 81.

THERMADATA STUDIO SOFTWARE

The ThermaData logger is connected to a PC via a USB lead (supplied). By selecting the relevant icon the data can be downloaded and displayed either as a graph, table or summary. The information can then be analysed by zooming in, saving as a Studio File or exporting to other software packages.



REMOTE MONITORING



- **USB connection point**
Simply remove the end cap to access the USB port. This allows the user to connect the logger to a PC via the USB lead and upload the temperature readings collected.

Order code	Description
291-501	T/C TD logger type K - blind
292-501	T/C TD logger type K - LCD
291-571	T/C TD logger type T - blind
292-571	T/C TD logger type T - LCD
830-210	Protective silicone boot - white
832-950	Flexible tripod
T/C ThermaData loggers are exclusive of probes	



Specification	T/C ThermaData logger
Range - type K t/c	-100 to 1372 °C
Range - type T t/c	-100 to 400 °C
Operating range	-20 to 50 °C
Resolution	0.1 °C to 300 °C thereafter 1 °C
Accuracy	±0.4 °C ±0.1 % of reading
Memory	16000 or 2 x 8000 readings
Sample rate	0.1 to 255 minutes
Battery	AA Tadiran - Li-SOCl
Battery life	maximum 3 years @ 20 °C
Sensor type	K or T thermocouple
Display	12 mm LCD
Dimensions	34 x 66 x 109 mm
Weight	177 grams
Optional UKAS Certificate of Calibration available	

BLUETOOTH® LE THERMOMETERS

- Fast & accurate readings
- Instantly sends data to host device
- No more paperwork, eliminates human error
- SDK & technical support available

Using the latest Bluetooth LE thermometer technology eliminates human error from traditional pen and paper written logs and checks. Any iOS or Android smart phone, tablet or Windows 10 PC can be used as a host device to record and view the temperatures.

A simple push of the button will transmit the real time temperature to the host device, capture the reading and lock in the time and date for complete control on all checks.

APPLICATIONS FOR BLUETOOTH THERMOMETERS;

- Food processing
- Catering
- Refrigeration
- Water Treatment
- Logistics
- Pharmaceutical

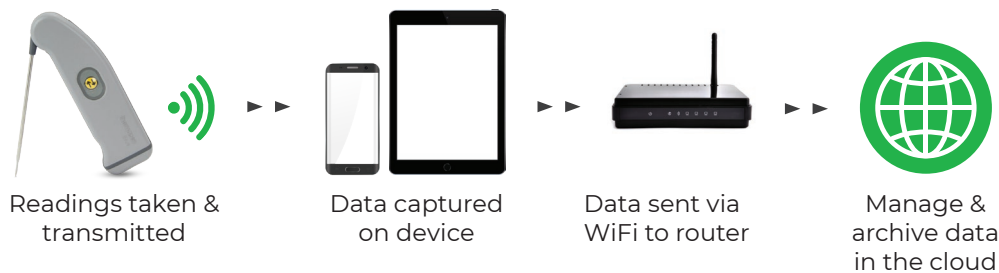
Our latest range in Bluetooth LE thermometers are also the perfect tool for software developers to integrate into new or existing custom built software. An SDK is available upon request.



HOW DOES THE SOFTWARE DEVELOPMENT KIT (SDK) WORK?

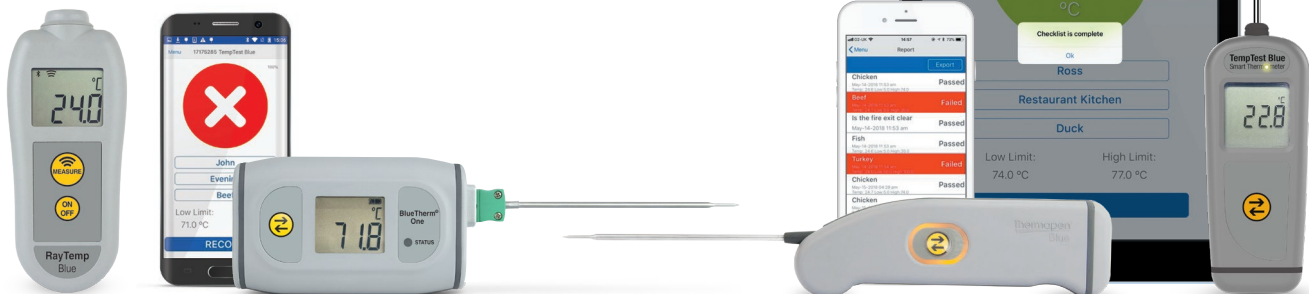
The SDK gives the software developer working on iOS, Android or Windows the ability to fully integrate the functionality of the Bluetooth product. This way the custom application which may already be in use, allows the probes to enhance the system, improving data capturing and help businesses to comply to procedures. For further information please contact our technical sales office

EXAMPLE OF WHAT CAN BE ACHIEVED USING THE SDK



HACCP LE MOBILE APPLICATION

HACCP LE is designed to allow iOS & Android devices to be used in conjunction with ETI Bluetooth thermometers. In seconds you can turn your smart device into a professional HACCP solution. Create custom checklists for food items, and Yes/No questions. Assign high and low temperature settings for each food item. Store temperature readings with the touch of a button and add user notes and corrective actions where needed. Export the results to store electronically as a PDF file.



THERMAPEN® BLUE THERMOMETER

- Reaches temperature in just 3 seconds
- Securely transmits data to your smart device
- Helps your business be HACCP compliant
- Colour-coded ID for different applications

The Thermapen Blue combines the latest Bluetooth® wireless technology with the same high accuracy, precision and speed as delivered by the Thermapen Professional. Simply connect to your host device (iOS or Android), probe the item to be measured and press the button to securely transmit your temperature data via a secure connection of up to 50 metres.

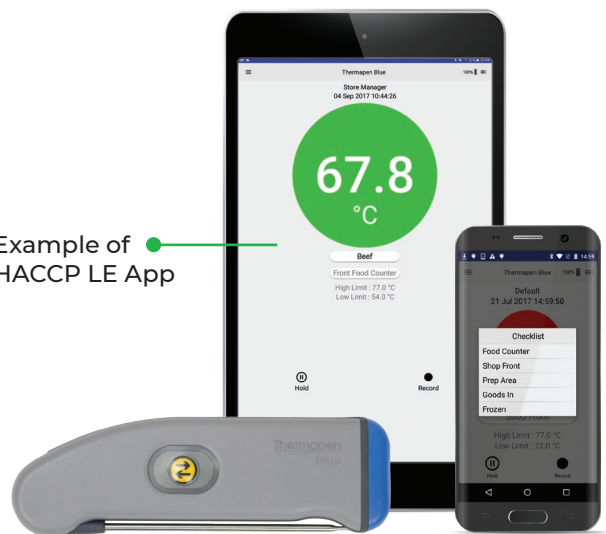
The casing is washable and includes Biomaster Antimicrobial Technology that reduces bacterial growth and the ergonomic rubber seal minimises the risk of the ingress of water, dust or food. As well as being waterproof to IP66/67, the Thermapen Blue is still 'probably' the fastest reading contact thermometer on the market today. The true temperature of a product can be tested in just three seconds.

The Thermapen Blue incorporates a reduced tip, stainless steel, penetration probe (Ø3.3 x 110 mm) that conveniently folds back through 180° into the side of the instrument when not in use.

A Software Development Kit (SDK) is available upon request to allow integrators to write custom Apps to communicate with the Thermapen Blue.



Example of HACCP LE App



Order code	Description
179-607	Thermapen Blue - grey
179-647	Thermapen Blue - red
179-657	Thermapen Blue - blue
830-620	Silicone boot - glow in dark/magnets
832-002	Stainless steel wall bracket

Specification	Thermapen Blue
Range	-49.9 to 299.9 °C
Resolution	0.1 °C via remote device
Accuracy	±0.4 °C (-49.9 to 199.9 °C) otherwise ±1 °C
Bluetooth module	Bluetooth LE
Battery	1 x 1.5 volt AAA
Battery life	1000 hours - continuous use
Sensor type	K thermocouple
Dimensions	19 x 50 x 157 mm
Weight	112 grams
FREE traceable certificate of calibration included	

Please note: Bluetooth LE thermometers have a range of 50 metres depending on the users smart device make and model. Environmental conditions may also affect the signal strength.

BLUETHERM® ONE THERMOMETER

- Interchangeable thermocouple probes
- Fast & Accurate HACCP checks
- Water resistant to IP65
- SDK & technical support available



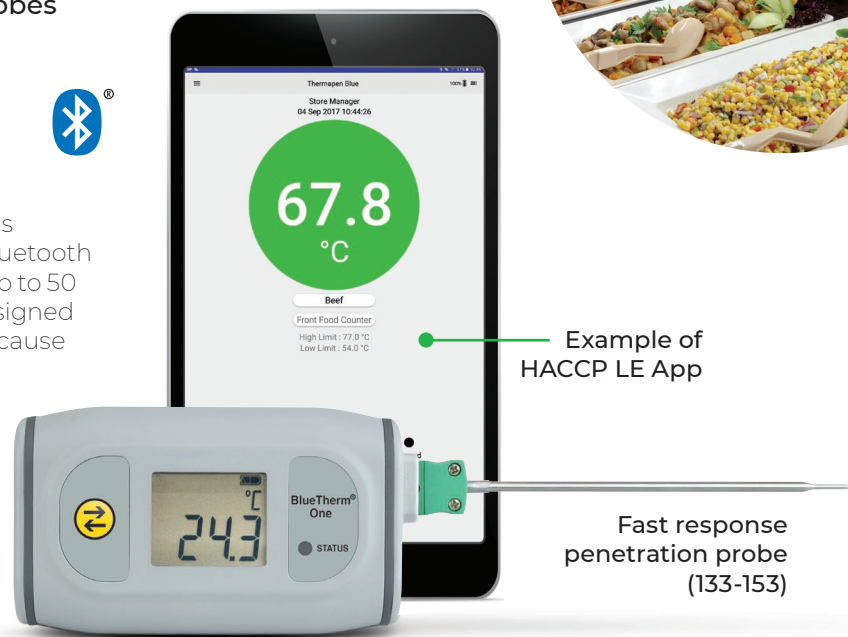
The BlueTherm One thermometer transmits temperature data to your iOS, Android or Bluetooth wireless device via a secure connection of up to 50 metres. This thermometer is specifically designed to eliminate the need for wires which often cause many traditional probes to break or fail.

Each unit is housed in an ergonomic case that includes Biomaster Antimicrobial Technology that reduces bacterial growth. The BlueTherm One incorporates a large LCD and a single LED which indicates Bluetooth connection status. A wide range of type K thermocouple probes can be connected to the BlueTherm One, see below and pages 39, 51 and 75 to 81 for details.

Available as a FREE download, the 'ThermaQ App' software reads the temperature and provides simple-to-set high and low alarms. This App includes programmable alerts and notifications to prompt changes and also logs data from the probe to a graph.

A Software Development Kit (SDK) is available upon request to allow integrators to write custom Apps to communicate with the BlueTherm One.

Order code	Description
292-911	BlueTherm One
830-210	Protective silicone boot - white
The BlueTherm One is exclusive of probe	










Example of HACCP LE App

Fast response penetration probe (133-153)



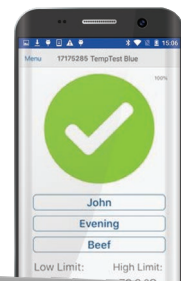
Specification	BlueTherm One
Range	-199.9 to 1372 °C
Resolution	0.1 °C/°F to 999.9 thereafter 1 °C/°F
Accuracy	±0.4 °C ±0.1 % of reading
Bluetooth module	Bluetooth LE
Battery & life	1 x 1.5 volt AA - 3000 hours
Sensor type	K thermocouple
Display	12 mm LCD
Dimensions	34 x 66 x 109 mm
Weight	165 grams
FREE traceable certificate of calibration included	

		Order code	
FAST RESPONSE PENETRATION PROBE    Ø3.3 x 80 or 120 mm	This reduced tip (Ø1.8 x 25 mm) fast response, stainless steel penetration probe is versatile and ideal for liquids or semi-solids. <ul style="list-style-type: none"> ● Response time less than 2 seconds ● Probe temperature range -75 to 250 °C 	133-153 (120 mm) 133-154 (80 mm)	
AIR OR GAS PROBE    Ø3.3 x 120 mm	This probe has a perforated stainless steel tip for fast response. Ideal for chill cabinets, fridges, freezers and HVAC units. <ul style="list-style-type: none"> ● Response time less than 1 second ● Probe temperature range -75 to 250 °C 	133-301	
SURFACE PROBE  Ø8 x 120 mm	This stainless steel surface probe uses flat ribbon technology ensuring a fast, accurate response with minimal heat loss. A right-angled version is also available. <ul style="list-style-type: none"> ● Response time less than 1 second ● Probe temperature range 75 to 250 °C 	133-045 133-046 (right-angled)	

Please note: Bluetooth LE thermometers have a range of 50 metres depending on the users smart device make and model. Environmental conditions may also affect the signal strength.

TEMPTTEST® BLUE THERMOMETER

- Waterproof IP67, compact design
- Automatic 360° rotational display



The new TempTest Blue combines the latest Bluetooth wireless technology with high accuracy, precision and fast response. Simply connect to your host device (iOS or Android), probe the item to be measured and press the button to securely transmit your temperature data via a secure connection of up to 50 metres.

The thermometer is housed in a waterproof IP67 case with an ergonomic rubber seal, both include Biomaster Antimicrobial Technology to reduce bacterial growth. The TempTest Blue incorporates a stainless steel food penetration probe (Ø3.3 x 80 mm) with fast response tip. The true temperature of a product can be measured in just three seconds.

A Software Development Kit (SDK) is available upon request to allow integrators to write custom Apps to communicate with the TempTest Blue.

Order code	Description
292-910	TempTest Blue
830-431	Protective silicone boot - white



Specification	TempTest Blue
Range	-49.9 to 299.9 °C
Resolution	0.1 °C/°F
Accuracy	±0.4 °C (-49.9 to 199.9 °C) otherwise ±1 °C
Bluetooth module	Bluetooth LE
Battery	2 x 1.5 volt AAA
Battery life	1000 hours - continuous use
Sensor type	K thermocouple
Display	11 mm LCD
Dimensions	17 x 47 x 200 mm (inc. probe)
Weight	105 grams

FREE traceable certificate of calibration included

RAYTEMP® BLUE THERMOMETER

- Securely transmits data to your device
- Target distance/diameter ratio 5:1



The RayTemp Blue infrared non-contact thermometer incorporates many of the features of the RayTemp 2, but with the latest Bluetooth wireless technology. Simply connect to your host device (iOS or Android), press and hold the measure button and aim the thermometer at the target to display the surface temperature and securely transmit the data via a secure connection of up to 50 metres.

The unit does not incorporate laser alignment, which will encourage users to get closer to the object being measured thus reducing inaccurate readings.

The RayTemp Blue features a two button keypad, incorporating measure and on/off function, and an auto-power off facility that automatically turns the instrument off after 10 minutes, maximising battery life.

Order code	Description
228-920	RayTemp Blue
830-221	Protective silicone boot - white
814-132	Comparator



Specification	RayTemp Blue
Range	-49.9 to 349.9 °C
Resolution	0.1 °C/°F
Accuracy	±1 °C (0 to 100 °C) otherwise ±2 °C or ±2 % of reading whichever is greater
Field of view	Target ratio 5:1
Bluetooth module	Bluetooth LE
Emissivity	0.95 default - adjustable 0.1 to 1
Battery & life	3 x 1.5 volt AAA - 3000 hours
Display	12 mm LCD
Dimensions	25 x 56 x 128 mm
Weight	140 grams

FREE traceable certificate of calibration included

Please note: Bluetooth LE thermometers have a range of 50 metres depending on the users smart device make and model. Environmental conditions may also affect the signal strength.