



# REMOTE TEMPERATURE MONITORING

Automating your processes using data loggers eliminates time-consuming temperature checks. In addition, it will enable you to keep a more accurate, organised and accessible data archive.

We have a range of loggers that suit different budgets and applications, from blind loggers ideal for transportation to Wi-Fi loggers that send notifications for ultimate security. And with free user-friendly software available, integrating a new paperless system into your business couldn't be easier.

## REMOTE MONITORING BENEFITS

There are many benefits to choosing data loggers, including:

- Save time and money on manual labour
- Add a time and date stamp to your readings
- Prevent recordings from being falsified or written incorrectly
- Keep a more organised and accessible data archive
- Enable swift corrective actions to avoid costly damages

## USB DATA LOGGERS

USB data loggers automatically take readings at programmed intervals. The readings are stored within the instrument and can then be transferred to your PC using a USB connector.

These are most commonly used for ambient readings, such as fridge/freezer temperatures and room temperature or humidity. But they can also be used to track the internal temperature of perishables over a period of time, such as during transportation.

## WI-FI DATA LOGGERS

Like USB data loggers, Wi-Fi loggers take readings at programmed intervals. But instead of needing to connect to a computer to download the readings, they are automatically transmitted using Wi-Fi.

The benefit of this is that users can monitor the results in real time, even receiving notifications for out-of-range readings. This provides the highest level of security where temperatures are critical, enabling corrective actions to be taken instantly and preventing costly damages.

## FREE SOFTWARE

View, download and share your data using ETI's free user-friendly software. This includes ThermoData Studio software for desktop and TD Link app for mobile and tablet. Both applications are free to download with no ongoing subscription charges

# THERMADATA® LITE LOGGER

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

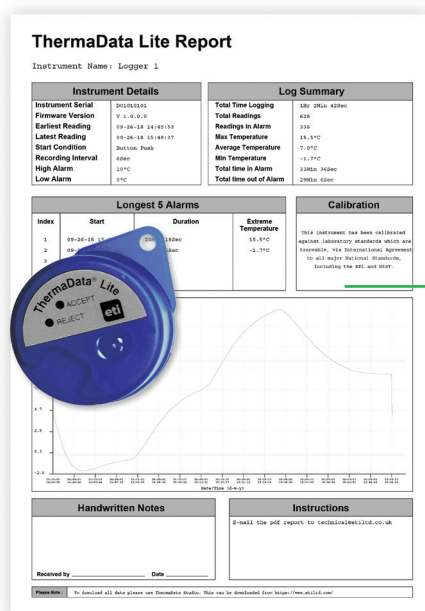
The ThermaData Lite logger is a cost effective, self-contained temperature data logger or blind recording thermometer that is designed to record the temperature of the surrounding environment. The ThermaData Lite logger is housed in a water-resistant polyethylene case and incorporates two LED status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

The ThermaData Studio software allows the user to programme the logging sample/interval rate (6 seconds 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 31-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 ( $\pm 3$  °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 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 to make it easier to identify, 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	$\pm 0.5$ °C
Memory	16000
Sample rate	6 seconds 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	

# THERMADATA® LOGGERS

- Waterproof housing offering IP66/67 protection
- Temperature range -40 to 85 °C or 125 °C
- Resolution 0.1 °C, high accuracy  $\pm 0.5$  °C
- Meets EN 12830:1999, S & T, C & D, 1, 0.5

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.

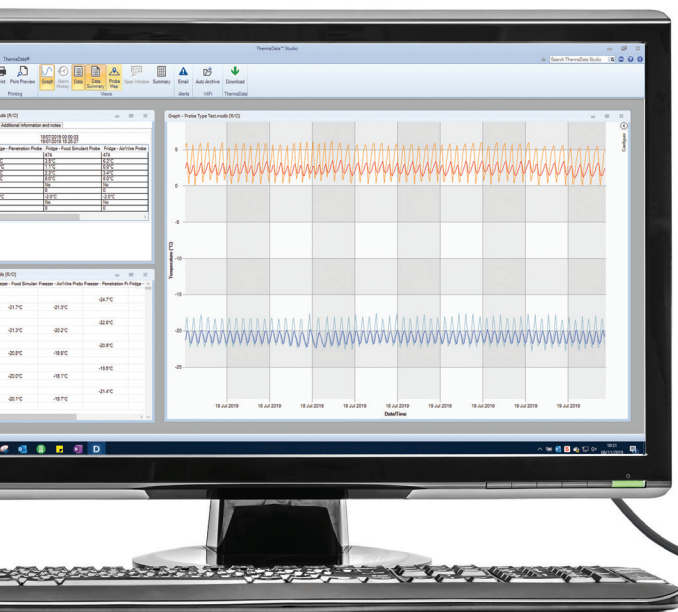


## THERMADATA STUDIO SOFTWARE

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 multiple 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 (6 seconds 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.



## 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

## 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 (external)
- Records up to 4000 readings

Order code	Description
296-101	Model TDF

## 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 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	6 seconds to 255 minutes
Battery & life	3.6 volt ½ AA lithium (approx. 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 41 for details

## THERMADATA® LOGGERS FOR HUMIDITY

- LCD display toggles between humidity & temperature
- Records up to a maximum of 16000 readings



### USB CRADLE & START MAGNET

Each USB cradle is supplied with a one metre PVC lead complete with a start magnet (293-804)



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	6 seconds to 255 minutes	
Battery & life	3.6 volt ½ AA lithium - 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

# THERMADATA® STAINLESS STEEL PRO LOGGERS

- Integral USB interface for setup & download
- Auto PDF summary
- High temperature range -20 to 125 °C
- 6 probe options available

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

The ThermaData Studio software allows the user to programme the logging sample/interval rate (1 second to 255 minutes), the real-time clock, °C/°F, delayed start (maximum 23 hours, 59 minutes), software start, temperature start or time start and a 31-character user ID. The user can also set high and low alarm values for a specific application.

The Stainless Steel Pro is available in six options; without a probe, with a Ø3.3 x 50 mm penetration probe, a Ø4.5 x 100 mm, Ø4.5 x 150 mm, Ø4.5 x 200 mm penetration probe all with a Ø3.3 reduced tip. In addition to the five standard options there is also a Ø1.8 x 20 mm fast response probe variant which is ideal for applications that require a fast ambient reading i.e. Dishwashers. Each logger is supplied with a one metre USB-C lead.

## THERMADATA STUDIO SOFTWARE & AUTOMATIC PDF FILE OUTPUT

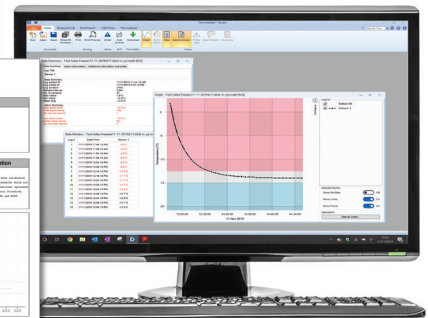
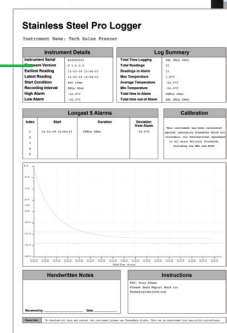
The ThermaData Studio software is supplied as a FREE download. The Stainless Steel Pro logger is connected to a PC via a USB-C port lead and by selecting the relevant icon the data can be downloaded and displayed either as a graph, table or summary. The information can then be analysed by zooming in, saving as a Studio File or exporting to other software packages. The Stainless Steel Pro logger 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.



REMOTE MONITORING

### Example of PDF file

- **USB connection point**  
Simply unscrew the end cap to access the USB-C connector. Using the supplied USB-C lead this allows the user to connect the logger to a PC and upload any data collected.



Order code	Description
294-900	Stainless steel logger - without probe
294-940	Stainless steel logger - 20 mm FR probe
294-930	Stainless steel logger - 50 mm probe
294-931	Stainless steel logger - 100 mm probe
294-932	Stainless steel logger - 150 mm probe
294-933	Stainless steel logger - 200 mm probe
Supplied with a one metre USB-C lead	

Specification	ThermaData Stainless Steel Pro
Range	-20 to 125 °C
Resolution	0.1 °C
Accuracy	±0.5 °C
Memory	16,000 temperature readings
Sample rate	1 second to 255 minutes
Battery	3.6 volt 2/3 AA lithium
Battery life	3 years (based on 6 sec sample rate)
Dimensions	Ø22.5 x 129 mm (excluding probe)
Weight	170 grams - model dependant

# THERMADATA® THERMOCOUPLE 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 dual input ThermaData Thermocouple loggers are housed in a water-resistant, ergonomic case that is designed to meet IP65 protection. Two models are available with an LCD display.

The Thermocouple 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 300 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 77 to 83.

## THERMADATA STUDIO SOFTWARE

The Thermocouple 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
292-501	TD T/C logger type K - LCD
292-571	TD T/C logger type T - LCD
830-210	Protective silicone boot - white
ThermaData T/C loggers are exclusive of probes	

Specification	ThermaData T/C 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	6 seconds 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	

# THERMADATA® WI-FI LOGGERS FOR TEMPERATURE

- Email alerts user when alarm limits are exceeded
- Access recorded data worldwide via internet
- FREE software with NO ongoing or subscription charges
- Programmable high/low alarms

The ThermaData Wi-Fi loggers utilise the latest Wi-Fi 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 Wi-Fi router connected to the internet which can be accessed and viewed from a PC, laptop or tablet anywhere in the world.

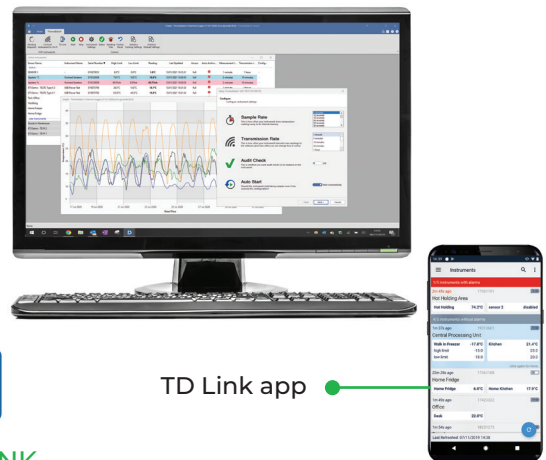
The loggers have a range limited to the specification of the users Wi-Fi router. Each logger has an intuitive LCD displaying; temperature, Wi-Fi and internet connection status, max/min recorded temperatures, alarm status and battery life.

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 Wi-Fi 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, with no ongoing or subscription charges.

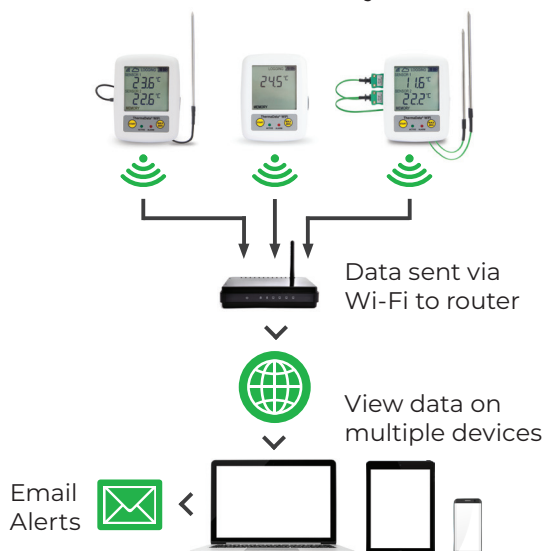


## HOW DOES THE THERMADATA WI-FI LOGGER WORK?

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 Wi-Fi 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 Wi-Fi loggers perfect for HACCP analysis



TD Link app

## TD LINK

By signing in to the TD Link app, you can view the status of all the ThermaData wireless thermometer units associated with ThermaData Studio, wherever the internet is available.

You can view the current readings, settings and reference information of all your thermometers. Warning indicators will appear if there is a problem with any instrument, or if any sensor reading has reached the alarm levels set in ThermaData Studio.

For each thermometer, you can opt to receive push notifications when an alarm condition has been detected.

TD Link is a view-only app, that cannot be used to alter instrument settings. Available on iOS and Android.

Please note: Wi-Fi 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® WI-FI ONE/TWO CHANNEL THERMISTOR LOGGERS

The ThermaData Wi-Fi 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	6 seconds 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*
*Inclusive of thermistor probe(s) 832-590 ABS wall bracket also included (see page 41)	

## THERMADATA® WI-FI TWO CHANNEL THERMOCOUPLE LOGGERS










The ThermaData Wi-Fi 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 page 83.

Specification	ThermaData Wi-Fi - 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	6 seconds 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
<div><h3>GENERAL PURPOSE PROBE</h3><div></div><div><div> HIGH ACCURACY</div><div> HIGH ACCURACY</div></div><div>Ø3.3 x 100 mm</div></div> <div><p>This stainless steel probe is suitable for a wide range of applications. Supplied with a one metre PTFE insulated lead and connector.</p><ul style="list-style-type: none"><li>● Response time less than 5 seconds</li><li>● Probe temperature range -75 to 250 °C</li></ul></div> <div><div>133-158 (1000 mm)</div><div>133-220 (3000 mm)</div><div>133-222 (5000 mm)</div></div>		
<div><h3>FOOD SIMULANT PROBE</h3><div></div><div><div> HIGH ACCURACY</div><div> HIGH ACCURACY</div></div><div>9 x 100 x 100 mm</div></div> <div><p>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.</p><ul style="list-style-type: none"><li>● Probe temperature range -20 to 100 °C</li></ul></div> <div><div>133-350 (1000 mm)</div><div>133-352 (3000 mm)</div><div>133-354 (5000 mm)</div></div>		
<div><h3>HEAVY-DUTY PTFE WIRE PROBE</h3><div></div><div><div> HIGH ACCURACY</div><div> HIGH ACCURACY</div></div><div>Ø2.4 x 1000 or 2000 mm</div></div> <div><p>This heavy-duty, PTFE insulated wire probe is ideal for measuring the air temperature in fridges, freezers, ovens etc.</p><ul style="list-style-type: none"><li>● Response time less than 1 second</li><li>● Probe temperature range 75 to 250 °C</li></ul></div> <div><div>133-372 (1000 mm)</div><div>133-373 (2000 mm)</div></div>		

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

# THERMADATA® WI-FI LOGGER FOR HUMIDITY

- FREE software with NO ongoing or subscription charges
- Simultaneously displays humidity & temperature
- Access recorded data worldwide via internet
- Programmable high/low alarms

These ThermaData Wi-Fi 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 Wi-Fi 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 Wi-Fi 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 (6 seconds 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.

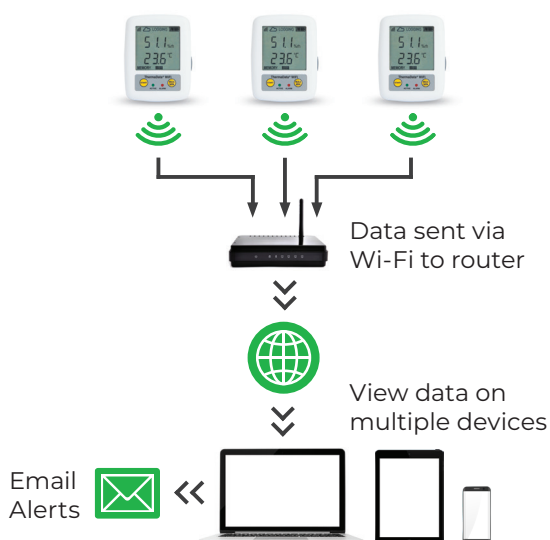


### Order code Description

298-621	ThermaData Wi-Fi HTD
830-880	Protective silicone boot - black
830-800	Magnetic mount
890-111	UKAS 3-point certificate available

**\*when purchased with a new Logger**

## HOW DOES THE THERMADATA WI-FI HTD LOGGER WORK?



- TD Link available on iOS and Android for mobile phone push notifications

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)	±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	6 seconds 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 available		

# THERMADATA® 4 CHANNEL LOGGER

- Four channel type K thermocouple input
- Simultaneously measure four probe temperatures
- Programmable high/low audible alarm
- Wide temperature range -99.9 to 1372 °C

The ThermaData 4 Channel Logger is housed in an ergonomic, ABS case that includes Biomaster product protection to reduce bacterial growth. The unit is waterproof to IP67 thanks to an integrated rubber seal, making it more durable in harsh environments and less prone to damage.

The 4 Channel Logger measures temperature over the range of -99.9 to 1372 °C with a 0.1 °C resolution, auto-ranging to 1 °C over the range of 300 to 1372 °C. At programmable intervals the logger will record the temperature, up to a maximum of 64,000 readings (16,000 per channel).

A multi logging feature also allows this instrument to be started and stopped in order to map multiple processes, without downloading the data each time.

Featuring an easy-to-read LCD, the 4 Channel Logger displays temperature, high and low limits, max/min recorded temperatures and volume level. The LCD can either be toggled from T1 & T2 to T3 & T4, or locked, using the DISPLAY / LOCK button.

Programmable audible alarms allows the user to preset high and low temperature limits for any logging process. The alarm can be silenced by pressing MUTE on the front of the instrument.

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

We offer an extensive range of interchangeable type K thermocouple probes for a variety of different applications, see pages 77 to 83.

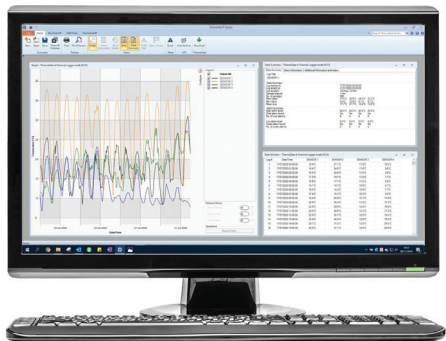


General purpose probe (133-158)



## THERMADATA STUDIO SOFTWARE

The ThermaData 4 Channel Logger is connected to a PC via a USB C 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.



Specification	ThermaData 4 Channel Logger
Range	-99.9 to 1372 °C
Operating range	-20 to 50°C
Resolution	0.1 °C to 299.9 °C thereafter 1 °C
Accuracy	±0.4 °C ±0.1 % of reading
Memory	64,000 (4 x 16,000)
Sample rate	1 second to 255 minutes
Battery	3 x 1.5 volt AAA
Battery life	1 year (1 minute sample rate)
Sensor type	Type K thermocouple
Display	Custom LCD
Dimensions	32 x 71 x 142 mm
Weight	230 grams
FREE traceable certificate of calibration included	

Order code	Description
291-401	ThermaData 4 Channel Logger
830-258	Protective silicone boot - black
The ThermaData 4 Channel Logger is exclusive of probes	

# THERMADATA® PHARM WI-FI LOGGERS

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

The ThermaData Pharm Wi-Fi 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, Wi-Fi 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 Wi-Fi 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 Wi-Fi 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.

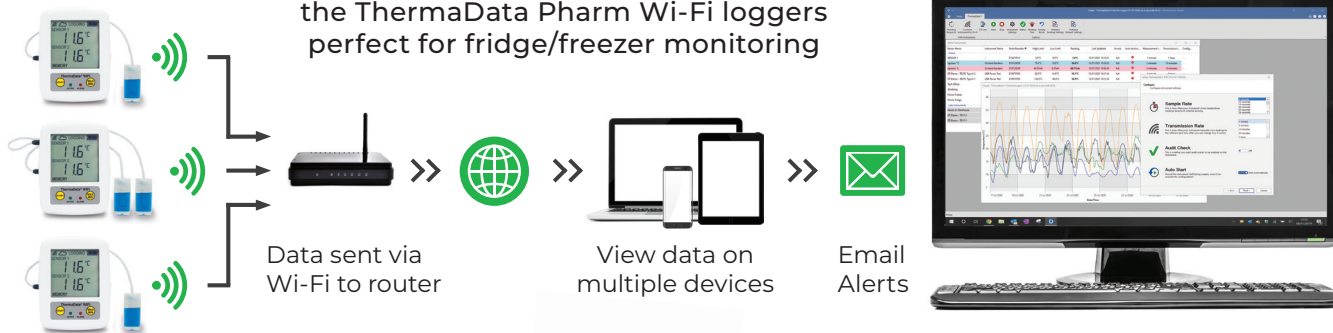
Each thermistor probe is encased in a sealed bottle and incorporates a two metre PUR/PVC fixed lead. To begin monitoring, simply unscrew and top up with Glycol solution (50 ml bottle supplied).

**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.



REMOTE MONITORING

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



- TD Link available on iOS and Android for mobile phone push notifications

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	Replacement 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	6 seconds 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: Wi-Fi 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.

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, a hook for hanging and a screw thread for tripod mounting.



**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
891-911	ThermaGuard Pharm 101 & UKAS Cert
226-912	ThermaGuard Pharm 102
891-912	ThermaGuard Pharm 102 & UKAS Cert
830-880	Protective silicone boot - black
832-590	Replacement 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	

REMOTE MONITORING