

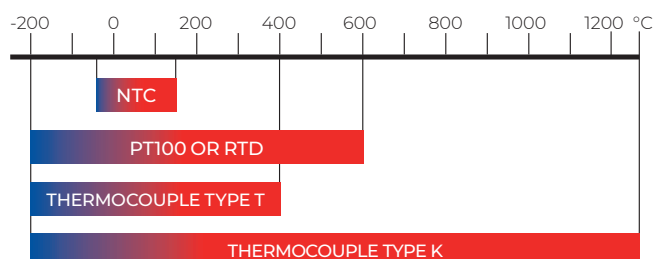


# INDUSTRIAL THERMOMETERS

Selecting the correct thermometer for an application is by definition very important, to achieve the maximum accuracy and repeatability of the temperature reading. The selection criteria for a digital thermometer should include:

- Measurement range
- Resolution of the reading 1 °C, 0.1 °C or 0.01 °C
- Desired accuracy
- Response time
- Extra features such as max/min, hold & backlight

Our digital thermometers utilise one of three types of temperature sensors: thermocouple, NTC thermistor and resistance temperature detectors (RTD). Thermocouple thermometers and probes are fast to respond to changes in temperature, they also have a wide measurement range. Resistance temperature detector and NTC thermistor probes are slower to respond to changes in temperature, but generally more accurate, although thermistor probes have a limited measurement range.



## NTC THERMISTORS

NTC thermistor probes are also based on a temperature dependent resistance change in the sensor element. But unlike RTD's, thermistors have a negative temperature coefficient, i.e. the resistance decreases with increasing temperature.

## RESISTANCE TEMPERATURE DETECTORS

Resistance temperature detector (RTD) probes consist of a flat film or wire wound platinum resistance sensor element. The measurement resistance value changes in line with the temperature being measured.

## THERMOCOUPLES

Thermocouple probes consist of two wires of dissimilar metals or metal alloys welded together. Thermocouples are based on the thermoelectric (Seebeck) effect. There are various types of thermocouple, types K and T being the most common, although type K is by far the most widely used.

# THERMA 1, 3 & ELITE THERMOMETERS

- Elite model includes backlight & max/min functions
- FREE traceable certificate of calibration
- Interchangeable thermocouple probes
- Compact & robust design

The Therma 1 and 3 digital thermometers are rugged and easy-to-use instruments that operate through the range of -100 to 1372 °C with a 0.1 °C or 1 °C resolution. The thermometers are housed in a robust ABS case that contains Biomaster Antimicrobial Technology to reduce bacterial growth.

The Therma 1 and 3 feature large, easy-to-read, LCD displays with open circuit 'Err', hold and low battery indication. Each thermometer is powered by three AAA batteries that give a minimum of 10000 hours of battery life. The units will power off automatically after ten minutes, maximising battery life. This feature can be disabled by the user, if not required.

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

## • Therma Elite thermometer

The Therma Elite incorporates all the features of a Therma 1 thermometer, but with the addition of a backlit display, max/min memory function and a mode button for the selection of 0.1/1 °C/°F. The thermometer also incorporates a calibration trim function ( $\pm 2$  °C) which allows the user to compensate for thermocouple probe errors.



Order code	Description	£ each
221-041	Therma 1	60.00
221-043	Therma 3	50.00
221-061	Therma Elite	70.00
123-160	Penetration probe	31.50
830-227	Protective silicone boot - black	8.00
832-053	S/steel wall bracket & boot	17.00
The Therma series is exclusive of probe		



Penetration probe (123-160)



## OPTIONAL ACCESSORIES:

- Protective silicone boot - the Therma series is splashproof to IP64 when used in conjunction with this boot. Various colours are available - see page 13 for details
- Stainless steel wall bracket (screws not supplied) & protective black silicone boot (832-053)



Specification	Therma 1/Elite	Therma 3
Range 0.1 °C	-99.9 to 299.9 °C	N/A
Range 1 °C	300 to 1372 °C	-100 to 1372 °C
Resolution	0.1 °C & 1 °C	1 °C
Accuracy	±0.4 °C ±0.1 %	±1 °C
Battery & life	3 x 1.5 volt AAA - 10000 hours	
Sensor type	K thermocouple	
Display	12 mm LCD	
Dimensions	25 x 56 x 128 mm	
Weight	130 grams	
FREE traceable certificate of calibration included		



# THERMA WATERPROOF THERMOMETER

- Interchangeable thermocouple probes
- Waterproof IP66/67, robust design
- Integrated rubber seal for durability
- Large, easy-to-read backlit LCD

The Therma Waterproof thermometer is housed in a robust waterproof black ABS case which offers IP66/67 protection. The thermometer utilises state of the art electronic circuitry, designed for reliability and ease of use and can be submerged or washed under a running tap - ideal for industrial applications.

The thermometer measures temperature over the range of -99.9 to 299.9 °C with a 0.1 °C resolution, auto-ranging to 1 °C resolution over the range of 300 to 1372 °C.

The Therma Waterproof thermometer features a large easy-to-read, LCD display with max/min, hold, open circuit, low battery indication and a user selectable backlight. The unit also incorporates an auto-power-off facility that automatically turns the instrument off after ten minutes, maximising battery life.

Each unit is housed in a durable, ABS case that incorporates an integrated rubber seal to ensure complete water tightness and help reduce the possibility of damage in harsh environments.

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



Waterproof penetration probe (143-162)



## OPTIONAL ACCESSORIES:

- Protective silicone boot. Various colours are available - see page 40 for details
- Probe Wipes - helps reduce bacterial growth - see page 34



Order code	Description	£ each
232-101	Therma Waterproof	84.00
143-162	Penetration probe	34.00
830-257	Protective silicone boot - black	10.00

The Therma Waterproof is exclusive of probe

Specification	Therma Waterproof
Range 0.1 °C	-99.9 to 299.9 °C
Range 1 °C	300 to 1372 °C
Resolution	0.1 °C to 299.9 °C thereafter 1 °C
Accuracy	±0.4 °C ±0.1 % of reading
Battery	3 x 1.5 volt AAA
Battery life	10000 hours
Sensor type	K thermocouple
Display	15 mm LCD
Dimensions	32 x 71 x 141 mm
Weight	220 grams

FREE traceable certificate of calibration included

# LEGIONNAIRES' THERMOMETER KITS

- For routine water temperature monitoring
- Excellent value-for-money

Incorrect water temperature is a key risk factor for legionella growth. The legionella bacteria multiply in water at temperatures between 20 to 45 °C. A typical method of control is to store hot water above 60 °C and distribute it at above 50 °C (care must be taken to prevent scalding). Cold water should be kept below 20 °C. These kits represent excellent value-for-money and are supplied in a robust ABS carrying case/zip pouch. For a full specification on the Therma 1, see page 63.



## LEGIONNAIRES' STANDARD THERMOMETER KIT

### Each kit contains:

- Therma 1 thermometer (221-041)
- Waterproof surface immersion probe (323-046)
- Heavy-duty PTFE wire probe (133-372)
- Zip pouch (830-037)



Order code	Description	£ each
860-885	Legionnaires' Standard kit	102.00
FREE traceable certificate of calibration included		

## LEGIONNAIRES' PREMIUM THERMOMETER KIT

### Each kit contains:

- Therma 1 thermometer (221-041)
- Penetration probe (123-160)
- Precision ribbon surface probe (123-030)
- PTFE wire probe (133-362)
- Water-resistant countdown timer (806-150)
- Box of 100 Probe Wipes (836-220)
- ABS carrying case (834-150)



Order code	Description	£ each
860-860	Legionnaires' Premium kit	152.50
FREE traceable certificate of calibration included		

## LEGAL RESPONSIBILITIES FOR TESTING FOR LEGIONELLA

If you are the employer or person in control of premises, you must organise a risk assessment from exposure to legionella. The revised Approved Code of Practice (ACOP) Legionnaires' disease: Control of Legionella Bacteria in water systems (L8) issued by the Government's Health and Safety Executive (HSE) significantly extends the scope of its guidance on control of legionella bacteria in water. The code applies to all hot and cold water systems in the workplace regardless of their capacity, i.e. the lower limit of 300 litres previously used to exclude domestic systems, no longer applies. Whilst domestic systems may represent a risk, the code only applies to a risk arising from a work activity, but does include domestic landlords who have a duty to keep their tenants safe from health hazards. This means that all employers and landlords, who manage premises with hot/cold water systems and/or wet cooling systems, have a legal responsibility to identify any risk of contamination and to prevent or control it.



# THERMA DIFFERENTIAL THERMOMETER

- Robust, waterproof case offering IP66/67 protection
- Ideal for radiator balancing or HVAC applications
- Designed for plumbers, reliable & easy-to-use
- Backlit LCD with max/min & hold functions

The Therma Differential is a digital thermometer that allows the user to operate two type K thermocouple probes simultaneously. The display can be switched to show probe T1 or T2 temperature or the difference between probes T1 and T2 (T1-T2). This allows, for example, the temperature drop across radiators or the temperature rise or fall of two items being measured.

The Therma Differential measures temperature over the range of -99.9 to 299.9 °C with a 0.1 °C resolution or 300 to 1372 °C with a 1 °C resolution. The thermometer features a custom, LCD display with °C/°F, T1, T2, diff, hold, open circuit, low battery indication and a user selectable backlight. The unit incorporates an auto-power-off facility that automatically turns the instrument off after ten minutes, maximising battery life.

Each unit is housed in a durable, ABS case that has an integrated rubber seal to ensure complete water tightness and help reduce the possibility of damage in harsh environments.

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



- Protective silicone boot - black c/w foot stand and magnet for mounting on pipes, radiators etc.. (830-258)



- Stainless steel wall bracket (832-015) screws not supplied



Order code	Description	£ each
231-022	Therma Differential	85.00
830-258	Protective silicone boot - black	14.00
133-040	Pipe clamp probe	23.00
832-015	Stainless steel wall bracket	15.00
The Therma Differential is exclusive of probe		

Specification	Therma Differential
Range 0.1 °C	-99.9 to 299.9 °C
Range 1 °C	300 to 1372 °C
Resolution	0.1 °C to 299.9 °C thereafter 1 °C
Accuracy	±0.4 °C ±0.1 % of reading
Battery	3 x 1.5 volt AAA
Battery life	7500 hours
Sensor type	K thermocouple
Display	15 mm LCD
Dimensions	32 x 71 x 141 mm
Weight	220 grams
FREE traceable certificate of calibration included	

# HVAC THERMOMETER KITS

- For everyday temperature monitoring
- Excellent value-for-money

These HVAC thermometer kits are ideal for a wide range of plumbing and heating applications. The kits can be used to monitor both cold and hot water temperatures as well as undertake other routine HVAC checks. A typical application includes balancing radiators using a pair of clip-on pipe probes on the flow and return pipes at either end of the radiator. Starting with the radiator nearest the boiler, adjust the lockshield valve until you get a temperature drop of 11 °C across the two pipes. Then move onto the other radiators in turn.

For a full specification on the Therma Differential thermometer, see page opposite.

## HVAC STANDARD THERMOMETER KIT

### Each kit contains:

- Therma Differential thermometer (231-022)
- 2 x pipe clamp probes (133-040)
- Zip pouch (830-090)



Order code	Description	£ each
860-095	HVAC Standard thermometer kit	113.00
FREE traceable certificate of calibration included		



## HVAC PREMIUM THERMOMETER KIT

### Each kit contains:

- Therma Differential thermometer (231-022)
- Precision ribbon surface probe (123-030)
- Penetration probe (123-160)
- 2 x pipe clamp probes (133-040)
- ABS carrying case (834-300)



Order code	Description	£ each
860-090	HVAC Premium thermometer kit	160.00
FREE traceable certificate of calibration included		



## LEGAL RESPONSIBILITIES FOR SAFE SURFACE & WATER TEMPERATURES

If you are the employer or person in control of premises you have a legal duty of care in respect of the risk of scalding or burning from hot water and hot surface temperatures. NHS and HSE guidelines state that surface temperatures of space heating devices such as thermal storage heaters, oil-filled radiators and conventional radiators should not exceed 43 °C. This will control and prevent patients from being burned. When the surface temperature exceeds 43 °C there is a high risk of burning, often leading to fatalities in the elderly, people with mental illness and learning disabilities or children who cannot react appropriately to prevent injury.

# MICROTHERMA 1 THERMOMETER

- $\pm 0.2^{\circ}\text{C}$  high accuracy,  $0.1^{\circ}\text{C}$  resolution over the full range
- Multi-input type K, J, T, R, N, S & E thermocouple probes
- In-built microprocessor for automatic recalibration
- FREE traceable certificate of calibration

The MicroTherma 1 microprocessor thermometer measures temperature over the range of  $-270$  to  $1768^{\circ}\text{C}$  with a  $0.1^{\circ}\text{C}/^{\circ}\text{F}$  resolution. Each MicroTherma 1 incorporates an easy-to-read,  $4\frac{1}{2}$ -digit dual LCD display with open circuit, low battery, hold, max/min and  $^{\circ}\text{C}/^{\circ}\text{F}$  indication.

The thermometer should never need re-calibrating as the microprocessor enables the instrument to continuously and automatically carry out self-diagnostic recalibration. An additional feature allows the user to adjust the reading ( $\pm 2.5^{\circ}\text{C}$ ) to offset any probe errors, correcting any inaccuracies of the thermocouple probe.

Each thermometer thereafter will automatically store, display the offset and adjust the instrument for the known probe error, maximising system accuracy.

The MicroTherma 1 has the versatility of accepting any type K, J, T, R, N, S & E thermocouple probe, the probe type is simply selected through the mode button. The unit incorporates both max and min readings with a reset function and also features an auto-power-off facility that maximises the battery life, turning the instrument off automatically after 30 minutes, this function can be disabled by the user, if not required. Other selectable parameters include: display contrast and internal CJC temperature reading. For details of the wide range of type K or type T thermocouple probes available, see opposite and pages 77 to 83.



High temperature probe (123-212)



Air probe (127-300)

- Protective silicone boot - white. Protect your instrument against accidental damage by fitting a boot (830-205)



- Acrylic wall bracket (screws not supplied). Ideal for storing your thermometer safely when not in use (832-115)



Order code	Description	£ each
221-091	MicroTherma 1	130.00
123-212	High temperature probe	34.50
127-300	Air probe	31.50
830-205	Protective silicone boot - white	8.50
832-115	Acrylic wall bracket	10.00
The MicroTherma 1 is exclusive of probe		

Specification	MicroTherma 1
Range	$0.1^{\circ}\text{C}$ $-270$ to $1768^{\circ}\text{C}$
Resolution	$0.1^{\circ}\text{C}/^{\circ}\text{F}$
Accuracy	$\pm 0.2^{\circ}\text{C} \pm 1$ digit
Battery	2 x 1.5 volt AAA
Battery life	1000 hours
Sensor type	K, J, T, R, N, S & E thermocouple - selectable
Display	Custom LCD
Dimensions	35 x 73 x 141 mm
Weight	175 grams
FREE traceable certificate of calibration included	



# THERMA 1T THERMOMETER

- High accuracy  $\pm 0.2^{\circ}\text{C}$
- Utilises high accuracy type T thermocouple probes
- FREE traceable certificate of calibration
- Includes Biomaster Antimicrobial Technology

The Therma 1T utilises a type T thermocouple sensor which offers both fast response and a measurement range of  $-100$  to  $400^{\circ}\text{C}$  with a  $0.1^{\circ}\text{C}$  resolution. Each unit is housed in a robust ABS case that contains Biomaster Antimicrobial Technology that reduces bacterial growth.

The Therma 1T thermometer features a large, easy-to-read, LCD display with open circuit and low battery indication. Each unit is powered by three AAA batteries that give a minimum of 10000 hours of battery life. The instrument will power off automatically after ten minutes, maximising battery life. This feature can be disabled by the user, if not required.

Below is a small selection of our high accuracy ( $\pm 0.2^{\circ}\text{C}$ ) type T thermocouple probes, for alternative probes contact our sales team or visit our website.



Order code	Description	£ each
221-107	Therma 1T	60.00
830-221	Protective silicone boot - white	8.00
832-050	S/steel wall bracket & boot	17.00

The Therma 1T is exclusive of probe









Fast response probe (127-159)

Specification	Therma 1T
Range	$-100$ to $400^{\circ}\text{C}$
Resolution	$0.1^{\circ}\text{C}$ to $300^{\circ}\text{C}$ thereafter $1^{\circ}\text{C}$
Accuracy	$\pm 0.2^{\circ}\text{C}$ $\pm 0.1\%$ of reading
Battery & life	3 x 1.5 volt AAA - 10000 hours
Sensor type	T thermocouple
Display	12 mm LCD
Dimensions	25 x 56 x 128 mm
Weight	130 grams

FREE traceable certificate of calibration included

INDUSTRIAL

## HIGH ACCURACY TYPE T THERMOCOUPLE PROBES

		Order code	£ each
<b>PENETRATION PROBE</b>   $\varnothing 3.3 \times 130 \text{ mm}$	This stainless steel penetration probe is strong, versatile and ideal for measuring liquids and semi-solids. <ul style="list-style-type: none"> <li>• Response time less than 2 seconds</li> <li>• Probe temperature range <math>-75</math> to <math>250^{\circ}\text{C}</math></li> </ul>	127-160	31.50
		327-160 (coiled lead)	32.50
<b>FAST RESPONSE PROBE</b>   $\varnothing 3.3 \times 100 \text{ mm}$	This reduced tip ( $\varnothing 1.8 \times 25 \text{ mm}$ ), fast response, stainless steel penetration probe is ideal for liquids or semi-solids i.e. soft rubber and other similar materials. <ul style="list-style-type: none"> <li>• Response time less than 2 seconds</li> <li>• Probe temperature range <math>-75</math> to <math>250^{\circ}\text{C}</math></li> </ul>	127-159	34.50
		327-159 (coiled lead)	35.50
<b>AIR OR GAS PROBE</b>   $\varnothing 4.5 \times 130 \text{ mm}$	This stainless steel, fast response probe is ideal for measuring air temperature in chill cabinets, fridges, freezers, storage areas and similar. <ul style="list-style-type: none"> <li>• Response time less than 1 second</li> <li>• Probe temperature range <math>-75</math> to <math>250^{\circ}\text{C}</math></li> </ul>	127-300	31.50
		327-300 (coiled lead)	32.50

Please note: the above type T thermocouple probes offer a high accuracy of  $\pm 0.2^{\circ}\text{C}$  over the range of  $-20$  to  $70^{\circ}\text{C}$

# PRECISION PT100 THERMOMETERS

- High accuracy  $\pm 0.2$  °C or 0.05 °C
- Interchangeable PT100 probes
- 0.1 °C or 0.01 °C resolution
- Meets the European Standard EN 13485

High accuracy is one of the notable features of the Precision thermometers. There are two models available, the Precision and Precision Plus. The Precision measures temperature over the range of -199.9 to 499.9 °C with a 0.1 °C resolution and high accuracy of  $\pm 0.2$  °C. The Precision Plus measures temperature over the range of -199.99 to 199.99 °C with a 0.01 °C resolution and high accuracy of  $\pm 0.05$  °C. **Please note:** the accuracies quoted are for the instruments only.

Conveniently located on the front of the instrument are the on/off, max/min and display hold buttons. The Binder probe socket is positioned at the top of the instrument which enables a variety of probes to be used depending on the application.

The Precision thermometers feature a large, easy-to-read, LCD display with open circuit 'Err' and low battery indication. Each thermometer is powered by three AAA batteries that give a minimum of 2000 hours of battery life. The unit will power off automatically after ten minutes, maximising battery life. This feature can be disabled by the user, if required.

We offer a range of interchangeable PT100 Class A probes for use with the Precision thermometer, see page 85 for full details. The Precision Plus is supplied with a PT100 1/10<sup>th</sup> DIN liquid probe (160-222) and a UKAS Certificate of Calibration. For regularly checking the accuracy of each Precision thermometer, a range of calibration PT100 test caps complete with a UKAS Certificate of Calibration are available, see page 105 for details.



PT100 1/10<sup>th</sup> DIN liquid probe (160-222)

INDUSTRIAL



## OPTIONAL ACCESSORY:

- Protective silicone boot - the Precision/Precision Plus thermometers are splashproof to IP64 when used in conjunction with this boot. Various colours are available - see page 13



0601



Order code	Description	£ each
222-053	Precision thermometer	105.00
222-051	Precision Plus thermometer	225.00
160-222	PT100 1/10 <sup>th</sup> DIN liquid probe	85.00
830-221	Protective silicone boot - white	8.00
832-050	S/steel wall bracket & boot	17.00

The Precision is exclusive of probe  
The Precision Plus is inclusive of probe

Specification	Precision	Precision Plus
Range	-199.9 to 499.9 °C	-199.99 to 199.99 °C
Resolution	0.1 °C	0.01 °C
Accuracy	$\pm 0.2$ °C	$\pm 0.05$ °C
Battery & life	3 x 1.5 volt AAA - 2000 hours	
Sensor type	PT100	
Display	10 mm LCD	
Dimensions	25 x 56 x 128 mm	
Weight	130 grams	

The Precision includes a traceable certificate of calibration  
The Precision Plus includes a UKAS Certificate of Calibration

# THERMAPEN® CLASSIC THERMOMETERS

- Choice of air, surface or penetration probe
- Lightweight, compact & easy-to-use
- High accuracy  $\pm 0.4^\circ\text{C}$
- One-handed operation

The Thermapen classic thermometer incorporates a large digital display with a precise read-out over the range of  $-49.9$  to  $299.9^\circ\text{C}$  with a  $0.1^\circ\text{C}$  resolution. The resolution can be switched to  $1^\circ\text{C}$ , if required, via a switch in the battery compartment.

The thermometer will power off automatically after ten minutes, maximising battery life. This feature can be disabled if not required. Both low battery (icon) and open circuit indication are also displayed, when applicable. Each industrial Thermapen is powered by two lithium coin cell batteries with a minimum life expectancy of 1500 hours.

The probe conveniently folds back through  $180^\circ$  into the side of the instrument when not in use. The casing is washable and includes Biomaster Antimicrobial Technology that reduces bacteria growth and the ergonomic rubber seal minimises the risk of the ingress of water, dust or food.

## ● Choice of probe styles

The Thermapen classic thermometer is available with three styles of probe; surface, air or penetration. The fast response air probe is an invaluable tool in establishing the correct air temperature quickly in HVAC and laboratory applications. The surface probe is particularly useful in determining the temperature of hot plates or pipes etc. **Please note:** the accuracy and speed of response will be dependant on whether the surface is flat and heat transfer compound is used.

## OPTIONAL ACCESSORIES:

- Protective PVC wallet with belt strap (830-110)
- Protective silicone boot (830-260)
- Glow-in-the-dark silicone boot with magnets (830-265)
- Stainless steel wall bracket (832-002) screws not supplied



Order code	Description	£ each
231-210	Thermapen Classic - penetration probe	59.00
231-212	Thermapen Classic - surface probe	59.00
231-214	Thermapen Classic - air probe	59.00
830-260	Protective silicone boot	7.00
830-265	Silicone boot - glow in dark	9.50
830-110	Protective wallet	5.80
832-002	Stainless steel wall bracket	13.00

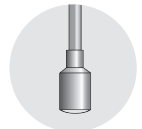
The Thermapen is supplied in a zip pouch (830-001)



## WATERPROOF SURFACE PROBE

Ø8 x 95 mm

This waterproof ribbon surface probe is ideal for measuring the surface temperature of pipes, bearings, hotplates and other flat surfaces.



## PENETRATION PROBE

Ø3.3 x 108 mm

This strong and versatile probe incorporates a pointed, general purpose tip, ideal for insertion into liquids and semi-solids.



## AIR OR GAS PROBE

Ø3.3 x 95 mm

This fast response air or gas probe is ideal for measuring the air temperature in HVAC applications, laboratories and other temperature sensitive working areas.



Specification	Classic Thermapen
Range	$-49.9$ to $299.9^\circ\text{C}$
Resolution	$0.1^\circ\text{C}$ or $1^\circ\text{C}$ - user selectable
Accuracy	$\pm 0.4^\circ\text{C}$ ( $-49.9$ to $149.9^\circ\text{C}$ ) or $\pm 1\%$
Battery	2 x 3 volt CR2032 lithium coin cell
Battery life	1500 hours
Sensor type	K thermocouple
Display	14.5 mm LCD
Dimensions	19 x 47 x 153 mm
Weight	97 grams
FREE traceable certificate of calibration included	



## BI-METAL DIAL THERMOMETERS

### Ø25 mm bi-metal dials



These pocket-sized Ø25 mm dial thermometers feature a magnified lens and a pointed Ø4 x 130 mm stainless steel stem. Each dial is manufactured in three scales and is supplied with a FREE calibration spanner and probe cover complete with pocket clip.

The thermometer incorporates a calibration adjustment nut, at the rear of the dial to allow easy recalibration.

Order code	Description	Range	£ each
800-811	Ø25 mm dial	-40 to 70 °C	4.50
800-812	Ø25 mm dial	-10 to 110 °C	4.50
800-813	Ø25 mm dial	0 to 250 °C	4.50
830-220	Ø4 mm probe holder clip		1.80

### Ø45 mm bi-metal dials



These pocket-sized Ø45 mm dial thermometers feature a pointed Ø4 x 130 mm stainless steel stem. Each dial is manufactured in three scales and is supplied with a FREE calibration spanner and probe cover complete with pocket clip.

The thermometer incorporates a calibration adjustment nut, at the rear of the dial to allow easy recalibration.

Order code	Description	Range	£ each
800-801	Ø45 mm dial	-40 to 70 °C	5.50
800-802	Ø45 mm dial	-10 to 110 °C	5.50
800-803	Ø45 mm dial	0 to 250 °C	5.50
830-220	Ø4 mm probe holder clip		1.80

## HEAVY-DUTY BI-METAL DIAL THERMOMETERS

- Self adjustment nut for easy recalibration
- Ø50 mm dial with 300 mm length probe

These simple-to-use, heavy-duty, Ø50 mm bi-metal dial probe thermometers are reliable and accurate. The dial thermometers feature a Ø6.35 x 300 mm pointed stainless steel stem. Ideal for asphalt, blacktop, soil and other heavy-duty applications.

Each thermometer incorporates a clear acrylic face and a calibration adjustment nut at the rear of the dial. Three temperature scales are available - see below.

Order code	Description	Range	£ each
800-060	Ø50 mm dial	-20 to 60 °C	10.50
800-120	Ø50 mm dial	0 to 120 °C	10.50
800-250	Ø50 mm dial	0 to 250 °C	10.50



## BI-METAL DIAL PIPE THERMOMETER

- Ideal for hot water pipes
- Ø60 mm stainless steel dial

This easy-to-use surface pipe thermometer features a Ø60 mm stainless steel dial and indicates temperature over the range of 0 to 120 °C or 32 to 250 °F. The Ø50 mm dial face has a clear, graduated scale indicating temperature in 2 °C and 4 °F divisions. Ideal for use in hot water pipework.

Supplied with a wrap-around stainless steel spring kit for pipe mounting (two springs - one for up to 15 mm pipes, the other for up to 53 mm pipes). For larger pipes it is possible to attach the thermometer to pipework using either tie-wraps or wire (not supplied).



Ø50 mm dial face



Order code	Description	£ each
800-951	Pipe thermometer	14.00

## MAGNETIC BI-METAL DIAL THERMOMETER

- Ø60 mm bi-metal dial
- Ideal for central heating & HVAC industries

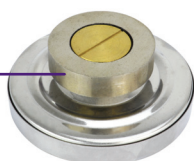
This Ø60 mm stainless steel, surface dial thermometer incorporates a magnetic sensing pad for mounting on ferrous metals and indicates temperature ranges from 0 to 120 °C or 32 to 250 °F.

This magnetic dial thermometer is widely used in the central heating and HVAC industries and is suitable for monitoring the temperature of radiators and pipes, it is especially useful when balancing radiator temperatures.

The Ø50 mm dial face has a clear, graduated scale indicating temperature in 2 °C and 4 °F divisions.



Rear magnet



Order code	Description	£ each
800-950	Magnetic thermometer	17.00

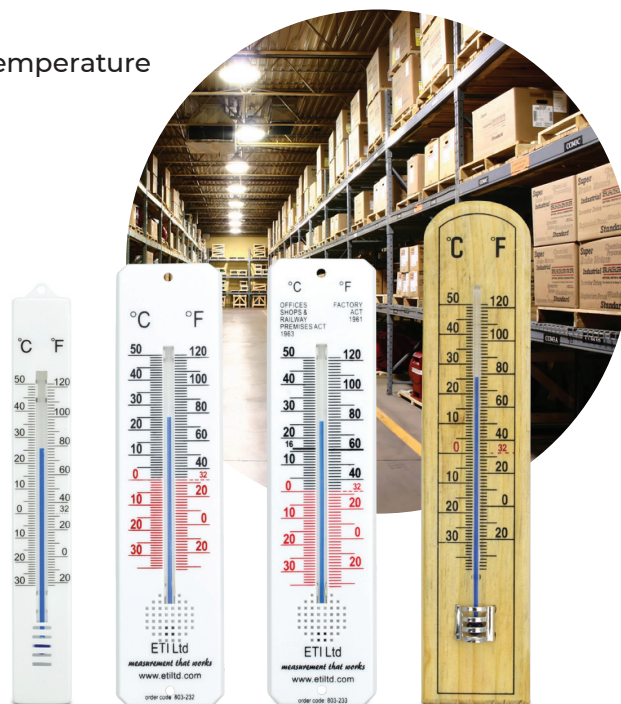
## ROOM THERMOMETERS

- Simple & cost-effective means of measuring temperature
- Traditional, spirit-filled design - mercury free

These traditional, spirit-filled room thermometers display temperature over the range of -30 to 50 °C with an accuracy of  $\pm 1$  °C and a clearly marked scale in both °C and °F.

Models 803-229, 803-232 and 803-233 are housed in a white, ABS plastic case whereas model 803-292 is housed in a smooth grained, traditional style, beechwood case. Model 803-233 indicates the Factory Act minimum working temperature of 16 °C.

These room thermometers feature a wall-mounted slot for hanging and are ideal for recording temperatures in the office, factory, laboratory or home.



Order code	Description	£ each
803-229	White 25 x 175 mm	1.80
803-232	White 45 x 195 mm	2.50
803-233	White 45 x 195 mm - Factory Act	2.50
803-292	Wooden 45 x 205 mm	3.60

## DIGITAL MAX/MIN THERMOMETER

- Simultaneously displays max/min temperatures
- Large, easy-to-read LCD display

These digital max/min thermometers with internal temperature sensor simultaneously display the actual temperature whilst displaying the maximum and minimum recorded temperatures.

Each unit measures temperature over the range of -20 to 69.9 °C with a 0.1 °C/°F resolution and is ideal for recording temperatures in an office, factory, laboratory, home, greenhouse or conservatory.

The thermometer is easy-to-use, to switch the current reading between °C and °F or reset the recorded max/min temperatures simply press the button on the side of the unit.

The unit is housed in an ABS case measuring 29 x 79 x 187 mm that incorporates a slot for hanging and is powered by one AA battery (supplied).



Order code	Description	£ each
810-120	Digital max/min - white	12.00
810-121	Digital max/min - green	12.00

Specification	Digital max/min
Range	-20 to 69.9 °C
Resolution	0.1 °C/°F
Accuracy	$\pm 1$ °C
Battery & life	1.5 volt AA - 4000 hours
Display	Custom LCD
Dimensions	29 x 79 x 187 mm
Weight	180 grams



# DIGITAL MAX/MIN THERMOMETER

- Internal sensor & external temperature probe
- Programmable high/low audible alarm

This max/min and alarm thermometer indicates temperature over the range of -24.9 to 69.9 °C with a resolution of 0.1 °C/°F and an accuracy of  $\pm 1$  °C.

The thermometer features a large, easy-to-read LCD display, max/min memory function to record the highest and lowest temperatures and a high/low programmable audible alarm. The unit incorporates two temperature sensors, a remote water-resistant probe with one metre PVC lead for the appliance temperature and an internal sensor for the room temperature.

The remote probe can be mounted onto a wall using the suction pad or mounting bracket supplied. Housed in a durable ABS case the thermometer incorporates a foot stand for shelf mounting.



Remote probe

MAX  
MIN



Order code	Description	£ each
810-125	Digital max/min thermometer	10.25

Specification	Digital max/min
Range	-24.9 to 69.9 °C
Resolution	0.1 °C/°F
Accuracy	$\pm 1$ °C
Battery	3 volt CR2032 lithium coin cell
Battery life	3000 hours
Display	Custom LCD
Dimensions	16 x 50 x 82 mm
Weight	50 grams

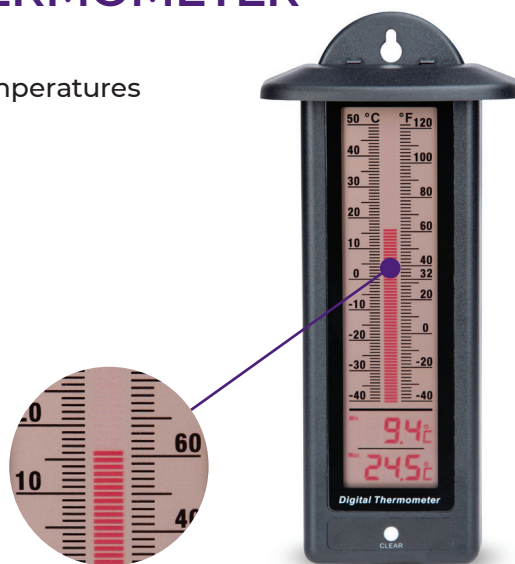
# LCD BAR GRAPH MAX/MIN THERMOMETER

- Simultaneously displays both current & max/min temperatures
- Temperature range -19.9 to 49.9 °C

This digital max/min thermometer simultaneously displays the actual temperature whilst displaying the max and min temperatures on a digital LCD bar graph.

The thermometer measures temperature over the range of -19.9 to 49.9 °C with a resolution of 0.1 °C/°F and an accuracy of  $\pm 1$  °C. To reset the recorded max and min temperatures, simply press the white button on the front of the thermometer.

The instrument is housed in a black ABS case which incorporates a slot for hanging and is powered by a single AAA battery (supplied).



Order code	Description	£ each
810-105	Digital max/min - black	16.00

Specification	Digital max/min
Range	-19.9 to 49.9 °C
Resolution	0.1 °C/°F
Accuracy	$\pm 1$ °C
Battery	1.5 volt AAA
Battery life	17500 hours
Display	Custom LCD
Dimensions	20 x 66 x 212 mm
Weight	188 grams