

Brannan



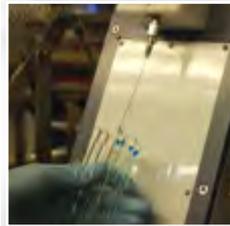
Brannan Scientific Range

- Calibration Services
- Laboratory Thermometers
- Digital & Electronic Instrumentation
- Special Application Instrumentation
- Hydrometers

Measurement for Life.

Brannan

Measuring Success



S. Brannan & Sons has manufactured and supplied thermometers, gauges and instrumentation since 1913.

Over a century of tradition, combined with modern manufacturing methods at our facilities in the UK ensure unequalled service.

The Company has operated a quality management system since 1991 and currently operates within the scope of ISO 9001: 2015.

Complimenting our production facilities, the Company provides a calibration service operating its own UKAS accredited laboratory where, in addition to having new thermometers tested, customers may also have existing instruments re-calibrated.

Following the 2014 EU ban on mercury, a wide choice of electronic instruments and organic, non-hazardous filling materials, including our Patented **LO-tox**[™] fillings, are available.

This catalogue describes a wide range of products for a variety of applications. Standard items are normally available for immediate delivery. Many can be supplied with customer branding or include modifications to suit special applications.

Products in this catalogue are generally supplied on **Brannan** standard packaging, or customer's own packaging (quantity dependant) and many are also available bulk packed.

All our products carry a 2 year warranty.

Customers' requirements can be discussed with our Sales Team.
Products may also be viewed our website: **www.brannan.co.uk**

Please note:

- All electronic instruments are supplied with batteries and full instructions.
- All dimensions are for unpacked products
- All information is correct at time of printing but our policy is one of continuous product development. We reserve the right to change specification without notice.

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Brannan Thermometers & Instrumentation

is located in Cleator Moor on the western fringe of the English Lake District. Please see below contact details for assistance with your enquiries or to place an order. All of our prices are competitive and quantity discounts apply. Alternatively, small orders can be placed on our webshop.

WEBSITE

www.brannan.co.uk

EMAIL

sales@brannan.co.uk

PHONE

+ 44 (0)1946 816600

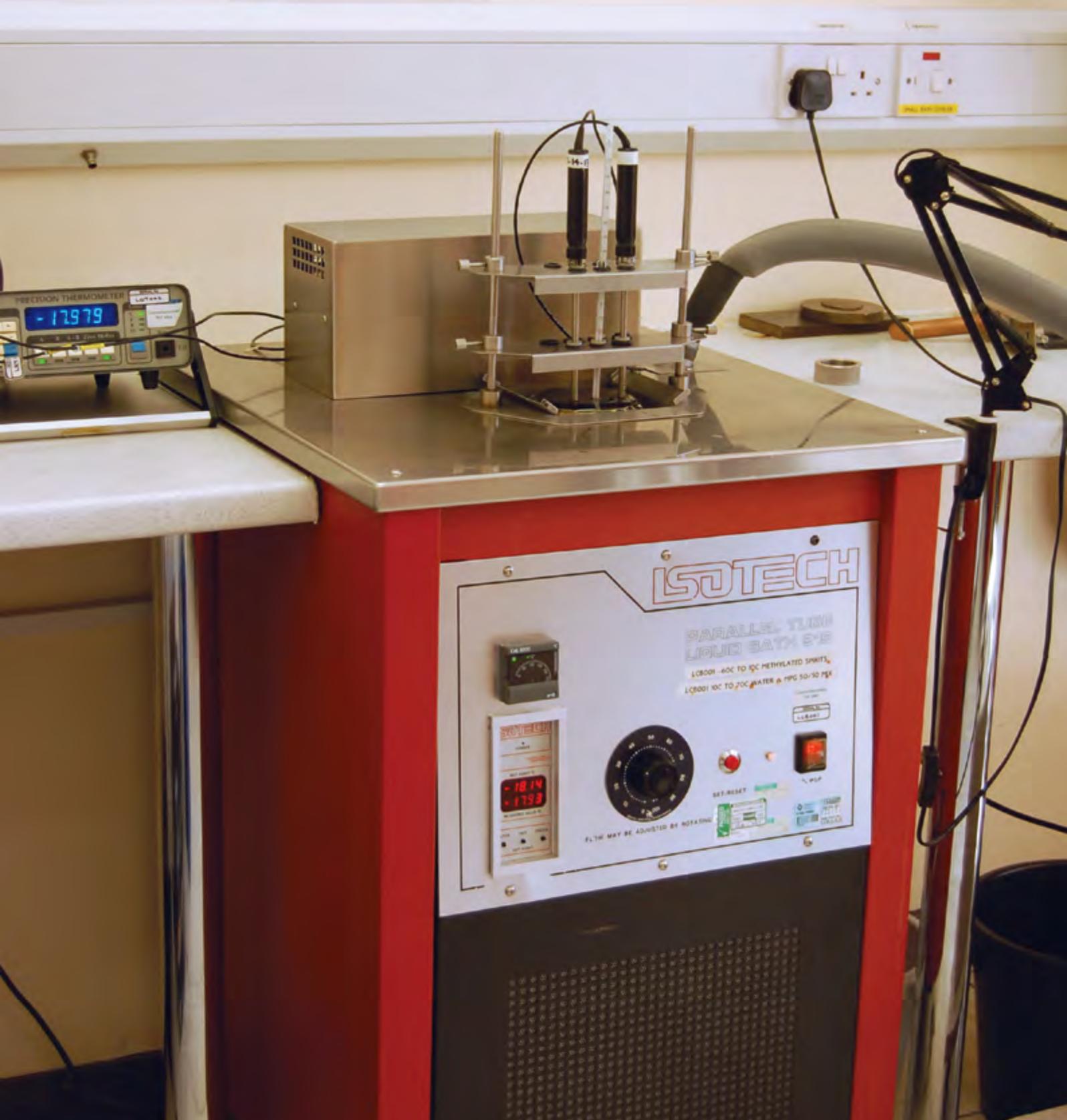
FAX

+ 44 (0)1946 816625

ADDRESS

S.Brannan & Sons
Leconfield Industrial Estate
Cleator Moor
Cumbria
UK
CA25 5QE





Calibration Services



To complement the production facilities of **S. Brannan & Sons**, a comprehensive calibration service is available for a variety of instruments including thermometers, pressure gauges and hydrometers. In addition, we are able to calibrate many other measuring instruments, such as electronic max mins and weatherstations, data loggers and wall thermometers, either UKAS Accredited or certification Traceable to National Standards.

This service is available, for an additional charge, at time of product's purchase or for customers own existing instruments. Please contact our Sales Team to discuss the suitability of your instrument for calibration.



The table below shows standard instruments and their most compatible certification.

Instrument Type	UKAS Accredited	Traceable to National Standards
Liquid in Glass Thermometers	✓	✓
Dial Thermometers	✓	✓
Electronic Thermometers with Indicators	✓	✓
Measurements of Temperature in Air	✗	✓
Surface Temperature	✗	✓
Infrared Thermometers	✗	✓
Environmental Meters (sound, light, etc)	✗	✓
Pressure Gauges/Instruments	✓	✓
Hydrometers*	✓	✓
Digital Timers*	✓	✓

* Calibration of hydrometers and timers carried out at external laboratory

What is a Calibration & Why Calibrate

- Calibration is a procedure in which an instrument is tested to ensure it conforms with an appropriate standard (if applicable) and to verify the accuracy of an instrument.
- By comparing an instrument of a known value against a second instrument (unit under test), the difference can be calculated and suitable corrections determined.

Re-Calibration

- The calibration frequency for a specific thermometer is up to the individual customer.
- It should be based on factors such as:
 - The environment in which the instrument is used,
 - The frequency of use and
 - The level of confidence required in the readings taken from the customers' process.

Calibration Points

- Calibration points can be drawn on a graph and joined together to form a calibration curve.
- This allows the user to estimate the corrections at points where a calibration value has not been measured.





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UKAS Accredited Laboratory

- Our facilities conform to (BS) EN ISO/IEC 17025:2017 – ‘General requirements for the competence of testing and calibration laboratories’.
- For temperature measurement our laboratory can calibrate:
 - Liquid-in-glass thermometers i.e. both spirit and mercury
 - Dial type temperature indicators/recorders
 - Temperature sensors such as digital thermometers
- Certification is available for test temperatures between -60°C and +250°C.
- Certificates are produced with reference to the International Temperature Scale of 1990 (ITS-90).

Example of UKAS Calibration Certificate

CERTIFICATE OF CALIBRATION		
ISSUED BY S.Brannan & Sons Ltd		0582
DATE OF ISSUE: 27 March 2015	Certificate Number: 07905	
S. Brannan & Sons Ltd, Leetonfield Industrial Estate, Cleator Moor, Cumbria, ENGLAND, CA25 5QE		Telephone: +44 (0) 1946 816600 Fax: +44 (0) 1946 816625 E-mail: sales@brannan.co.uk Registered No: 290512 ENGLAND
Thermometers & Gauges		PAGE 1 OF 2 PAGES Calibration System and Approval System: Name: J. Henderson Signature:
Client	A N Other	
Address		
Clients Order No		
Apparatus Tested	Electronic Thermometer	
Type / Specification	Electronic Digital Thermometer	
Range & Division/Frequency or Resolution	-50/70°C & °F 0.1°C (External Probe Only)	
Calibration Immersion	76mm	
Serial No		
CALIBRATION CONDITIONS		
Date Instrument Received	24 March 2015	
Date Calibration/Test Completed	27 March 2015	
Laboratory Temperature	20°C±0.5°C	
Laboratory Humidity	20% to 85% (RH)	
<p>The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor k=2, providing a level of confidence of approximately 95%. The uncertainty evaluation has been carried out in accordance with UKAS requirements.</p> <p>This certificate is issued in accordance with the laboratory accreditation requirements of the United Kingdom Accreditation Service. It provides traceability of measurement to the SI system of units and/or to units of measurement realised at the National Physical Laboratory, NIST or other recognised national metrology institutes. This certificate may not be reproduced other than in full, except with the prior written approval of the issuing laboratory.</p>		



Safe Packaging Service

We are able to supply packaging for use when sending your thermometer to us to help reduce the risk of breakage during transit. The pack comprises of a box with a blank calibration label, a telescopic plastic tube and an inner polystyrene tray with a 'cut-out' for robust protection of the thermometer.

Also included is a "Fragile" label for use on your own outer packaging. The thermometer packaging is then used to return the calibrated instrument to the customer, together with the calibration certificate, after our laboratory personnel have completed the details on the box label with the relevant identification information.

Two sizes of packaging are available, to cover different thermometer lengths.

Please contact our Sales Team for further details.

Product numbers:

Thermometer length under 305mm - **40/900/0**

Thermometer length over 350 to 405mm - **40/901/0**



Additional Calibration Services

- In addition to our UKAS Accredited Calibration Laboratory, we have the capability of providing calibration certificates traceable to National Standards for many other instruments, including the following:

Pressure

- We offer calibrations for pressure gauges ranging from 0 to 600 BAR
- We use a hydraulic dead weight tester traceable to UKAS standards

Air Temperature

- We offer temperature in air measurements traceable to UKAS using a thermal chamber
- We offer calibrations between -40°C & 180°C.
- We use ITS-90 as the reference scale when carrying out temperature calibration work.

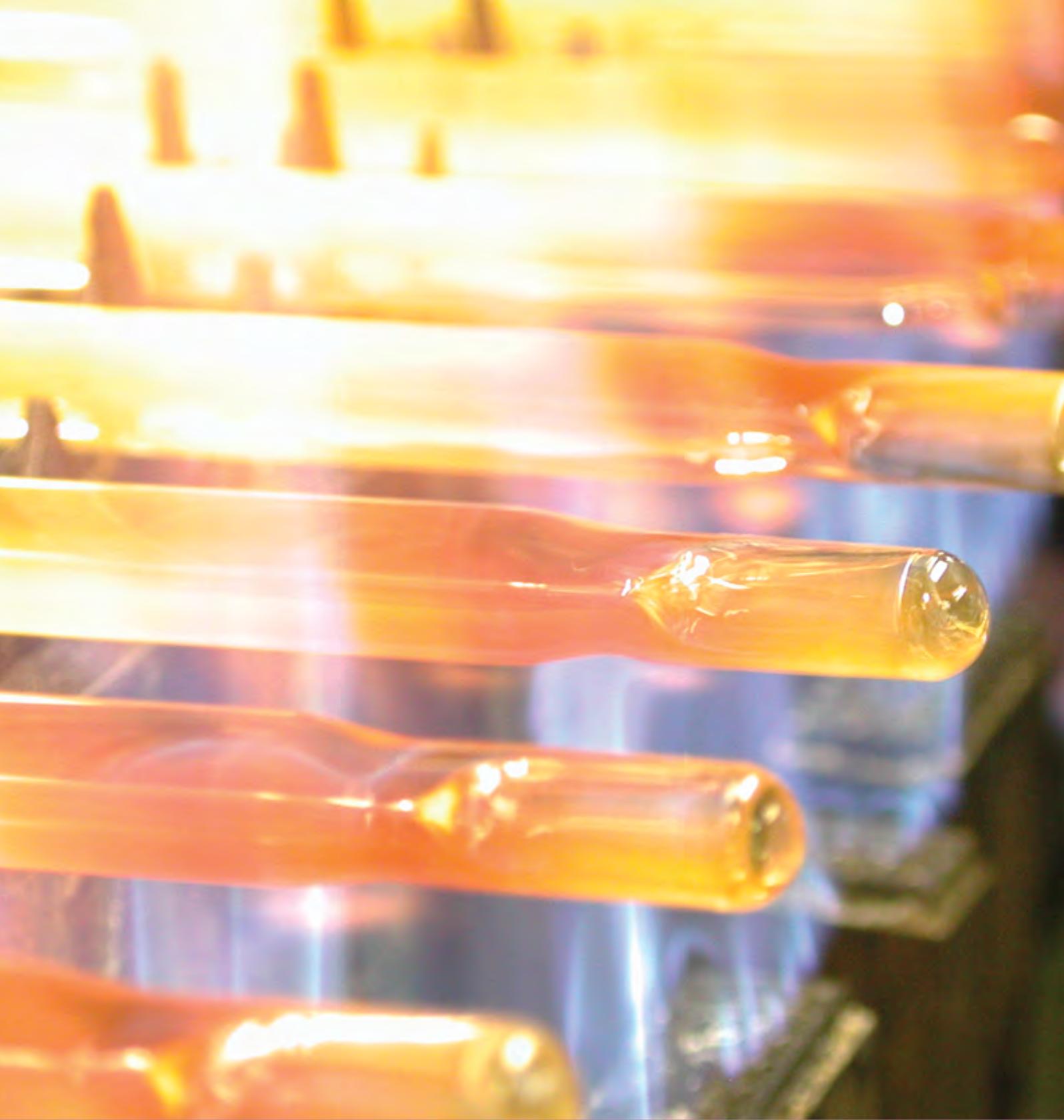
Hydrometers

We can offer calibration certificates for all the hydrometers we supply which are traceable to National Standards.

All our prices are competitive and quantity discounts may apply.

Please contact us for further details on the above or to discuss other instruments suitable for Certification.





Laboratory Thermometers

Brannan

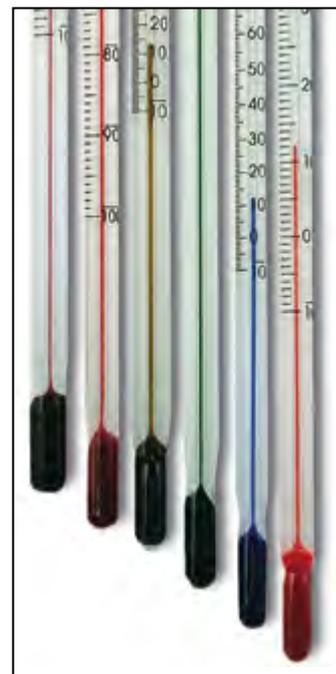
As one of the premier manufacturers of liquid-in-glass thermometers, **Brannan** is leading the way in innovation of new fillings to cover a wide range of temperatures providing alternatives to traditional, and now prohibited, mercury thermometers.

• **Highly resistant to aggressive chemicals**

All of our thermometers have a clear scale, fired directly into the glass

• **Wide choice of thermometers**

- **LO-tox™** Laboratory Thermometers - Blue or brown filling
- **ECO-therm™** Laboratory Thermometers - Green filling
- General Purpose **Spirit** Laboratory Thermometers - Red or blue fillings
- **Precision** Laboratory Thermometers - complete with calibration certificate



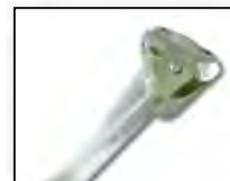
• **Made in England**

Over 100 years of manufacturing experience at our factory in the North of England.



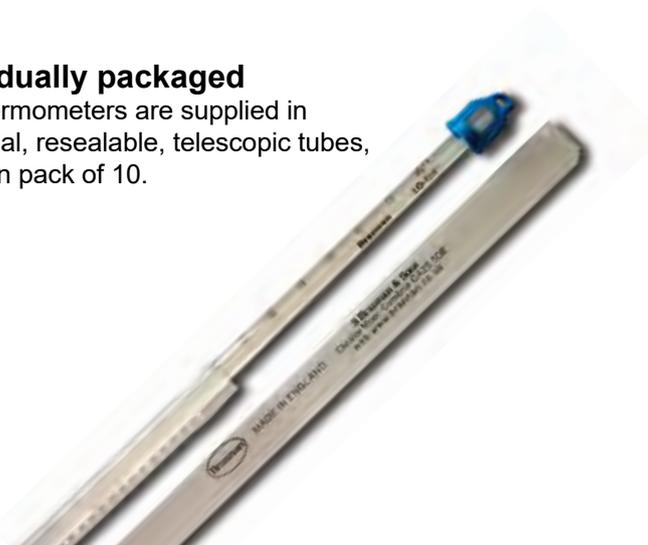
• **Non-roll device fitted**

All thermometers fitted with either **Brannan** non-roll end cap which has a ring to allow the thermometer to be suspended, or a tri-top shaped thermometer end.



• **Individually packaged**

The thermometers are supplied in individual, resealable, telescopic tubes, boxed in pack of 10.



UKAS Calibration Certification

All our laboratory thermometers can be supplied with full UKAS Certification, at an additional charge, on request. Our facilities conform to (BS) EN ISO/IEC 17025:2005 – ‘General requirements for the competence of testing and calibration laboratories’. For temperature measurement our laboratory can calibrate all types of liquid-in-glass thermometers i.e. both spirit and mercury. Certification is available for test temperatures between -60°C and +250°C. See Calibration section of this catalogue, or contact our Sales Team for more details.



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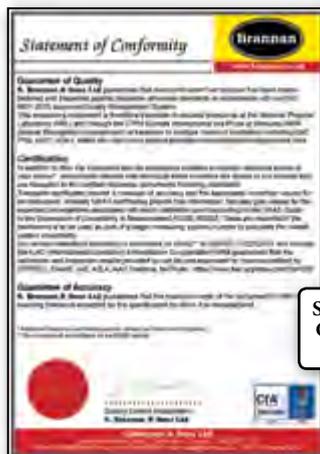


Number of Points Calibrated	Product Number
1 point calibration	49/501/0
2 point calibration	49/502/0
3 point calibration	49/503/0
4 point calibration	49/504/0
5 point calibration	49/505/0
6 point calibration	49/506/0
7 point calibration	49/507/0
8 point calibration	49/508/0
9 point calibration	49/509/0
10 point calibration	49/510/0
11 point calibration	49/511/0
12 point calibration	49/512/0
13 point calibration	49/513/0

Statement of Conformity

Statement of Conformity available on request.

Product Number: 49/080/0



Statement of Conformity Available

Safe Packaging Service

To complement our calibration services, we are able to supply packaging for use when sending your thermometer to us to help reduce the risk of breakage during transit. The pack comprises of a box with a blank calibration label, a telescopic plastic tube and an inner polystyrene tray with a ‘cut-out’ for robust protection of the thermometer.

Also included is a “Fragile” label for use on your own outer packaging. The thermometer packaging is then used to return the calibrated instrument to the customer, together with the calibration certificate, after our laboratory personnel have completed the details on the box label with the relevant identification information.

Two sizes of packaging are available, to cover different thermometer lengths. Please contact our Sales Team for further details of prices, etc.

Product numbers:

Thermometer length under 305mm - **40/900/0**

Thermometer length over 350 to 405mm - **40/901/0**



The European Commission's objective of reducing the circulation of mercury in society by cutting supply and demand meant that from October 2017 it became illegal throughout the EU to manufacture or supply mercury glass tube thermometers.



S.Brannan & Sons is leading the way in developing alternative fillings and styles to replace mercury thermometers. All laboratory thermometers can be supplied with UKAS Calibration Certificate or Statement of Conformity on request for an additional charge.

All these thermometers are made in the UK and are fitted with a **Brannan** non-roll end cap which has a ring to allow the thermometer to be suspended and are packed boxed in ten thermometers, either in PVC packaging or individual telescopic tubes.



LO-tox™ Laboratory Thermometers

Brannan LO-tox™ Laboratory Thermometers use a specially selected organic filling, normally coloured blue although certain ranges have a brown filling. Stable over a wide temperature span and providing the lowest practical level of hazard, the quality and legibility of these thermometers provide an ideal alternative to mercury.



Spirit Laboratory Thermometers

These **Spirit** Laboratory Thermometers use filling materials covering temperatures down to -200°C. Normal fillings are coloured red on white back glass but some are also available on yellow back glass. Also available with blue spirit on white back glass. The -200°C range thermometers are filled with the colourless liquid.



ECO-therm™ Laboratory Thermometers

The **ECO-therm™** Laboratory Thermometers are filled with food safe oils, recently developed by **Brannan's** own product development team. Using a green coloured liquid, this thermometer covers the most popular temperature ranges at present, although it is intended to add further ranges in the future.



Precision Specification Laboratory Thermometers

Following of the ban on specification mercury laboratory thermometers in October 2017, **S.Brannan & Sons** has developed a range of spirit filled, high precision thermometers. These thermometers are supplied complete with a traceable calibration certificate and are presented in a sturdy box for storage. The thermometers are made to the highest possible standards and are checked at every stage of manufacture to the requirements of our ISO 9001 Quality Management System. In addition to our standard checks, these High Precision Specification Thermometers are calibrated at two or three separate points across their working range.



Protective Cases for Thermometers

To protect the standard 6.5mm diameter laboratory thermometer from breakage, a variety of cases are available. These have a slot front for easy reading, a suspension ring at the top and holes in the bulb end to ensure quick response to temperature.

Case Type	Length	Product number
Brass Slot Front Cases	155mm	47/732/0
	305mm	47/432/0
	355mm	47/832/0
	405mm	47/932/0
Stainless Slot Front Cases	305mm	47/434/0
	405mm	47/934/0



LO-tox™ Filled Laboratory Thermometers



LO-tox™ is an organic filling specially chosen to achieve a wide temperature span and provide the lowest practical levels of hazard. The quality and legibility make these an ideal substitute for mercury thermometers. Each **LO-tox™** thermometer is fitted with a **Brannan** non-roll end cap which has a ring to allow the thermometer to be suspended. The thermometers are supplied as standard in individual, resealable, telescopic tubes then boxed in pack of 10 thermometers.

These thermometers can be supplied with UKAS Calibration Certificate or Statement of Conformity on request, for an additional charge.

The tables below show our standard thermometers, however other ranges are available on request.

Statement of Conformity Available

UKAS Calibration Certificate upon request



Laboratory Thermometers

Range °C only	Division	Length	LO-tox Colour	76mm Immersion		Total Immersion	
				Accuracy	Product No	Accuracy	Product No
-10 to +50°C	1.0°C	155mm	Blue	-	-	+/-1.0°C @ 35°C	44/850/7
-10 to +110°C	1.0°C	155mm	Blue	-	-	+/-1.5°C @ 90°C	44/830/7
-35 to +50°C	1.0°C	305mm	Blue	+/-1.0°C @ 35°C	44/801/8	+/-1.0°C @ 35°C	44/809/8
-10 to +50°C	0.5°C	305mm	Blue	+/-0.5°C @ 35°C	44/800/8	+/-0.5°C @ 35°C	44/808/8
-20 to +110°C	1.0°C	305mm	Blue	+/-1.0°C @ 90°C	44/802/8	+/-1.0°C @ 90°C	44/810/8
-20 to +110°C	0.5°C	305mm	Blue	+/-1.0°C @ 90°C	44/802/9	+/-1.0°C @ 90°C	44/810/9
-20 to +150°C	1.0°C	305mm	Blue	+/-1.0°C @ 90°C	44/803/8	+/-1.0°C @ 90°C	44/811/8
-10 to +210°C	1.0°C	405mm	Blue	+/-2.0°C @ 90°C	44/805/8	+/-2.0°C @ 90°C	44/812/8
-10 to +260°C	1.0°C	405mm	Blue	+/-2.0°C @ 90°C	44/804/8	+/-2.0°C @ 90°C	44/813/8
-10 to +300°C	1.0°C	305mm	Brown	+/-2.0°C @ 90°C	44/815/0	+/-2.0°C @ 90°C	44/818/0
-10 to +330°C	2.0°C	305mm	Brown	+/-2.0°C @ 90°C	44/814/0	+/-2.0°C @ 90°C	44/827/0
-10 to +360°C	2.0°C	305mm	Brown	+/-2.0°C @ 90°C	44/826/8	+/-2.0°C @ 90°C	44/819/0
-1 to +51°C	0.1°C	405mm	Blue	+/-1.0°C @ 35°C	44/820/0	+/-0.5°C @ 35°C	44/821/0
-1 to +51°C	0.2°C	405mm	Blue	+/-1.0°C @ 35°C	44/822/0	+/-0.5°C @ 35°C	44/823/0
-1 to +101°C	0.2°C	405mm	Blue	+/-1.0°C @ 90°C	44/824/0	+/-0.4°C @ 90°C	44/825/0

Range °F only	Division	Length	LO-tox Colour	76mm Immersion		Total Immersion	
				Accuracy	Product No	Accuracy	Product No
-30 to +120°F	1.0°F	305mm	Blue	+/-2°F @ 95°F	44/801/5	+/-2°F @ 95°F	44/809/7
0 to +230°F	2.0°F	305mm	Blue	+/-2°F @ 194°F	44/802/7	+/-2°F @ 194°F	44/816/7
0 to +300°F	2.0°F	305mm	Blue	+/-2°F @ 194°F	44/803/7	+/-2°F @ 194°F	44/817/7
0 to +500°F	2.0°F	405mm	Blue	+/-2°F @ 194°F	44/804/7	+/-2°F @ 194°F	-

Range °C&F	Division	Length	LO-tox Colour	76mm Immersion		Total Immersion	
				Accuracy	Product No	Accuracy	Product No
-20 to +110°C&F	1.0°C&F	305mm	Blue	+/-1.0°C @ 90°C	44/802/5	-	-
-20 to +150°C&F	1.0°C&F	305mm	Blue	+/-1.0°C @ 90°C	44/803/5	-	-
-10 to +260°C&F	1.0°C&F	405mm	Blue	+/-2.0°C @ 90°C	44/804/5	-	-



ECO-therm™ Filled Laboratory Thermometers

Laboratory Thermometers



- Introduced by our own product development team
- Environmentally safe
- Non-toxic
- Non-hazardous
- Biodegradable
- Made in England
- Supplied in individual resealable, protective tube



Statement of Conformity Available

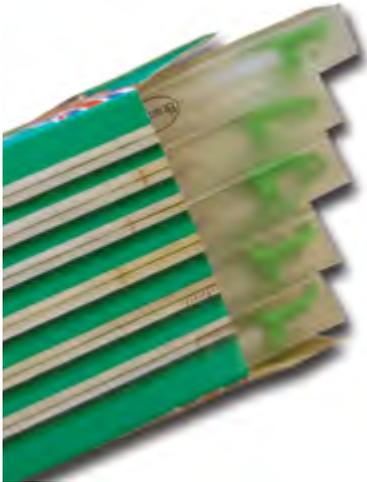
UKAS Calibration Certificate upon request

S.Brannan & Sons is leading the way in developing alternative fillings and styles to replace mercury thermometers. The **ECO-therm™** Thermometers, filled with food safe oils, have been recently developed by **Brannan's** own product development team. The quality and resolution make these an ideal substitute for general purpose mercury thermometers. The 305mm thermometers are presently available to cover the most popular temperature ranges, although it is intended to add further ranges in future. All thermometers are made in the UK and are fitted with a **Brannan** non-roll end cap which has a ring to allow the thermometer to be suspended. The thermometers are supplied as standard in protective individual, resealable, telescopic tubes. Packed in box of 10 thermometers. All laboratory thermometers can be supplied with UKAS Calibration Certificate or Statement of Conformity on request.

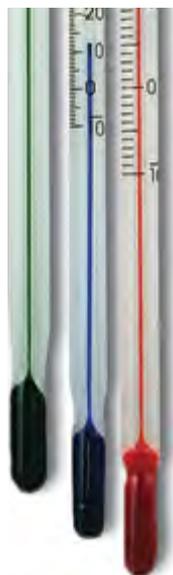


Range °C only	Division	Length	Filling Colour	76mm Immersion	
				Accuracy	Product No
-35 to +50°C	1.0°C	305mm	Green	+/-1.0°C @ 35°C	46/700/0
-10 to +110°C	1.0°C	305mm	Green	+/-1.0°C @ 35°C	46/703/0
-10 to +150°C	1.0°C	305mm	Green	+/-1.0°C @ 35°C	46/706/0

Range °C only	Division	Length	Filling Colour	76mm Immersion	
				Accuracy	Product No
-35 to +50°C	1.0°C	305mm	Green	+/-1.0°C @ 35°C	46/700/1
-10 to +110°C	1.0°C	305mm	Green	+/-1.0°C @ 35°C	46/703/1
-10 to +150°C	1.0°C	305mm	Green	+/-1.0°C @ 35°C	46/706/1



General Purpose Spirit Filled Lab Thermometers



These thermometers use specially selected filling material covering temperatures down to -200°C . Normal fillings are coloured red on a white back glass but alternative colours are available as shown. The -200°C range thermometers are filled with a colourless liquid.

Thermometers normally supplied with a non-roll end cap which has a ring to allow the thermometer to be suspended. The thermometers are supplied as standard in protective PVC packaging but are also available in individual, resealable, telescopic tubes. Both styles of packaging are boxed in pack of 10 thermometers.

All laboratory thermometers can be supplied with UKAS Calibration Certificate or Statement of Conformity on request.

The tables below show our standard thermometers, however other ranges are available on request.



Statement of Conformity Available



Range $^{\circ}\text{C}$ only	Division	Length	Filling Colour	76mm Immersion		Total Immersion	
				Accuracy	Product No	Accuracy	Product No
-10 to $+50^{\circ}\text{C}$	1.0°C	150mm	Red	-	-	$\pm 1.0^{\circ}\text{C}$ @ 35°C	44/450/0
-10 to $+110^{\circ}\text{C}$	1.0°C	150mm	Red	-	-	$\pm 1.5^{\circ}\text{C}$ @ 35°C	44/430/0
-10 to $+110^{\circ}\text{C}$	1.0°C	150mm	Green	-	-	$\pm 1.5^{\circ}\text{C}$ @ 35°C	44/430/5#
-10 to $+110^{\circ}\text{C}$	1.0°C	150mm	Blue	-	-	$\pm 1.5^{\circ}\text{C}$ @ 35°C	44/430/7
-10 to $+60^{\circ}\text{C}$	1.0°C	205mm	Red	$\pm 1.5^{\circ}\text{C}$ @ 35°C	44/105/1	$\pm 1.5^{\circ}\text{C}$ @ 35°C	44/105/2
-10 to $+110^{\circ}\text{C}$	1.0°C	205mm	Red	$\pm 1.5^{\circ}\text{C}$ @ 35°C	44/423/0	$\pm 1.5^{\circ}\text{C}$ @ 35°C	44/100/4
-10 to $+150^{\circ}\text{C}$	1.0°C	205mm	Red	$\pm 2.0^{\circ}\text{C}$ @ 35°C	44/441/0	$\pm 2.0^{\circ}\text{C}$ @ 35°C	44/442/0
-10 to $+110^{\circ}\text{C}$	1.0°C	205mm	Green	$\pm 1.5^{\circ}\text{C}$ @ 35°C	44/423/5#	-	-
-10 to $+110^{\circ}\text{C}$	1.0°C	250mm	Red	$\pm 1.0^{\circ}\text{C}$ @ 35°C	44/417/0	$\pm 1.0^{\circ}\text{C}$ @ 35°C	44/107/1
-10 to $+150^{\circ}\text{C}$	1.0°C	250mm	Red	$\pm 1.0^{\circ}\text{C}$ @ 35°C	44/105/5	$\pm 1.0^{\circ}\text{C}$ @ 35°C	44/100/5
-100 to $+50^{\circ}\text{C}$	1.0°C	305mm	Red	$\pm 2.0^{\circ}\text{C}$ @ 0°C	46/457/0	$\pm 2.0^{\circ}\text{C}$ @ 0°C	46/456/0
-80 to $+30^{\circ}\text{C}$	1.0°C	305mm	Red	-	-	$\pm 2.0^{\circ}\text{C}$ @ 0°C	46/438/0
-50 to $+50^{\circ}\text{C}$	1.0°C	305mm	Red	$\pm 1.0^{\circ}\text{C}$ @ 0°C	46/540/0	$\pm 1.5^{\circ}\text{C}$ @ 35°C	46/539/0
-10 to $+50^{\circ}\text{C}$	0.5°C	305mm	Red	$\pm 0.5^{\circ}\text{C}$ @ 35°C	44/401/0	$\pm 0.5^{\circ}\text{C}$ @ 35°C	44/401/1
-10 to $+110^{\circ}\text{C}$	1.0°C	305mm	Red	$\pm 1.0^{\circ}\text{C}$ @ 35°C	44/403/0	$\pm 1.0^{\circ}\text{C}$ @ 35°C	44/010/8*
-10 to $+110^{\circ}\text{C}$	1.0°C	305mm	Green	$\pm 1.0^{\circ}\text{C}$ @ 35°C	44/403/5#	-	-
-10 to $+110^{\circ}\text{C}$	1.0°C	305mm	Blue	$\pm 1.0^{\circ}\text{C}$ @ 35°C	44/403/7	$\pm 1.0^{\circ}\text{C}$ @ 35°C	44/010/7**
-10 to $+110^{\circ}\text{C}$	0.5°C	305mm	Red	$\pm 2.0^{\circ}\text{C}$ @ 90°C	44/803/0	-	-
-10 to $+150^{\circ}\text{C}$	1.0°C	305mm	Red	$\pm 1.0^{\circ}\text{C}$ @ 35°C	44/406/0	$\pm 1.0^{\circ}\text{C}$ @ 35°C	44/011/8*
-10 to $+200^{\circ}\text{C}$	1.0°C	305mm	Blue	$\pm 2.0^{\circ}\text{C}$ @ 90°C	44/408/0	$\pm 2.0^{\circ}\text{C}$ @ 90°C	44/408/1

* Range: -20 to $+150^{\circ}\text{C}$.

* Range: -20 to $+110^{\circ}\text{C}$.

Tri-top tube, rather than non-roll cap.

See page 16 of this catalogue for details of Tri-top thermometers.



The tables below shows thermometers with yellow back glass.

Range $^{\circ}\text{C}$ only	Division	Length	Filling Colour	76mm Immersion		Total Immersion	
				Accuracy	Product No	Accuracy	Product No
-20 to $+110^{\circ}\text{C}$	1.0°C	305mm	Red	$\pm 1.0^{\circ}\text{C}$ @ 35°C	44/302/8	$\pm 1.0^{\circ}\text{C}$ @ 35°C	44/310/8
-20 to $+150^{\circ}\text{C}$	1.0°C	305mm	Red	$\pm 1.5^{\circ}\text{C}$ @ 35°C	44/303/8	$\pm 1.5^{\circ}\text{C}$ @ 35°C	44/311/8

Range $^{\circ}\text{C}\&\text{F}$	Division	Length	Filling Colour	76mm Immersion		Total Immersion	
				Accuracy	Product No	Accuracy	Product No
-20 to $+110^{\circ}\text{C}\&\text{F}$	$1^{\circ}\text{C}/2^{\circ}\text{F}$	305mm	Red	$\pm 1.0^{\circ}\text{C}$ @ 35°C	44/302/9	-	-
-20 to $+150^{\circ}\text{C}\&\text{F}$	$1^{\circ}\text{C}/2^{\circ}\text{F}$	305mm	Red	$\pm 1.5^{\circ}\text{C}$ @ 35°C	44/303/9	-	-



Following of the ban on specification mercury laboratory thermometers in October 2017, **S.Brannan & Sons** has developed a range of spirit filled, high precision thermometers. These thermometers are supplied complete with a traceable calibration certificate and are presented in a sturdy box for storage. The thermometers are made to the highest possible standards and are checked at every stage of manufacture to the requirements of our ISO 9001 Quality Management System. In addition to our standard checks, these High Precision Specification Thermometers are calibrated at two or three separate points across their working range. This range of thermometers are fully manufactured and certified in our factory in the UK and delivery is available within 7 working days.



Filling	Tube Length	Range	Divs	Product Number		No of Points*
				76mm Immersion	Total Immersion	
Blue Spirit	405mm	0 to +40°C	0.1°C	50/500/0	50/510/0	2 pts
		0 to +40°C	0.2°C	50/501/0	50/511/0	
		-1 to +51°C	0.1°C	50/502/0	50/512/0	
		-1 to +51°C	0.2°C	50/503/0	50/513/0	
		-1 to +101°C	0.2°C	50/504/0	50/514/0	
		-1 to +201°C	0.5°C	50/505/0	50/515/0	3 pts
	-1 to +250°C	0.5°C	50/506/0	-		
	305mm	-35 to +50°C	0.5°C	50/520/0	50/525/0	2 pts
		-20 to +110°C	0.5°C	50/521/0	50/526/0	3 pts
		-20 to +150°C	0.5°C	50/522/0	50/527/0	
-10 to +50°C		0.5°C	50/523/0	50/528/0	2 pts	
205mm	-10 to +150°C	1.0°C	50/531/0	50/536/0	3 pts	
Red Spirit Low Range	305mm	-100 to +50°C	1.0°C	50/550/0	50/555/0	2 pts
		-80 to +30°C	1.0°C	50/551/0	50/556/0	
		-50 to +50°C	1.0°C	50/552/0	50/557/0	
	205mm	-10 to +110°C	1.0°C	50/530/0	50/535/0	3 pts
		0 to +50°C	1.0°C	50/532/0	50/537/0	2 pts

* Calibration points for two point calibration are 0 & 35°C. Calibration points for three point calibration are 0, 35 & 90°C.

breaksafe™ Coated LO-tox™ Laboratory Thermometers



Laboratory Thermometers

The **Brannan breaksafe™** range of laboratory thermometers are offered in choice of Fluoro Ethylene Propylene (FEP) or PVC coating to contain any glass or filling material in the event of breakage.

The FEP material is completely transparent and offers resistance to virtually all chemicals and UV radiation. Properties of FEP coating include:

- Virtual total chemical and solvent resistance
- Working temperature from -200 to +200°C
- Non stick surface
- Naturally non-inflammable
- Non toxic



Statement of Conformity Available



The **Brannan breaksafe™** PVC coated range of laboratory thermometers offers a low cost alternative to the Fluoro Ethylene Polyene (FEP) coated thermometers whilst still offering a high level of thermometer protection.

All **breaksafe™** thermometers are supplied with **Brannan's** unique **LO-tox** filling and can be supplied with UKAS Calibration Certificate or Statement of Conformity on request.

The below photograph shows a broken laboratory thermometer with glass and spirit held safely within the **breaksafe™** sleeve.



breaksafe™ FEP Coated LO-tox™ Laboratory Thermometers

Range °C only	Division	Length	76mm Immersion		Total Immersion	
			Accuracy	Product No	Accuracy	Product No
-10 to +110°C	1.0°C	155mm	-	-	+/-1.5°C @ 35°C	44/930/7
-20 to +110°C	1.0°C	305mm	+/-1.0°C @ 35°C	44/902/8	+/-1.0°C @ 35°C	44/910/8
-20 to +150°C	1.0°C	305mm	+/-1.0°C @ 35°C	44/903/8	+/-1.0°C @ 35°C	44/911/8
-20 to +210°C	1.0°C	405mm	+/-2.0°C @ 90°C	44/905/8	+/-1.0°C @ 35°C	44/912/8
-1 to +51°C	0.1°C	405mm	+/-1.0°C @ 35°C	44/920/0	+/-0.5°C @ 35°C	44/921/0
-1 to +51°C	0.2°C	405mm	+/-1.0°C @ 35°C	44/922/0	+/-0.5°C @ 35°C	44/923/0
-1 to +101°C	0.2°C	405mm	+/-1.0°C @ 35°C	44/924/0	+/-0.5°C @ 35°C	44/925/0

breaksafe™ PVC Coated LO-tox™ Laboratory Thermometers

Range °C only	Division	Length	76mm Immersion		Total Immersion	
			Accuracy	Product No	Accuracy	Product No
-10 to +50°C	1.0°C	155mm	-	-	+/-1.0°C @ 35°C	44/550/7
-10 to +110°C	1.0°C	155mm	-	-	+/-1.0°C @ 35°C	44/530/7
-35 to +50°C	1.0°C	305mm	+/-1.0°C @ 35°C	44/501/8	+/-1.0°C @ 35°C	44/509/8
-10 to +50°C	0.5°C	305mm	+/-0.5°C @ 35°C	44/500/8	+/-0.5°C @ 35°C	44/508/8
-20 to +110°C	1.0°C	305mm	+/-1.0°C @ 35°C	44/502/8	+/-1.0°C @ 35°C	44/510/8
-1 to +51°C	0.1°C	405mm	+/-1.0°C @ 35°C	44/520/0	+/-0.5°C @ 35°C	44/521/0
-1 to +51°C	0.2°C	405mm	+/-1.0°C @ 35°C	44/522/0	+/-0.5°C @ 35°C	44/523/0
-1 to +51°C	0.2°C	405mm	+/-1.0°C @ 35°C	44/524/0	+/-0.5°C @ 35°C	44/525/0



initial™ Brand Laboratory Thermometers

The **initial™** Brand range of laboratory thermometers offer a significant saving on our standard range of thermometers while making no compromises to the traditional **Brannan** quality and accuracy. This entry level range is now available in a choice of green or blue spirit filling and have Tri-top, moulded glass non-roll device to help prevent breakage. These thermometers are printed with a clear, easy-to-read scale making them particularly suitable for student use.



Range °C only	Division	Length	Filling Colour	76mm Immersion		Total Immersion	
				Accuracy	Product No	Accuracy	Product No
-10 to +110°C	1.0°C	150mm	Green	-	-	+/-2.0°C @ 35°C	46/330/5
-10 to +110°C	1.0°C	150mm	Blue	-	-	+/-2.0°C @ 35°C	46/330/7
-10 to +110°C	1.0°C	200mm	Green	+/-1.5°C @ 35°C	46/323/5	-	-
-10 to +110°C	1.0°C	200mm	Blue	+/-1.5°C @ 35°C	46/323/7	-	-
-10 to +110°C	1.0°C	300mm	Green	+/-1.5°C @ 35°C	46/303/5	-	-
-10 to +110°C	1.0°C	300mm	Blue	+/-1.5°C @ 35°C	46/303/7	-	-
PVC Coated initial™ Brand* Thermometers - Green Filling*							
-10 to +110°C	1.0°C	200mm	Green	+/-1.5°C @ 35°C	44/425/0	-	-
Uncalibrated Thermometers (for student calibration)							
Covers Range		305mm	Green	-	46/603/5	-	-
-10 to +110°C		305mm	Blue	-	46/603/7	-	-

* For details about the full range of PVC coated thermometers, please see previous page of this catalogue

Educational Classroom Kits

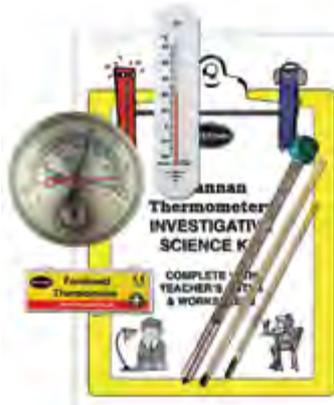
The following kits have been developed for use in the classroom to assist teachers to operate within the National Curriculum.



Classroom Kit

This kit has been developed for use in the classroom. It comes complete with a variety of **initial™** Brand laboratory thermometers and a set of 'Classroom' notes and photocopiable worksheets.

25/700/0

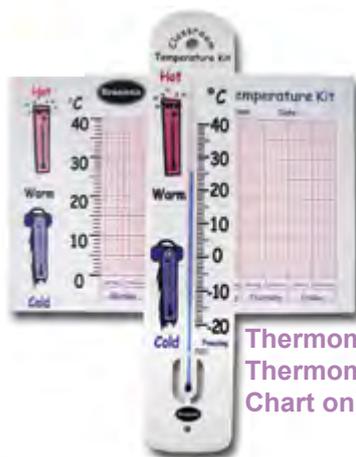


Investigative Science Kit

Investigative Science Kit comprising a variety of instruments including **initial™** Brand laboratory thermometers, dial max/min, soil thermometer and clinical thermometer together with a booklet

of 'Investigative Science' notes.

25/701/0



Classroom Wall Kit

Colourful 380mm plastic wall thermometer and chart for recording temperatures.

Thermometer and Chart: 25/702/0

Thermometer only: 25/703/0

Chart only: 25/704/0



New

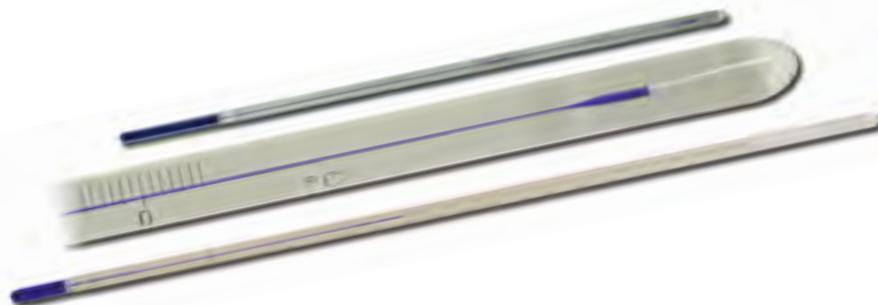


The following thermometers have been developed (product references 55/---/-) as spirit filled alternatives to the standard mercury filled ASTM thermometers. Those marked with an "S", ie "S5C", are exact equivalents to the ASTM Standard and are manufactured to E2251-14 "Liquid-in Glass ASTM Thermometers with Low Hazard Precision Liquids", others are produced similar to the Standard. The thermometers marked * are spirit filled thermometers from the original ASTM series and are still available. A range of IP equivalent thermometers are also being developed (product references 56/---/-).

All these thermometers can be supplied with UKAS Calibration Certificate or Statement of Conformity on request.

Please ask our Sales Team for information.

Statement of Conformity Available



Equivalent ASTM Number	Name	Range	Division	Max Length	Immersion	Product Number
1C	Partial Immersion	-20 to +150°C	1.0°C	327mm	76mm	55/001/2
1F	Partial Immersion	0 to +302°F	2.0°F	327mm	76mm	55/001/1
S5C	Cloud & Pour	-38 to +50°C	1.0°C	235mm	108mm	55/005/2
S5F	Cloud & Pour	-36 to +120°F	2.0°F	235mm	108mm	55/005/1
*6C (IP 2C)	Low Cloud & Pour	-80 to +20°C	1.0°C	235mm	76mm	58/002/2
*6F	Low Cloud & Pour	-112 to +70°F	2.0°F	235mm	76mm	59/006/1
9C	Low Pensky-Martens	-5 to +110°C	0.5°C	295mm	57mm	55/009/2
9F	Low Pensky-Martens	+20 to +230°F	1.0°F	295mm	57mm	55/009/1
S12C	Density Wide Range	-20 to +102°C	0.2°C	425mm	Total	55/012/2
S12F	Density Wide Range	+5 to +215°F	0.5°F	425mm	Total	55/012/1
13C	Loss on Heating	+155 to +170°C	0.5°C	160mm	Total	55/013/2#
14C	Wax Melting Point	+38 to +82°C	0.1°C	380mm	79mm	55/014/2
14F	Wax Melting Point	+100 to +180°F	0.2°F	380mm	79mm	55/014/1
S15C	Low Softening Point	-2 to +80°C	0.2°C	400mm	Total	55/015/2
S15F	Low Softening Point	-30 to +180°F	0.5°F	400mm	Total	55/015/1
16C	High Softening Point	+30 to +200°C	0.5°C	400mm	Total	55/016/2
16F	High Softening Point	+85 to +392°C	1.0°F	400mm	Total	55/016/1
17C	Saybolt Viscosity	+19 to +27°C	0.1°C	280mm	Total	55/017/2
17F	Saybolt Viscosity	+66 to +80°F	0.2°F	280mm	Total	55/017/1
S18C	Reid Vapour Pressure	+34 to +42°C	0.1°C	280mm	Total	55/018/2
S18F	Reid Vapour Pressure	+94 to +108°F	0.2°F	280mm	Total	55/018/1
19C	Saybolt Viscosity	+49 to +57°C	0.1°C	280mm	Total	55/019/2
19F	Saybolt Viscosity	+120 to +134°F	0.2°F	280mm	Total	55/019/1
20C	Saybolt Viscosity	+57 to +65°C	0.1°C	280mm	Total	55/020/2
20F	Saybolt Viscosity	+134 to +184°F	0.2°F	280mm	Total	55/020/1
21C	Saybolt Viscosity	+79 to +87°C	0.1°C	280mm	Total	55/021/2
21F	Saybolt Viscosity	+174 to +188°F	0.2°F	280mm	Total	55/021/1
S22C	Oxidation Stability	+95 to +103°C	0.1°C	280mm	Total	55/022/2
S22F	Oxidation Stability	+204 to +218°F	0.2°F	280mm	Total	55/022/1
23C	Engler Viscosity	+18 to +28°C	0.2°C	217mm	90mm	55/023/2
24C	Engler Viscosity	+39 to +54°C	0.2°C	242mm	90mm	55/024/2

Equivalent ASTM Number	Name	Range	Division	Max Length	Immersion	Product Number
25C	Engler Viscosity	+95 to +105°C	0.2°C	217mm	90mm	55/025/2
26C	Nitrocellulose Stability	+130 to +140°C	0.1°C	468mm	Total	55/026/2
27C	Turpentine Distillation	+147 to +182°C	0.5°C	306mm	76mm	55/027/2 ^{#1}
28C	Kinematic Viscosity	+36.6 to +39.4°C	0.05°C	310mm	Total	55/028/2
28F	Kinematic Viscosity	+97.5 to +102.5°F	0.1°F	310mm	Total	55/028/1
29C	Kinematic Viscosity	+52.6 to +55.4°C	0.05°C	310mm	Total	55/029/2
29F	Kinematic Viscosity	+127.5 to +132.5°F	0.1°F	310mm	Total	55/029/1
30F	Kinematic Viscosity	+207.5 to +212.5°F	0.1°F	310mm	Total	55/030/1
33C	Low Aniline Point	-38 to +42°C	0.2°C	425mm	50mm	55/033/2
33F	Low Aniline Point	-36.5 to +107.5°F	0.2°F	425mm	50mm	55/033/1
34C	Medium Aniline Point	+25 to +105°C	0.2°C	425mm	50mm	55/034/2
34F	Medium Aniline Point	+77 to +221°F	0.5°F	425mm	50mm	55/034/1
35C	High Aniline Point	+90 to +170°C	0.2°C	425mm	50mm	55/035/2
35F	High Aniline Point	+194 to +338°F	0.5°F	425mm	50mm	55/035/1
36C	Titer Test	-2 to +68°C	0.2°C	410mm	45mm	55/036/2
37C	Solvents Distillation	-2 to +52°C	0.2°C	400mm	100mm	55/037/2
38C	Solvents Distillation	+24 to +78°C	0.2°C	400mm	100mm	55/038/2
39C	Solvents Distillation	+48 to +102°C	0.2°C	400mm	100mm	55/039/2
40C	Solvents Distillation	+72 to +126°C	0.2°C	400mm	100mm	55/040/2
41C	Solvents Distillation	+98 to +152°C	0.2°C	400mm	100mm	55/041/2
44C	Kinematic Viscosity	+18.6 to +21.4°C	0.05°C	310mm	Total	55/044/2
44F	Kinematic Viscosity	+66.5 to +71.5°F	0.1°F	310mm	Total	55/044/1
45C	Kinematic Viscosity	+23.6 to +26.4°C	0.05°C	310mm	Total	55/045/2
45F	Kinematic Viscosity	+74.5 to +79.5°F	0.1°F	310mm	Total	55/045/1
46C	Kinematic Viscosity	+48.6 to +51.4°C	0.05°C	310mm	Total	55/046/2
46F	Kinematic Viscosity	+119.5 to +124.5°F	0.1°F	310mm	Total	55/046/1
47C	Kinematic Viscosity	+58.6 to +61.4°C	0.05°C	310mm	Total	55/047/2
47F	Kinematic Viscosity	+137.5 to +142.5°F	0.1°F	310mm	Total	55/047/1
48C	Kinematic Viscosity	+80.6 to +83.4°C	0.05°C	310mm	Total	55/048/2
48F	Kinematic Viscosity	+177.5 to +182.5°F	0.1°F	310mm	Total	55/048/1
49C	Stormer Viscosity	+20 to +70°C	0.2°C	310mm	65mm	55/049/2
50F	Gas Colorimeter Inlet	+54 to +101°F	0.1°F	473mm	Total	55/050/1
51F	Gas Colorimeter Outlet	+69 to +116°F	0.1°F	473mm	Total	55/051/1
52C	Butadiene Boiling Point Range	+10 to +5°C	0.1°C	167mm	Total	55/052/2
54C	Congealing Point	+20 to +100.6°C	0.2°C	315mm	Total	55/054/2
54F	Congealing Point	+68 to +213°F	0.5°F	315mm	Total	55/054/1
S56C	Bomb Calorimeter	+19 to +35°C	0.02°C	600mm	Total	55/056/2
S56F	Bomb Calorimeter	+66 to +95°F	0.05°F	600mm	Total	55/056/1
57C	Tag Closed Tester Low Range	+20 to +50°C	0.5°C	292mm	57mm	55/057/2
57F	Tag Closed Tester Low Range	-4 to +122°F	1.0°F	292mm	57mm	55/057/1
S58C	Tank	-34 to +49°C	0.5°C	305mm	57mm	55/058/2
S58F	Tank	-30 to +120°F	1.0°F	305mm	57mm	55/058/1
S59C	Tank	+18 to +82°C	0.5°C	305mm	57mm	55/059/2
S59F	Tank	0 to +180°F	1.0°F	305mm	57mm	55/059/1
61C	Petrolatum Melting Point	+32 to +127°C	0.2°C	385mm	79mm	55/061/2
61F	Petrolatum Melting Point	+90 to +260°F	0.5°F	385mm	79mm	55/061/1
S62C	Precision	+38 to +2°C	0.1°C	384mm	Total	55/062/2
S62F	Precision	+36 to +35°F	0.2°F	384mm	Total	55/062/1
S63C	Precision	-8 to +32°C	0.1°C	384mm	Total	55/063/2
S63F	Precision	+18 to +89°F	0.2°F	384mm	Total	55/063/1

[#] Gallium filled

Equivalent ASTM Number	Name	Range	Division	Max Length	Immersion	Product Number
S64C	Precision	+25 to +55°C	0.1°C	384mm	Total	55/064/2
S64F	Precision	+77 to +131°F	0.2°F	384mm	Total	55/064/1
S65C	Precision	+50 to +80°C	0.1°C	384mm	Total	55/065/2
S65F	Precision	+122 to +176°F	0.2°F	384mm	Total	55/065/1
S66C	Precision	+75 to +105°C	0.1°C	384mm	Total	55/066/2
S66F	Precision	+167 to +221°F	0.2°F	384mm	Total	55/066/1
S67C	Precision	+95 to +155°C	0.2°C	384mm	Total	55/067/2
S67F	Precision	+203 to +311°F	0.5°F	384mm	Total	55/067/1
68C	Precision	+145 to +205°C	0.2°C	384mm	Total	55/068/2*
68F	Precision	+293 to +401°F	0.5°F	384mm	Total	55/068/1*
71C	Oil in Wax	-37 to +21°C	0.5°C	360mm	76mm	55/071/2
71F	Oil in Wax	-35 to +70°F	1.0°F	360mm	76mm	55/071/1
72C	Kinematic Viscosity	-19.4 to -16.6°C	0.05°C	310mm	Total	55/072/2
72F	Kinematic Viscosity	-2.5 to +2.5°F	0.1°F	310mm	Total	55/072/1
73C	Kinematic Viscosity	-41.4 to -38.6°C	0.05°C	310mm	Total	55/073/2
73F	Kinematic Viscosity	-42.5 to -37.5°F	0.1°F	310mm	Total	55/073/1
75F	Coolant (Anti-Freeze) Freezing Point	-35 to +35°F	0.5°F	413mm	100mm	55/075/1
77F	Saybolt Viscosity	+245 to +265°F	0.5°F	280mm	Total	55/077/1
78F	Saybolt Viscosity	+295 to +315°F	0.5°F	280mm	Total	55/078/1
79F	Saybolt Viscosity	+345 to +365°F	0.5°F	280mm	Total	55/079/1#1
80F	Saybolt Viscosity	+395 to +415°F	0.5°F	280mm	Total	55/080/1#1
82C	Fuel Rating, Engine	-15 to +105°C	1.0°C	165mm	30mm	55/082/2
82F	Fuel Rating, Engine	0 to +220°F	2.0°F	165mm	30mm	55/082/1
83C	Fuel Rating, Air	+15 to +70°C	1.0°C	174mm	40mm	55/083/2
83F	Fuel Rating, Air	+60 to +160°F	1.0°F	174mm	40mm	55/083/1
84C	Fuel Rating, Orifice Tank	+25 to +80°C	1.0°C	387mm	249mm	55/084/2
84F	Fuel Rating, Orifice Tank	+75 to +175°F	1.0°F	387mm	249mm	55/084/1
85C	Fuel Rating, Surge	+40 to +150°C	1.0°C	314mm	181mm	55/085/2
85F	Fuel Rating, Surge	+100 to +300°F	2.0°F	314mm	181mm	55/085/1
86C	Fuel Rating, Mix	+95 to +175°C	1.0°C	170mm	35mm	55/086/2
86F	Fuel Rating, Mix	+200 to +350°F	2.0°F	170mm	35mm	55/086/1
87C	Fuel Rating, Coolant	+150 to +205°C	1.0°C	175mm	40mm	55/087/2#
87F	Fuel Rating, Coolant	+300 to +400°F	1.0°F	175mm	40mm	55/087/1#
88C	Vegetable Oil Flash	+10 to +200°C	1.0°C	292mm	57mm	55/088/2#
88F	Vegetable Oil Flash	+50 to +392°F	2.0°F	292mm	57mm	55/088/1#
89C	Solidification Point	-20 to +10°C	0.1°C	375mm	76mm	55/089/2
90C	Solidification Point	0 to +30°C	0.1°C	375mm	76mm	55/090/2
S91C	Solidification Point	+20 to +50°C	0.1°C	375mm	76mm	55/091/2
92C	Solidification Point	+40 to +70°C	0.1°C	375mm	76mm	55/092/2
93C	Solidification Point	+60 to +90°C	0.1°C	375mm	76mm	55/093/2
94C	Solidification Point	+80 to +110°C	0.1°C	375mm	76mm	55/094/2
95C	Solidification Point	+100 to +130°C	0.1°C	375mm	76mm	55/095/2
96C	Solidification Point	+120 to +150°C	0.1°C	375mm	76mm	55/096/2
97C	Tank	-18 to +49°C	0.5°C	305mm	Total	55/097/2
97F	Tank	0 to +120°F	1.0°F	305mm	Total	55/097/1
98C	Tank	+16 to +82°C	0.5°C	305mm	Total	55/098/2
98F	Tank	+60 to +180°F	1.0°F	305mm	Total	55/098/1
99C	Weathering Test	-50 to +5°C	0.2°C	305mm	35mm	55/099/2
99F	Weathering Test	-58 to +41°F	0.5°F	305mm	35mm	55/099/1

#1 Gallium filled

Equivalent ASTM Number	Name	Range	Division	Max Length	Immersion	Product Number
100C	Solidification Point	+145 to +205°C	0.2°C	375mm	76mm	55/100/2 ^{#1}
102C	Solvents Distillation	+123 to +177°C	0.2°C	400mm	100mm	55/102/2
103C	Solvents Distillation	+148 to +202°C	0.2°C	400mm	100mm	55/103/2*
104C	Solvents Distillation	+173 to +227°C	0.2°C	400mm	100mm	55/104/2 ^{#1}
108F	Saybolt Viscosity	+270 to +290°F	0.5°F	280mm	Total	55/108/1
109F	Saybolt Viscosity	+320 to +340°F	0.5°F	280mm	Total	55/109/1 ^{#1}
112C	Solidification Point of Benzene	+4 to +6°C	0.02°C	220mm	Total	55/112/2
113C	Bitumen Softening Point Wide Range	-1 to +175°C	0.5°C	410mm	Total	55/113/2
113F	Bitumen Softening Point Wide Range	+30 to +350°F	1.0°F	410mm	Total	55/113/1
S116C	Bomb Calorimeter	+18.9 to +25.1°C	0.01°C	614mm	Total	55/116/2
114C (IP14C)	Aviation Fuel Freezing Point	-80 to +20°C	0.5°C	305mm	Total	58/014/2 ^{#2}
S117C	Bomb Calorimeter	+23.9 to +30.1°C	0.01°C	614mm	Total	55/117/2
118C	Kinematic Viscosity	+28.6 to +31.4°C	0.05°C	310mm	Total	55/118/2
118F	Kinematic Viscosity	+83.5 to +88.5°F	0.1°F	310mm	Total	55/118/1
119C	Coolant (Anti-Freeze) Freezing Point	-38.3 to -30°C	0.1°C	425mm	100mm	55/119/2
119F	Coolant (Anti-Freeze) Freezing Point	-37 to -22°F	0.2°F	425mm	100mm	55/119/1
S120C	Kinematic Viscosity	+38.6 to +41.4°C	0.05°C	310mm	Total	55/120/2
121C	Kinematic Viscosity	+98.6 to +101.4°C	0.05°C	310mm	Total	55/121/2
122C	Brookfield Viscosity	-45 to -35°C	0.1°C	305mm	Total	55/122/2
123C	Brookfield Viscosity	-35 to -25°C	0.1°C	305mm	Total	55/123/2
124C	Brookfield Viscosity	-25 to -15°C	0.1°C	305mm	Total	55/124/2
125C	Brookfield Viscosity	-15 to -5°C	0.1°C	305mm	Total	55/125/2
126C	Kinematic Viscosity	-27.4 to -24.6°C	0.05°C	310mm	Total	55/126/2
126F	Kinematic Viscosity	-17.5 to -12.5°F	0.1°F	310mm	Total	55/126/1
127C	Kinematic Viscosity	-21.4 to -18.6°C	0.05°C	310mm	Total	55/127/2
128C	Kinematic Viscosity	-1.4 to +1.4°C	0.05°C	310mm	Total	55/128/2
128F	Kinematic Viscosity	+29.5 to +34.5°F	0.1°F	310mm	Total	55/128/1
129C	Kinematic Viscosity	+91.6 to +94.4°C	0.05°C	310mm	Total	55/129/2
129F	Kinematic Viscosity	+197.5 to +202.5°F	0.1°F	310mm	Total	55/129/1
S130C	Tank	-7 to +105°C	0.5°C	305mm	Total	55/130/2
130F	Tank	+20 to +220°F	1.0°F	305mm	Total	55/130/1
133C	Precision	-38 to +2°C	0.1°C	384mm	76mm	55/133/2
135C	Fuel Rating Air - High	+38 to +93°C	1.0°C	171mm	40mm	55/135/2
135F	Fuel Rating Air - High	+100 to +200°F	1.0°F	171mm	40mm	55/135/1
136C	Aviation Fuel Density	-20 to +60°C	0.2°C	290mm	Total	55/136/2
136F	Aviation Fuel Density	-5 to +140°F	0.5°F	290mm	Total	55/136/1
137C	Oxidation Cell Test	+80 to +100°C	1.0°C	255mm	76mm	55/137/2

#1 Gallium filled

#2 Toluene filled

The following laboratory thermometers are an ideal instrument where greater precision and accuracy is needed. The thermometers have been developed as spirit filled alternatives to the mercury filled BS 593 Specification Laboratory Thermometers. They are instead filled with a Low Hazard non-wetting blue liquid, except those marked with a * that are filled with gallium. The A series thermometers have divisions of 0.1°C and the B series divisions of 0.2°C. Both series are available in both 100mm and Total immersion. All these thermometers can be supplied with UKAS Calibration Certificate or Statement of Conformity on request. Please contact our sales team for more information.

Designation	Range	Division	Max Length	Immersion	Product Number
A 10C/Total	-30 to +10°C	0.1°C	405mm	Total	54/095/0
A 20C/Total	-20 to +20°C	0.1°C	405mm	Total	54/060/0
A 40C/Total	0 to +40°C	0.1°C	405mm	Total	54/061/0
A 70C/Total	+40 to +70°C	0.1°C	405mm	Total	54/062/0
A 100C/Total	+70 to +100°C	0.1°C	405mm	Total	54/063/0
A 130C/Total	+100 to +130°C	0.1°C	405mm	Total	54/064/0
A 160C/Total	+130 to +160°C	0.1°C	405mm	Total	54/065/0*
B 60C/Total	-20 to +60°C	0.2°C	405mm	Total	54/066/0
B 110C/Total	+50 to +110°C	0.2°C	405mm	Total	54/067/0
B 160C/Total	+100 to +160°C	0.2°C	405mm	Total	54/068/0*
B 210C/Total	+150 to +210°C	0.2°C	405mm	Total	54/069/0*
B 260C/Total	+200 to +260°C	0.2°C	405mm	Total	54/070/0*
A 10C/100	-30 to +10°C	0.1°C	405mm	100mm	54/001/0
A 20C/100	-20 to +20°C	0.1°C	405mm	100mm	54/002/0
A 40C/100	0 to +40°C	0.1°C	405mm	100mm	54/003/0
A 70C/100	+40 to +70°C	0.1°C	405mm	100mm	54/004/0
A 100C/100	+70 to +100°C	0.1°C	405mm	100mm	54/005/0
A 130C/100	+100 to +130°C	0.1°C	405mm	100mm	54/006/0
160C/100	+130 to +160°C	0.1°C	405mm	100mm	54/007/0*
B 60C/Total	-20 to +60°C	0.2°C	405mm	100mm	54/008/0
B 110C/Total	+50 to +110°C	0.2°C	405mm	100mm	54/009/0
B 160C/Total	+100 to +160°C	0.2°C	405mm	100mm	54/010/0*
B 210C/Total	+150 to +210°C	0.2°C	405mm	100mm	54/011/0*
B 260C/Total	+200 to +260°C	0.2°C	405mm	100mm	54/012/0*

* Gallium filled

UKAS Calibration Certification

All our laboratory thermometers can be supplied with full UKAS Certification on request.

Our facilities conform to (BS) EN ISO/IEC 17025:2005 – ‘General requirements for the competence of testing and calibration laboratories’. For temperature measurement our laboratory can calibrate all types of liquid-in-glass thermometers i.e. both spirit and mercury. Certification is available for test temperatures between -60°C and +250°C.

See Calibration section of this catalogue, or contact our Sales Team for more details.



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Digital & Electronic Instrumentation

Probe Thermometers
Max Min Thermometers
Environmental Instrumentation
K-Type Probes
Timers, Stopwatches & Tally Counters

Remote Reading Thermometers
Infrared Instrumentation
Thermocouple Thermometers
Data Loggers

Brannan



Digital & Electronic Instruments - Introduction

Digital & Electronic

All **Brannan** instruments are supplied complete with battery and full instructions and are CE, WEEE and RoHS compliant. Full certification is available via our website.



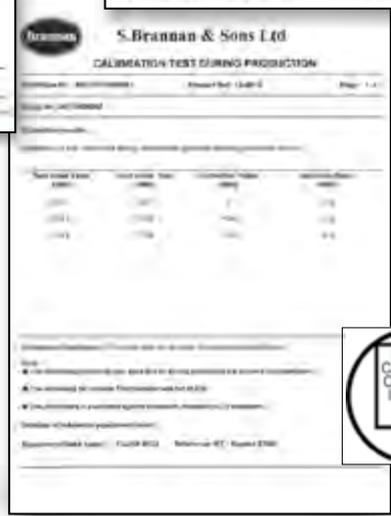
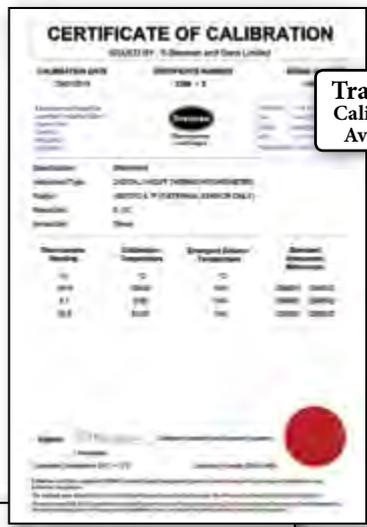
All electronic instruments can be supplied with certificate traceable to Recognised National Standard or a Statement of Conformity, if required and a wide range of our instruments can be supplied with UKAS Calibration Certification. In addition, our environmental range of instruments and our Infrared thermometers are supplied complete with factory calibration certificate. Please contact us for advice on the most appropriate certification for your instrument and for quotation.

0582

UKAS Calibration Certificate upon request

Traceable Calibration Available

Statement of Conformity Available



Factory Calibration Certificate Included

Brannan is pleased to introduce a co-ordinating range of mini, hand held, environmental instrumentation to measure wind speed, sound levels, light, humidity and temperature. All instruments are supplied complete with Factory Certificate of Calibration, battery and full instructions. All electronic instruments are CE, WEEE and RoHS compliant. Full certification is available via our website.

New



1. Thermo-Moisture Meter

Simultaneous measurement and display of moisture and temperature readings. Suitable for use on woods, bamboo, paper, wood fibre articles and building materials. Large colour LCD. Moisture level indication by tricolor LED bar graph. Flashlight, Max and data hold, auto power off. Supplied in protective pouch with calibration certificate and 2pcs replaceable electrode pins.

13/450/0



Traceable Calibration Available



2. Mini Thermo-Anemometer

Wind speed meter to measure air velocity with colour LCD. User selectable units, max/min and data hold functions.

13/470/0

Traceable Calibration: **49/705/0****

3. Mini Thermo-Sound Level Meter

Mini meter to measure sound level with colour LCD. Max/min and data hold functions.

13/471/0

Traceable Calibration: **49/706/0****



4. Mini Thermo-Light Meter

Hand held meter to measure illuminance. Silicone photo-diode with spectral response filter. Features include max/min recording, colour LCD and user selectable units.

13/472/0

Traceable Calibration: **49/707/0****



5. Mini Thermo-Humidity Meter

A digital instrument which has been designed to combine the functions of a thermometer and humidity Meter.

Features user selectable units, max/min recording and data hold function and colour LCD.

13/473/0

Traceable Calibration: **49/708/0****



**Additional charge applies

Description	Range	Basic Accuracy*	Other Functions	LCD Dimensions	Product Dimensions	Product Number
1. Mini Moisture Meter	Wood: 5 to 70%RH, Other: 0.1 to 2.4%RH Temp: -20 to 70°C&F	0.5%RH	Max/min & data hold Flashlight	35 x 28mm	129.8 x 55.8 x 26.5mm	13/450/0
2. Mini Anemometer	0.4 to 30 m/s, 1.4 to 108 km/s 0.9 to 67 Mph 0.8 to 88 knots,	+/- 3% rdg	Max/min & data hold	30 x 28mm	178.5 x 56 x 30.5mm	13/470/0
3. Mini Sound Level Meter	35 to 135dB,	+/- 2.0db	Max/min & data hold	30 x 28mm	144 x 56 x 30.5mm	13/471/0
4. Mini Light Meter	0 to 200 klux, 0 & 20 kFc	+/- 3% rdg	Max/min & data hold	30 x 28mm	174.5 x 56 x 30.5mm	13/472/0
5. Mini Humidity Temperature Meter	Humidity: 0 to 100%RH Temp: -30 to 70°C&F	+/- 2%RH +/- 2.5°C&F	Max/min & data hold	30 x 28mm	168 x 56 x 30.5mm	13/473/0

* Accuracy is listed as best across the range. Individual product data sheets are available for full accuracy details.

Brannan is pleased to introduce a co-ordinating range of professional, environmental instrumentation to measure wind speed, sound levels, light, humidity and temperature. All instruments are supplied in a heavy duty carry case with battery and full instructions and come complete with Certificate of Calibration.

All electronic instruments are CE, WEEE and RoHS compliant. Full certification is available via our website.



Traceable Calibration Available

1. Professional CFM/CMM Anemometer & Thermometer

Wind speed meter to measure air velocity, air flow and air temperature. User selectable units, max/min and data hold functions.

13/460/0

Traceable Calibration: **49/700/0***



2. Professional Sound Level Meter

Meter to measure sound level. Analogue AC/DC outputs for connection to frequency analyser or X-Y shaft recorder.

13/461/0

Traceable Calibration: **49/701/0***



3. Professional Light Meter

Precision instrument used to measure illuminance in the field. It meets CIE photopic spectral response and features PEAK capture, max/min and data hold functions and overload indicator.

13/462/0

Traceable Calibration: **49/702/0***

* Traceable Calibration Certificates available on request. Additional charge applies.



Traceable Calibration Available



4. Professional Humidity and Dew Point Temperature Meter

A digital instrument which has been designed to combine the functions of a thermometer and humidity meter with dew point indicator.

13/463/0

Traceable Calibration: **49/703/0***



5. Profession, 5-in-1, Multi-Function, Environment Meter

5-in-1 meter designed to measure sound, light, wind speed, humidity and temperature, suitable for professional and home use.

13/464/0

Traceable Calibration: **49/704/0***

Replacement vanes available: Lightmeter: **13/464/1**,
Anemometer: **13/464/2**, Thermo-Hygrometer: **13/464/3**



All Professional Meters supplied in robust carry case.

Replacement Carry Case: **13/092/0**



Description	Range	Basic Accuracy**	Other Functions	LCD Dimensions	Product Dimensions	Product Number
1. Anemometer & Thermometer	Air Velocity: 0.3 to 45 m/s, 1 to 162 km/hr, 59 to 8858 ft/min, 0.5 to 87.5 knots, 0.6 to 100.6 Mph Temp: -30 to 60°C&F	+/- 3% rdg +/-1.5°C&F	Max/min, data hold User selectable units	55 x 45mm	185 x 66 x 33mm	13/460/0
2. Sound Level Meter	Lo: 30 to 80dB, Med: 50 to 100dB Hi: 80 to 130dB, Auto: 30 to 130dB	+/-1.4db	Max/min record Over/under input alarm	55 x 45mm	252 x 66 x 33mm	13/461/0
3. Light Meter	40 to 400 klux 0 & 40 kFc	+/- 3% rdg	Max/min, data hold PEAK capture	55 x 45mm	185 x 66 x 33mm	13/462/0
4. Dew Point Thermometer & Humidity Meter	Temp: -35 to 100°C&F Humidity: 0 to 100%RH Dew Point Temp: -35 to 100°C&F	+/- 0.5°C&F +/- 2%RH +/- 1°C&F	Max/min, data hold Calibration function	55 x 45mm	261 x 66 x 33mm	13/463/0
5. Multi Function, 5-in-1 Environment Meter	Temp: -40 to 70°C&F Humidity: 10 to 95%RH Sound: 35 to 130dB Light: 0 to 400kLux / 0 to 40kFc Air Velocity: 0.3 to 45.0 m/s, 1.0 to 162 km/hr, 59 to 8858 ft/min, 0.5 to 87.5 knots, 0.6 to 100.6 Mph	+/- 2°C&F +/- 5%RH +/- 2dB +/- 3% rdg +/-3% rdg	Max/min, data hold	55 x 45mm	252 x 66 x 33mm	13/464/0

** Accuracy is listed as best across the range. Individual product data sheets are available for full accuracy details.

The following is our range of digital probe thermometers and are suitable for a variety of applications:

- Air conditioning
- Heating & ventilation
- Agriculture
- Photography
- Pharmaceutical
- Process Control
- Food Processing & Storage
- Energy Management
- Petrocarbons
- Refrigeration
- Brewing
- Laboratory

Traceable Calibration Available

Statement of Conformity Available

Probe thermometers can be supplied with UKAS Calibration Certificate or Statement of Conformity on request (for an additional charge). See table for full specifications.



1. Short Pocket Test Thermometer
Water resistant thermometer with max/min memory and 110mm stainless steel probe.
31/155/0



2. Vertical Barrel Test Thermometer
Test thermometer with vertical display. 120mm stainless steel probe.
31/160/0



4. Waterproof Test Thermometer
Dishwasher safe to 88°C
Waterproof thermometer to IPX7. Suitable for use in dishwasher during cycle. With max/min memory and hold functions and 115mm stainless steel probe.
31/164/0

3. Water Resistant Test Thermometer
Water resistant thermometer to IP65. With max/min memory and hold functions and 120mm stainless steel probe.
31/162/0



New



5. Stainless Steel Water Resistant Test Thermometer
Robust stainless steel, water resistant thermometer to IP65, with data hold function. 120mm stainless steel probe.
31/165/0



6. Folding Probe Test Thermometer
Probe thermometer with data hold function and 85mm stainless steel probe which folds in and out of the body of the thermometer for protection. Water resistant to IP65.
31/175/0



7. Hand Held Waterproof HACCP Thermometer

Hand held thermometer **waterproof to IP68**. 1.35m cable with 150mm stainless steel probe. Supplied complete with calibration certificate.

38/600/0



New

8. Hand Held Thermometer

Digital thermometer with robust 125mm stainless steel probe with 1.5m lead.

38/650/0

Replacement Probe - 38/650/1



UKAS
Calibration Certificate
upon request



9. Hand Held Thermometer with Alarm & Timer

Twin display thermometer with 1m cable and 235mm stainless steel probe.

38/660/0

Replacement Probe - 38/660/1



Anti-Bacterial Probe Wipes

200 disinfectant probe wipes in hygienic sealed tub. Kill harmful bacterial without water.

Dimensions: 165 x Ø85mm.

13/670/0



Thermometer Description	Range	Max/Min Function	Water Resistant	Probe Length	LCD Dimensions	Product Dimensions	Product Number	Replacement Probe
1. Short Test	-10 to +200°C&F	✓	IPX4	110mm	9 x 16mm	175 x 48 x 15mm	31/155/0	-
2. Vertical Barrel	-50 to +150°C&F	✗	✗	120mm	7 x 17mm	195 x 21 x 21mm	31/160/0	-
3. Water Resistant	-40 to +200°C&F	✓	IP65	120mm	7 x 17mm	200 x 20 x 15mm	31/162/0	-
4. Dishwasher Safe	-40 to +250°C&F	✓	IPX7	115mm	15 x 25mm	212 x 36 x 16mm	31/164/0	-
5. SS Water Resistant	-40 to +200°C&F	✗	IP65	120mm	11 x 30mm	190 x 25 x 12mm	31/165/0	-
6. Folding Probe	-50 to +300°C&F	✓	IP65	97mm	8 x 19mm	119 x 30 x 18mm	31/170/0	-
7. HACCP Hand Held	-40 to +300°C&F	✓	IP68	115mm	15 x 25mm	106 x 54 x 23.5mm	38/600/0	-
8. Hand Held	-50 to +200°C&F	✓	✗	1.5m	16 x 36mm	97 x 65 x 20mm	38/650/0	38/650/1
9. Hand Held with Alarm	-50 to +300°C&F	✓	✗	1.0m	16 x 36mm	97 x 65 x 20mm	38/660/0	38/660/1

* Accuracy is listed as best across the range. Individual product data sheets are available for full accuracy details.

Brannan thermocouple instruments are supplied complete with basic probe. Some models are also compatible with our range of K-type probes to extend temperature measurements. These instruments have large, easy to read LCDs and are supplied with batteries and detailed instructions. Probe thermometers can be supplied with UKAS Calibration Certificate or Statement of Conformity on request (for an additional charge).

All electronic instruments are CE, WEEE and RoHs compliant. Full certification is available via our website.



1. Waterproof PT100 Thermometer

A high accuracy, waterproof (IP67) thermometer with PT100 probe for a wide range of demanding applications. Max/Min/Avg operations. 120mm probe with 1100mm cable. **38/670/0**



2. K-Type/J-Type 4-Input Thermocouple Thermometer

A professional instrument with 4 inputs providing up to 4 simultaneous readings from J-Type or K-type thermocouples sensors. Readout in °C, °F or Kelvin. Supplied complete with carry case and basic K-type beaded wire thermocouples. Compatible with all **Brannan** K-Type probes. **38/685/0**



* Accuracy is listed as best across the range.

Description	Range	Basic Accuracy*	Included Probe	LCD Dimensions	Product Dimensions	Product Number
1. Waterproof PT100 Thermometer	Probe: -100 to 300°C&F	+/-0.4°C	PT100	40 x 40mm	150 x 66 x 31mm	38/670/0
1. Replacement Probe	-	-	-	-	-	38/670/1
2. K-type / J-Type 4-Input Thermocouple Thermometer	Probe: -200 to 1372°C&F	+/-1°C	4 x K-Type	55 x 45mm	184 x 66 x 33mm	38/685/0
2. Replacement Thermocouple	-	-	-	-	-	38/698/0

Brannan range of K-Type probes widen the temperature range of compatible products and also improve access to objects to be measured where more remote reading is required due to limited accessibility or for safety reasons.

1. K-Type Probe for Solids & Liquids

200mm stainless steel probe with 130mm handle. Range: -50 to +800°C&F* **38/690/0**

2. K-Type Probe for Gas & Air

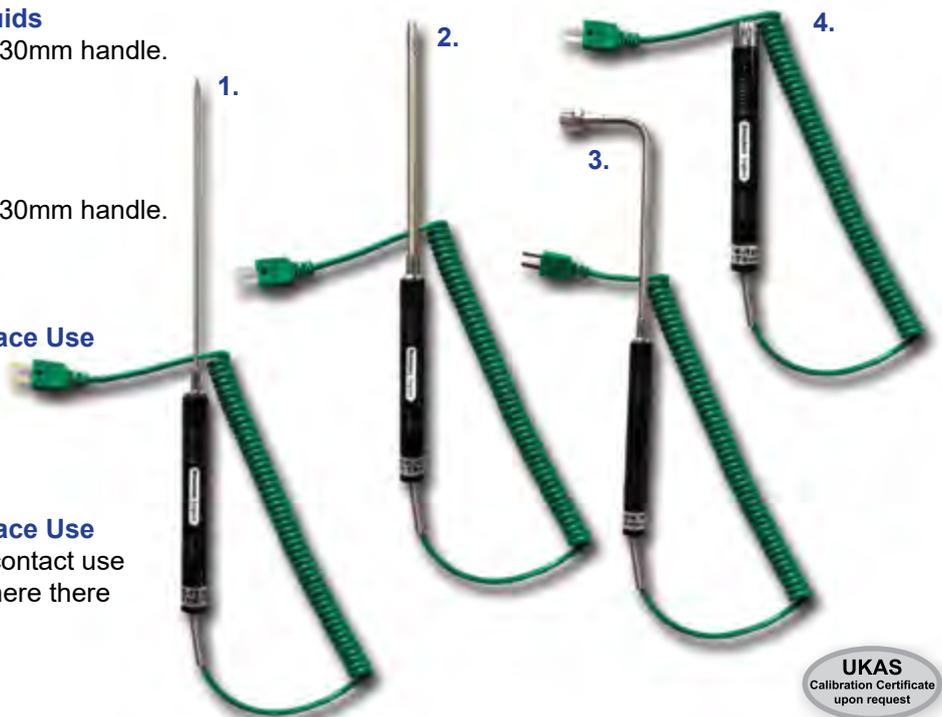
165mm stainless steel probe with 130mm handle. Range: -50 to +800°C&F* **38/691/0**

3. K-Type Probe for Contact/Surface Use

210mm stainless steel probe with 130mm handle. Range: -50 to +450°C&F **38/692/0**

4. K-Type Probe for Contact/Surface Use

K-Type set into 115mm handle for contact use to measure surface temperature where there is insufficient space for a probe. Range: -50 to +450°C&F **38/693/0**



* Note: The thermocouple in these devices can be used for temperatures up to +800°C&F, but for prolonged use at high temperatures and for all applications above 500°C&F, the handles should be protected against the effects of radiant heat.

Max/Min Wall Thermometers

In addition to the traditional liquid-in-glass max/min thermometers, the following is our range of electronic max/min instruments with triple display showing maximum, minimum and current temperature. All these instruments have hanging hook for wall mounting. All digital instruments are supplied with batteries and full instructions.



1. Large Electronic Max/Min Thermometers
Robust digital max/min thermometers in white or green moulding.



White: 12/426/3
Green: 12/427/3

BEST SELLERS

Statement of Conformity Available

Traceable Calibration Available



2. Electronic Max/Min Thermometer with Roof
Attractive max/min thermometer with roof.
12/428/3



3. Classic Design Max/Min Thermometers with Roof
Digital thermometer modelled on traditional liquid-in-glass style max/min design but with digital display.
12/429/3



Thermometer Description	Range	Basic Accuracy	LCD Dimensions	Product Dimensions	Product Number
1. Large Max/Min Thermometer - White	-10 to +50°C&F	+/-1°C	79 x 60mm	160 x 78 x 31mm	12/426/3
1. Large Max/Min Thermometer - Green	-10 to +50°C&F	+/-1°C	79 x 60mm	160 x 78 x 31mm	12/427/3
2. Max/Min Thermometer with Roof	-10 to +50°C&F	+/-1°C	47 x 39mm	150 x 80 x 29mm	12/428/3
3. Classic Design Max/Min Thermometer	-20 to +50°C&F	+/-1°C	16 x 52mm	203 x 100 x 30mm	12/429/3

Remote Reading Max/Min Thermometers

Hand held digital test thermometers with probe and lead for remote reading for use where temperatures are extreme or for dual location, indoor/outdoor, etc. All models have desk stand and batteries.

1. Max/Min Indoor/Outdoor Thermometer

White moulded case with two displays for indoor and outdoor temperatures.
12/412/3



2. Weatherstation

Max/min thermometer with silvered front and black trim. Large display with simultaneous reading of temperature and humidity.
13/420/3



3. Jumbo Thermometer & Hygrometer

Twin displays to read indoor temperature and humidity or indoor and outdoor temperatures.
12/421/3



4. Twin Reading Thermometer & Humidity Meter

Instrument to measure indoor and outdoor temperature and humidity.
22/425/3



Thermometer Description	Range			Basic Temp. Accuracy*	Max/Min Function	Cable Length	LCD Dimensions	Product Dimensions	Product Number
	Indoor	Remote	Humidity						
1. Max/Min Indoor/Outdoor	0 to +50°C&F	-50 to +70°C&F	-	+/-1°C	✓	2.5m	35 x 52mm	98 x 74 x 17mm	12/412/3
1. Replacement Probe	-	-	-	-	-	2.5m	-	-	12/412/1
2. Weatherstation	-10 to +50°C&F	-50 to +70°C&F	20 to 99%RH	+/-1°C	✓	2.0m	35 x 52mm	98 x 74 x 17mm	13/420/3
2. Replacement Probe	-	-	-	-	-	2.0m	-	-	13/420/4
3. Jumbo	-10 to +50°C&F	-50 to +70°C&F	20 to 99%RH	+/-1°C	✗	2.0m	60 x 80mm	103 x 98 x 21mm	12/421/3
3. Replacement Probe	-	-	-	-	-	2.0m	-	-	13/421/1
4. Twin Rdg. Thermo-Hygrom	-10 to +70°C&F	-50 to +70°C&F	10 to 95%RH	+/-1°C/5%RH	✓	2 x 1m	22 x 40mm	63 x 63 x 22mm	22/425/3

Brannan offer a wide range of infrared instruments for a variety of applications. The meters' field of view, or Distance to Spot (D:S) indicates the distance required from the target spot. For example, where the field of view is 30:1, the product should be 30cm from the target area. The diameter of the target must be at least 1cm. The instruments come complete with Factory Certificate of Calibration (except 38/720/0), battery, protective bag and full instructions. 3 point Traceable Calibration Certificates available on request (Ref: 49/709/0 - additional charge applies).



1. Pocket Infrared Thermometer
 Pocket infrared thermometer supplied with wrist strap, clip-out stand and storage pouch.
38/720/0

2. Standard Infrared Thermometer
 A simple and stable instrument providing easy and safe temperature measurement with built in laser targeting and Max/Min recording function. Available in two temperature ranges.
 Standard Range: **38/701/0**
 High Range: **38/702/0**



3. Compact Infrared Thermometers

Simple and compact instruments with built in laser targeting. Available in two temperature ranges.
 Standard Range: **38/703/0**
 High Range: **38/704/0**



4. Advanced, Dual Laser Infrared Thermometer

High specification, dual laser infrared thermometers with precise infrared measurement using built in laser pointers and K-type input capabilities.
 Standard Range: **38/705/0**
 High Range: **38/706/0**
 Replacement Thermocouple: **38/698/0** (also compatible with Brannan range of K-type thermocouple probes)



Statement of Conformity Available

Traceable Calibration Available



5. Infrared Thermometer with Multi-Spot Laser
 Infrared thermometer with 13 laser spots to increase targeting accuracy. Max Min recording function.
38/707/0



Description	Range	Distance to Spot Ratio	Basic Accuracy*	Max/Min Function	LCD Dimensions	Product Dimensions	Product Number
1. Pocket Infrared	-35 to +230°C&F	1:1	+/-2°C	X	14 x 24mm	75 x 40 x 20mm	38/720/0
2. Standard Infrared Thermometers	-50 to +350°C&F	13:1	+/-2°C	✓	19 x 26mm	155.5 x 98.8 x 27.5mm	38/701/0
	-50 to +550°C&F	13:1	+/-2°C	✓	19 x 26mm	155.5 x 98.8 x 27.5mm	38/702/0
3. Compact Infrared Thermometers	-50 to +500°C&F	12:1	+/-2°C	X	25 x 25mm	134 x 89 x 36mm	38/703/0
	-50 to +800°C&F	12:1	+/-2°C	X	25 x 25mm	134 x 89 x 36mm	38/704/0
4. Advanced, Dual Laser Infrared Thermometers	-50 to +500°C&F*	13:1	+/-2°C	✓	35 x 35mm	192 x 97 x 59mm	38/705/0
	-50 to +1050°C&F*	30:1	+/-2°C	✓	35 x 35mm	192 x 97 x 59mm	38/706/0
5. Multi-Spot Laser Infrared	-30 to +950°C&F	30:1	+/-2°C	✓	30 x 26mm	155 x 99 x 27mm	38/707/0

* K-type Range: -50 to +1370°C&F

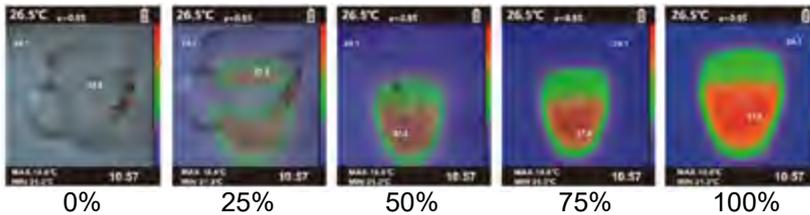
* Accuracy is listed as best across the range. Individual product data sheets are available for full accuracy details.

Thermal Imager Visual Infrared Thermometer

Visual Infrared thermometer with hot and cold spot temperature markers to guide user to the hottest and coldest area in the infrared heat map. Functions include image capture and SD storage card, USB edge PC for picture reading, selectable colour palettes. Supplied complete with Factory Certificate of Calibration and presented in protective box.

Range: -20 to +380°C&F
 Dimensions: 193 x 92 x 56mm
38/708/0

Accuracy*: +/-2°C
 LCD Dimensions: 48 x 36mm



Non-Contact Thermometers - To assist in the battle against Covid-19 and other infections



Infrared Body Temperature Thermometer

Non-contact and hygienic infrared thermometer designed to take the body temperature of a person regardless of room temperature. Ideally suited for use in schools, offices or other workplaces or environments where a large number of people are coming into contact with one another. Features include selectable body or surface temperature and switchable °C/°F readout, alarm value setting, trigger lock and data hold.

Memory Recall: 32 measurements
 Body Temp Range: +32 to +42.5°C&F
 Surface Temp Range: 0 to +60°C&F
 Dimensions: 149 x 77 x 43mm
 LCD Dimensions: 28 x 24mm
11/400/3



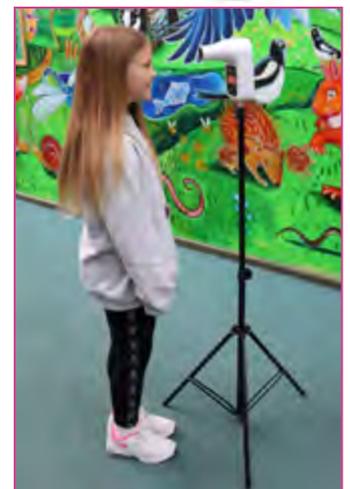
Automatic, Non Contact, Rapid Test, Infrared Temperature Scanner

Robust thermometer which can be wall mounted or positioned on a tripod*, situated in a position where a high number of people are entering a premises and capable of taking multiple temperature readings within a short period of time. Automatic reading provides hygienic, non contact measurement and eliminates the need for a member of staff to approach visitors.

Ideally suited for the entrance to schools, office buildings, retail shops, gyms, etc,
 Infrared Body Range: +34 to +43°C
 Dimensions: 171 x 115 x 140mm
 LCD Dimensions: 24 x 58mm
 Temperature Scanner: **14/100/0**

*Scanner Tripod: **14/100/1**
 *Pack of 2pcs Rechargeable Batteries: **14/100/2**
 *Additional charge applies

Please note: This is not a medical device and should not be used for diagnostic purposes. We recommend the use of a medical body thermometer to confirm high temperature readings.





Brannan range of USB data loggers are available for temperature or temperature and humidity, with or without LCD and or for use with thermocouple.

All data loggers feature red/green LEDs to indicate data logging status and include long-life lithium battery and operating instructions. These instruments can be supplied with UKAS Calibration Certificate or Statement of Conformity on request.

These easy to use data loggers connect directly into the USB port of a PC and are suitable for a variety of applications.

The free Windows software for set-up and data download is both streamlined and easy to use and is compatible with Windows 10, 8, 7, 2000, XP.

After data has been collected, it can be graphed or exported to Excel for further analysis.



Data Logger Description	Range	Basic Accuracy*	No of Readings	K-Type Probe Compatible	LCD Dimensions	Product Dimensions	Product Number
1. USB-Lite Logger	Temp: -10 to 50°C&F	+/-2.5°C&F	4,080	-	-	68 x 18.5 x 6mm	38/750/0
2. Temperature Logger	Temp: -35 to 80°C&F	+/-1.0°C&F	16,382	-	-	98 x 27 x 26mm	38/751/0
3. Temp. Logger with LCD	Temp: -35 to 80°C&F	+/-0.5°C&F	16,382	-	8 x 22mm	98 x 27 x 26mm	38/752/0
4. K, J and T-Type Temperature Logger	K-Type: -200 to 1550°C&F J-Type: -200 to 1190°C&F T-Type: -200 to 390°C&F	+/-1.0°C&F	32,000	✓	-	118 x 26 x 26mm	38/753/0
5. K, J and T-Type Temperature Logger with LCD	K-Type: -200 to 1550°C&F J-Type: -200 to 1190°C&F T-Type: -200 to 390°C&F	+/-1.0°C&F	32,000	✓	8 x 22mm	134 x 24 x 21mm	38/754/0
6. Temperature & Humidity Logger	Temp: -35 to 80°C&F	+/-0.5°C&F	16,382	-	-	103 x 27 x 26mm	38/755/0
	Humidity: 0 to 100%RH	+/-0.3°C&F	16,382	-	-	103 x 27 x 26mm	38/756/0
7. Temperature & Humidity Logger with LCD	Temp: -35 to 80°C&F Humidity: 0 to 100%RH	+/-0.3°C&F	16,382	-	8 x 22mm	126 x 25 x 22mm	38/757/0
8. S/S Temperature Logger	Temp: -40 to 125°C&F	+/-0.2°C&F	32,510	-	-	110 x 18 x 18mm	38/758/0

* Accuracy is listed as best across the range. Individual product data sheets are available for full accuracy details.

Hand Held Programmer and Data Collector for USB Data Logger Range

This data pad allows data loggers user to configure units, download data and view logging results on-the-spot. This allows continual logging with shorter breaks in data collection, less travel for the user and on-site data collection in graph, legend and summary format. Collects and stores up to 500 data loggers. Supplied with rechargeable internal lithium battery providing up to 8 hours use.

Dimensions: 107 x 68 x 19mm LCD Dimensions: 60 x 45mm
38/760/0



Data Logger UKAS Calibration

1, 3 or 5 point UKAS Calibration of **Brannan** data loggers is available, if required, either at time of order or for customers previously purchased data loggers, using product codes as shown on table.

Please contact our Sales Team for further details.
(Additional charge applies)



Data Logger UKAS Calibration	Number of Calibration Points	Product Number
Temperature	1 point	49/610/0
	3 point	49/611/0
	5 point	49/612/0
Temperature & Humidity	1 point	49/620/0
	3 point	49/621/0
	5 point	49/622/0

Wide range of single and multi-count timers which can be used in a variety of applications. All models are supplied with batteries and operating instructions. All electronic instruments are CE, WEEE and RoHS compliant.

3 point UKAS calibration is available on request (Ref: 49/650/0 - additional charge applies). Please contact our Sales Team for further details.



1. Large Display Timer
28/203/0



2. Timer & Clock
28/210/0



3. Slimline Timer
28/213/0



4. Visual, Audible & Vibrating, Multi-Alarm Timer & Clock
28/219/0

Timer Description	Count	Count Up & Down	Fixings	LCD Dimensions	Product Dimensions	Product Number
1. Large Timer	99 min, 59 sec	✓	Magnet	38 x 64mm	70 x 80 x 20mm	28/203/0
2. Timer & Clock	99 min, 59 sec	✓	Hook & magnet	20 x 48mm	66 x 76 x 20mm	28/210/0
3. Slimline Timer	99 min, 59 sec	✓	Magnet	12 x 34mm	88 x 48 x 18mm	28/213/0
4. Multi Alarm Timer	99 min, 59 sec	✓	Stand, clip & magnet	15 x 35mm	75 x 53 x 35mm	28/219/0

Double & Triple, Multi-Count Timers



1. Jumbo Dual Timer & Clock
28/208/0



2. Dual Timer & Clock
28/206/0



3. Dual Timer & Clock
28/211/0



4. Triple Timer & Clock
28/214/0



5. Triple Timer & Clock
28/207/0



6. Four Way Timer & Clock
28/212/0



Statement of Conformity Available

Traceable Calibration Available

Timer Description	Count	Count Up & Down	Fixings	LCD Dimensions	Product Dimensions	Product Number
1. Jumbo Dual Timer & Clock	23 hr, 59 min, 59 sec	✓	Wall mountable	75 x 63mm	140 x 95 x 20mm	28/208/0
2. Dual Timer & Clock	23 hr, 59 min, 59 sec	✓	Magnet & clip	24 x 35mm	53 x 68 x 14mm	28/206/0
3. Dual Timer & Clock	9 hr, 59 min, 59 sec	✓	Magnetic back clip	12 x 32mm	50 x 60 x 12mm	28/211/0
4. Triple Timer & Clock	23 hr, 59 min, 59 sec	✓	Magnet	44 x 40mm	88 x 66 x 13mm	28/214/0
5. Triple Timer & Clock	23 hr, 59 min, 59 sec	✓	Magnet	45 x 40mm	86 x 56 x 22mm	28/207/0
6. Four Way Timer & Clock	23 hr, 59 min, 59 sec	✓	Magnetic back clip	22 x 50mm	62 x 75 x 15mm	28/212/0

Bench Top Timers

Easy to use bench top timers particularly suited for use in schools. They have colour coded buttons and clear LCD display, housed in a robust ABS casing and are available with and without contacts for external triggering. The timers are highly accurate and have count up with lap and split timing features.

Timing period 9 hr, 59 min, 59 sec.

Dimensions: 90 x 100 x 70.5mm

LCD Dimensions: 20 x 64mm

With External Triggering Contacts 28/410/0
(spare contacts 28/410/4)

Without External Triggering Contacts 28/411/0



Stopwatches

Choice of stopwatches, standard or water resistant. Both models are supplied with batteries and operating instructions. All electronic instruments are CE, WEEE and RoHS compliant and can be supplied with statement of conformity upon request.

1. Stopwatch



1/100 second stopwatch with split counter, calendar, time and alarm. Complete with lanyard.

Max Count: 23hours
59 minutes
59 seconds

Dimensions: 80 x 60 x 17mm
LCD Dimensions: 16 x 33mm

28/404/0



2. Water Resistant Stopwatch

1/100 second waterproof stopwatch to IP65 with large LCD, split counter, calendar, time and alarm. Complete with adjustable hanging cord for use as wrist strap.

Max Count: 23hours
59 minutes
59 seconds

Dimensions: 80 x 65 x 18mm
LCD Dimensions: 17 x 35mm

28/405/0



Description	Max Count	LCD Dimensions	Product Dimensions	Product Number
1. Stopwatch	23 hr, 59 min, 59 sec	16 x 33mm	80 x 60 x 17mm	28/404/0
2. Water Resistant Stopwatch	23 hr, 59 min, 59 sec	17 x 35mm	80 x 65 x 18mm	28/405/0

Tally Counters



1. Hand Held Analogue Tally Counter

analogue counters available with with finger holder or metal stand which can be fixed securely to desk or table.. Resets by turning knob.

Dimensions: 48 x 54 x 37mm
Count Dimensions: 6 x 18mm
28/501/0 & 28/502/0

3. Hand Held Digital Tally Counter

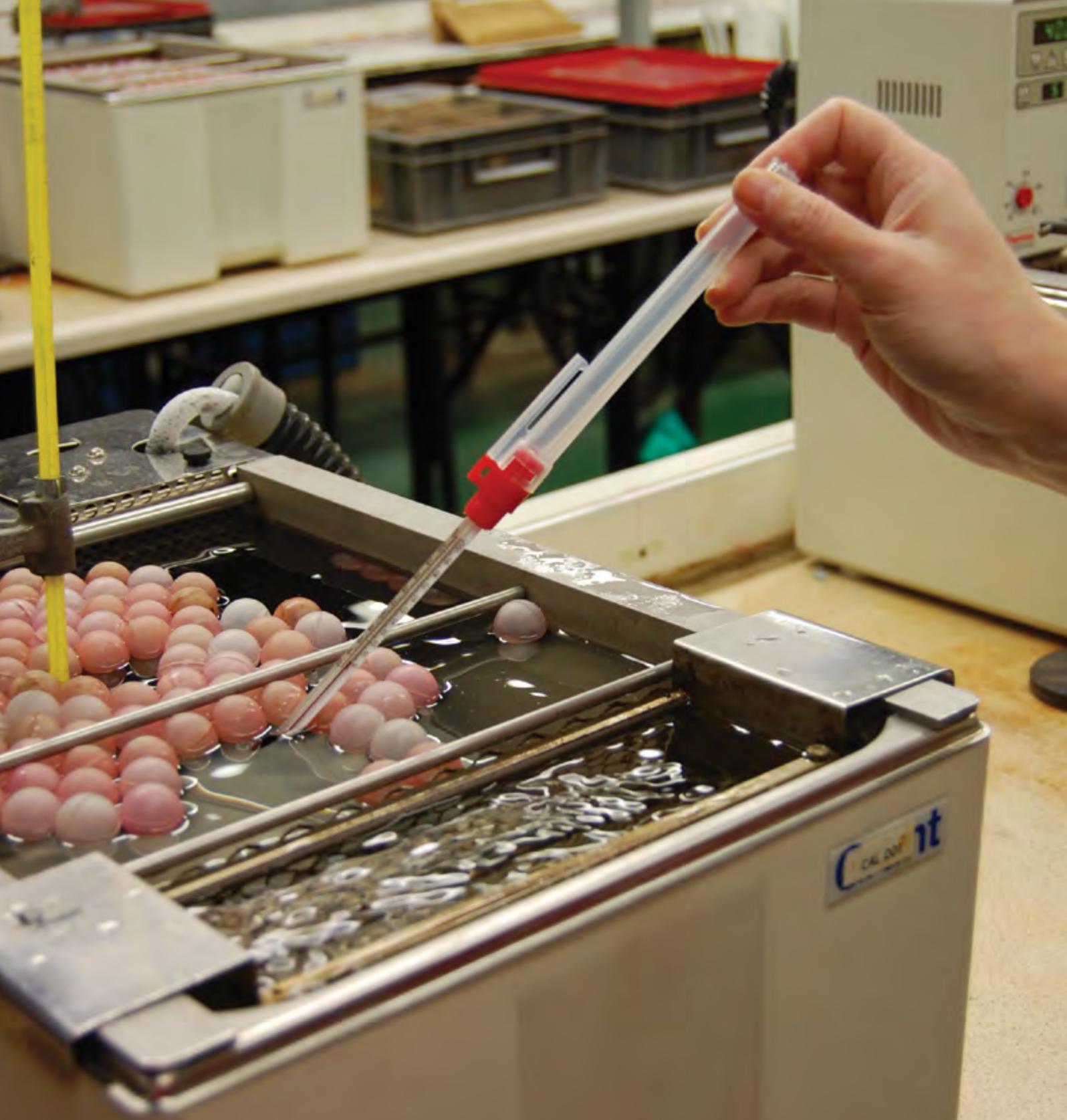
Digital tally counter with finger holder. Push button reset.
Dimensions: 50 x 46 x 35mm
LCD Dimensions: 8 x 22mm
28/503/0

4. Count Up & Count Down Digital Tally Counter

Robust tally counter ideal for counting customers in and out of a venue

Dimensions: 71 x 45 x 15mm
LCD Dimensions: 6 x 19mm
28/504/0

Description	Count	Analogue/Digital	Reset	Reading Dimensions	Product Dimensions	Product Number
1. Hand Held Tally Counter	0 to 9999	Analogue	Knob turn	6 x 18mm	48 x 54 x 37mm	28/501/0
2. Desk Top Tally Counter	0 to 9999	Analogue	Knob turn	6 x 18mm	63 x 55.5 x 55.5mm	28/502/0
3. Hand Held Tally Counter	0 to 99999	Digital	Push button	8 x 22mm	50 x 46 x 22mm	28/503/0
3. Count Up & Down Counter	0 to 9999	Digital	Push button	6 x 19mm	71 x 45 x 15mm	28/504/0



Special Application Instrumentation

Max Min Thermometers
Refrigeration Thermometers
Hygrometers

Wall Thermometers
Pocket Test Thermometers

Brannan

Maximum Minimum Wall Thermometers

Increasing environmental and health concerns have encouraged the development of these unique **mercury free** maximum minimum thermometers which replace the traditional mercury types, the standard design for over two hundred years. The products use a unique blue coloured liquid, specially developed by Brannan, to replace the mercury but retain the ease of operation of the mercury instruments.



Magnet Reset Max/Min
 A modern design with red, blue and black coloured scale in moulded grey plastic. Separate magnet reset and hanging hook on top and bottom of instrument.
 Range: -35 to +50°C&F
 Dimensions: 250 x 60 x 27mm
12/401/3



Heavy Duty Push Button Max/Min
 A robust design with fully protected bulbs and reset by press button. Black scale on a white background enclosed in a green case. Includes hanging hook at back of instrument.
 Range: -35 to +50°C&F
 Dimensions: 200 x 67 x 23mm
12/404/3

Statement of Conformity Available

Traceable Calibration Available



Quick Set Push Button Max/Min
 This popular design features a press button for quick reset. White plastic case with blue temperature scale and reset button. Hanging hook on top of instrument.
 Range: -35 to +50°C&F
 Dimensions: 205 x 55 x 27mm
12/408/3

Factory Act Thermometers

The following range of wall thermometers all show the recommended temperature for the workplace in accordance with The Workplace (Health, Safety & Welfare) Regulations 1992 Section 7, and are available in a choice of sizes. The clear black scale is printed on a robust plastic moulding. These thermometers can be supplied with certificate traceable to Recognised National Standard or Statement of Conformity, if required.



380mm Workplace Thermometer
 Large wall thermometer for easy to read temperature display ideally suited for use in large area.
 Range: -20 to +50°C&F
 Dimensions: 380 x 75 x 10mm
14/374/3



215mm Workplace Thermometer
 Compact thermometer suited for use in office or smaller premises.
 Range: -20 to +50°C&F
 Dimensions: 215 x 40 x 7mm
14/410/3



240mm Workplace Thermometer
 Clear scale suitable for use in office or factory.
 Range: -20 to +50°C&F
 Dimensions: 240 x 65 x 10mm
14/390/3

Statement of Conformity Available

Traceable Calibration Available

Refrigeration Thermometers

Range of thermometers to indicate the correct temperature at which your fridge and freezer should be maintained, to assist with the safe, cold storage of food or medicines, etc. These thermometers can be supplied with certificate traceable to Recognised National Standard or Statement of Conformity, if required.

Digital Fridge or Freezer Thermometer

Electronic thermometer which displays fridge or freezer and room temperature. Alarm feature and 1m cable with suction pad. Range: -50 to +70°C&F
Dimensions: 25 x 135 x 20mm
LCD Dimensions: 12 x 58mm
22/400/3



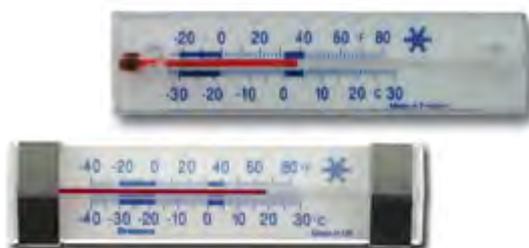
Twin Reading Thermometer

Thermometer with max/min feature and high/low alarm settings. Dual readouts for temperature in fridge or freezer and room temperature simultaneously. Magnet attachment and 2m probe cable. External probe suitable for UKAS calibration. Range: -50 to +70°C&F
Dimensions: 63 x 63 x 15mm
LCD Dimensions: 21 x 47mm
22/420/3



Standard Horizontal Fridge or Freezer Thermometer

130mm white horizontal thermometer with blue temperature scale with clear fridge and freezer temperature zones. Range: -30 to +40°C only
Dimensions: 130 x 40 x 22mm
22/483/2



Heavy Duty Fridge or Freezer Thermometers

Clear front horizontal thermometer with blue printed scale on white moulding and clear zones indicating recommended temperature for fridge and freezer. Magnet fixture on back of moulding or stainless steel clips for fixture to appliance. Range: -30 to +30°C&F
Dimensions: Magnet Fixture: 30 x 120 x 13mm - **22/430/3**
Clips Fixture: 30 x 120 x 19mm - **22/450/3**

Batch Sampling Thermometers

LO-tox™

These precision test thermometers are sealed into a 30ml polypropylene bottle and are ideally suited to monitor the temperature of samples in controlled storage. The bottle base of the assembly maintains a core temperature similar to that of the samples being monitored and is unaffected by short fluctuations caused by thermostatic variations or through the opening of cabinet doors. Clear reading **LO-tox™** blue filling eliminates the risk of mercury contamination.

A variety of ranges are available covering critical temperature spans for specific applications such as oven, freezer, blood bank, etc.

These thermometers can be supplied with UKAS Certification on request.



* Bottle requires filling with monopropylene glycol or other heat transfer medium before use.

Application	Range	Product Number
Oven	+20 to +130°C	17/102/2
Blood Bank*	-5 to +20°C	22/100/2
Freezer*	-30 to 0°C	22/101/2
Refrigerator*	-5 to +20°C	22/103/2
Incubator*	+18 to +50°C	22/105/2
Spare Bottle	-	22/110/0

Max/Min Digital Reading Sampling Thermometers

Batch sampling thermometer with max/min reading digital thermometer. The twin reading electronic thermometer has a max/min feature and high/low temperature alarm setting. Ideally suited to read temperature in a fridge or freezer and room temperature simultaneously. Magnet attachment and 2m probe cable. Meter Range: -50 to +70°C&F only
Meter Dimensions: 63 x 63 x 15mm
LCD Dimensions: 21 x 47mm
22/106/3



LO-tox™ Glass Pocket Test Thermometers

LO-tox™

Glass thermometers are the most popular and economical instrument for test purposes. Since mercury is no longer permitted under EU Regulations, these test thermometers are now filled with the **Brannan** blue coloured alternative, **LO-tox™** filling which combines high legibility and accuracy with low levels of hazard.

The test thermometers are available in three different temperature ranges and in Celsius only or dual scales. They are calibrated for total immersion and can be supplied in a variety of case types, plastic or aluminium.

These thermometers can be supplied with certificate traceable to Recognised National Standard or Statement of Conformity, if required.

Reversible Plastic Case

The clear body fits to the cap with a bayonet clip which allows the case to be reversed and used as a holder for the thermometer to avoid contact with the material being tested.

Dimensions: 150 x 15mm diameter

Range	Divisions	Product Number
-30 to +50°C	1°C	22/836/2
-30 to +50°C&F	1°C/2°F	22/836/3
0 to +50°C	0.5°C	22/875/2
0 to +50°C&F	0.5°C/1°F	22/875/3
-10 to +110°C	1°C	17/836/2
-10 to +110°C&F	1°C/2°F	17/836/3



Traceable Calibration Available

Statement of Conformity Available



Heavy Duty Aluminium Case

The body of the case is removed during use and the tube is retained in the cap.

Dimensions: 165 x 12mm diameter

Range	Divisions	Product Number
-30 to +50°C	1°C	22/848/2
-30 to +50°C&F	1°C/2°F	22/848/3
0 to +50°C	0.5°C	22/885/2
0 to +50°C&F	0.5°C/1°F	22/885/3
-10 to +110°C	1°C	17/848/2
-10 to +110°C&F	1°C/2°F	17/848/3



Aluminium Case with Slot Front

This pocket test thermometer is held inside an aluminium case for protection during use.

Dimensions: 158 x 11mm diameter

Range	Divisions	Product Number
-30 to +50°C	1°C	22/862/2
-30 to +50°C&F	1°C/2°F	22/862/3
0 to +50°C	0.5°C	22/880/2
0 to +50°C&F	0.5°C/1°F	22/880/3
-10 to +110°C	1°C	17/847/2
-10 to +110°C&F	1°C/2°F	17/847/3



Pocket Dial Test

Bimetal dial thermometers are an alternative to glass thermometers and have a stainless steel construction making them suitable for food products. These thermometers have 24mm diameter dial face with 125mm stainless spike stem and have a case with pocket clip which may be used as a handle for the thermometer. Other dial sizes available on request.

These thermometers can be supplied with certificate traceable to Recognised National Standard or Statement of Conformity, if required.

Dimensions: 125 x 24mm diameter



Traceable Calibration Available

Statement of Conformity Available

Range °C only	Product Number
-40 to +70°C	31/141/0
-10 to +110°C	31/143/0
0 to +250°C	31/144/0

These instruments measure the amount of water vapour in the atmosphere, on a percentage scale known as Relative Humidity (%RH). The difference between the “wet” and “dry” bulb temperatures enables the %RH to be determined through the use of tables or a calculator.

Mason's Hygrometers



Mason's Hygrometer

White polypropylene case with water container and wick. Supplied complete with calculator chart and instructions to determine %RH. Replacement water container pots and wick also available.

Range: -5 to +50°C&F or °C only

Dimensions: 310 x 77 x 32mm

13/222/3 (°C&F)

13/222/2 (°C only)

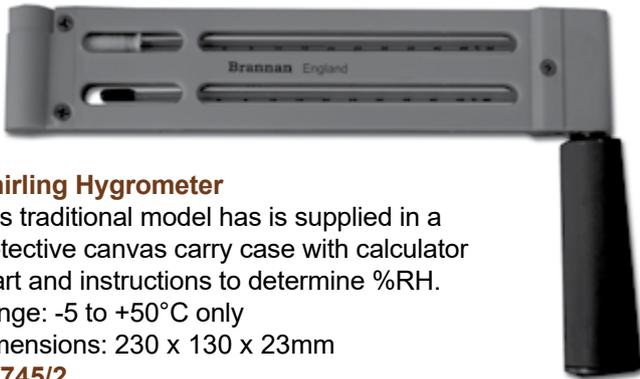
Pack of 12 Replacement Wicks 13/086/0

Replacement Pot 13/087/0



Whirling Hygrometers

Whirling Hygrometers, also known as sling psychrometers, employ the “wet” and “dry” bulb principal to determine %RH. They are designed to be rotated, by hand, to provide adequate and consistent ventilation of the bulbs. These hygrometers are filled with a spirit filling. Replacement refill tubes are available for both models. These instruments can be supplied with Calibration Certification on request.



Whirling Hygrometer

This traditional model has is supplied in a protective canvas carry case with calculator chart and instructions to determine %RH.

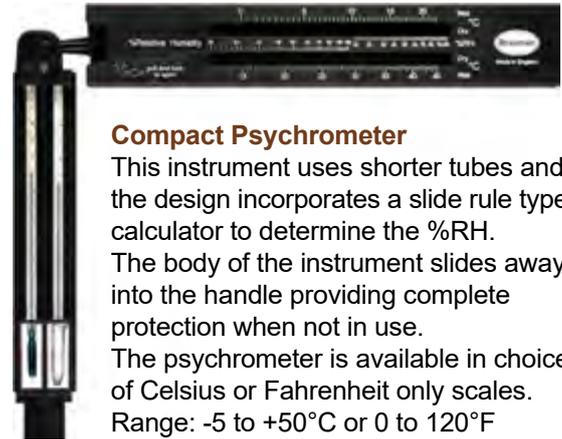
Range: -5 to +50°C only

Dimensions: 230 x 130 x 23mm

13/745/2

Pair replacement tubes: 13/645/2

Pack of 12 Replacement Wicks: 13/086/0



Compact Psychrometer

This instrument uses shorter tubes and the design incorporates a slide rule type calculator to determine the %RH.

The body of the instrument slides away into the handle providing complete protection when not in use.

The psychrometer is available in choice of Celsius or Fahrenheit only scales.

Range: -5 to +50°C or 0 to 120°F

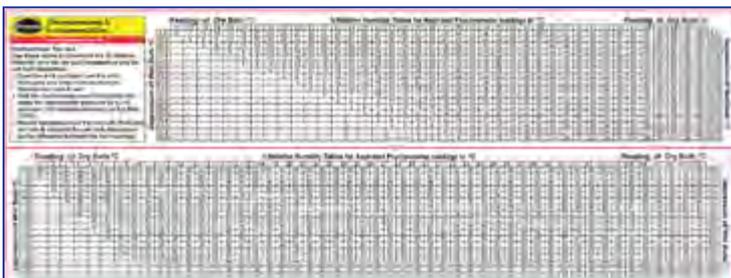
Dimensions: 210 x 36 x 16mm

13/606/2 - °C only

Replacement Tube - 13/605/2 (°C only)

13/606/1 - °F only

Replacement Tube - 13/605/1 (°F only)



New Automatic, Non Contact, Rapid Test, Infrared Temperature Scanner

Introducing the automatic temperature scanner specifically designed to assist in current battle against COVID-19 and other infections. The robust thermometer can be wall mounted or positioned on a tripod, situated in a position where a high number of people are entering a premises and capable of taking multiple temperature readings within a short period of time. Ideally suited for the entrance to schools, office buildings, retail shops, gyms, etc, and eliminates the need for a member of staff to approach visitors.

Please note: This is not a medical device and should not be used for diagnostic purposes. We recommend the use of a medical body thermometer to confirm high temperature readings.

Product Features:

- Automatic temperature measurement - hygienic, non contact
- Quick response reading (0.5s)
- High accuracy – 0.2°C
- Distinctive audible sound and red flashing light alert when high temp detected
- Long measuring distance
- Connects to PC for remote reading and measurement storage
- Wall fixture or optional tripod stand*
- USB cable power supply (suitable for use with rechargeable lithium battery*)

Perfect for schools, colleges, shops, businesses, cafes, cinemas, restaurants, etc

Infrared Body Range: +34 to +43°C

Dimensions: 171 x 115 x 140mm

LCD Dimensions: 24 x 58mm



Temperature Scanner : 14/100/0

Scanner Tripod : 14/100/1

Pack of 2pcs Rechargeable Battery: 14/100/2

*Additional charge applies



Count Up & Count Down Digital Tally Counter

Robust tally counter ideal for counting customers in and out of a venue to assist with social distancing.

Dimensions: 71 x 45 x 15mm

LCD Dimensions: 6 x 19mm

28/504/0



Advanced Body & Surface Temperature Non-Contact, Infrared Thermometer

Ideally suited for use in conjunction with temperature scanner.

See Infrared thermometer section of this catalogue for full details.

Memory Recall: 32 measurements

Body Temp Range: +32 to +42.5°C&F

Surface Temp Range: 0 to +60°C&F

Dimensions: 149 x 77 x 43mm

LCD Dimensions: 28 x 24mm

11/400/3



Hydrometers

Specific Gravity Hydrometers
Twaddle and Baumé
BS 718 and ASTM Hydrometers

Density Hydrometers
Alcohol Hydrometers
Hydrometer Accessories





The traditional hydrometry scale of Specific Gravity (density, relative to that of water at 60°F) used in the 1960 edition of the British Standard 718 is still much in demand and the General Purpose hydrometers at the beginning of this catalogue section use this scale.

For the Specification Density Hydrometers to BS 718 : 1991, the internationally accepted basis of scale is grams per millilitre (g/ml) with a reference temperature of 20°C (or, exceptionally 15°C). For use in tropical countries, ISO 387 proposes that hydrometers be adjusted at a higher reference temperature, 27°C (as opposed to the previously used high adjustment of 84°F).

Instruments adjusted at this higher temperature can be supplied to special order. In addition to being adjusted for use at a specific reference temperature, hydrometers are adjusted with regard to the Surface Tension of the materials whose density is to be determined. Surface tension may be expressed specifically for example 55 mN/m (millinewtons per metre) or described as a band. Low surface tension is less than 35 mN/m and medium surface tension is between 35 and 55 mN/m.



All hydrometers can be supplied with UKAS certification*, certificate traceable to Recognised National Standard or Statement of Conformity, if required.

* UKAS Calibration carried out at external laboratory.



Statement of Conformity upon request

General Purpose Specific Gravity Hydrometers



Hydrometers

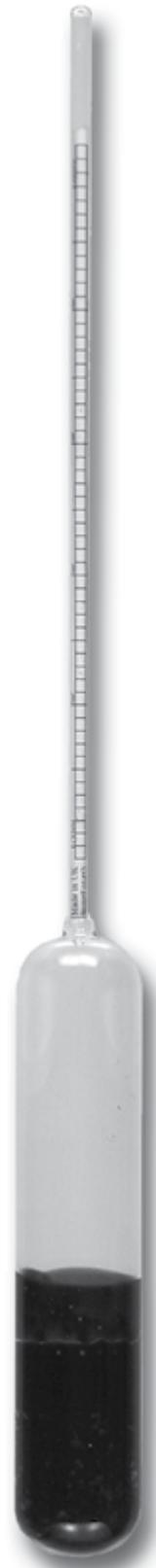
The specific gravity 60/60°F scale compares the relative density of a given liquid with that of water, at 60°F (15.6°C). The instruments listed are similar to hydrometers included in ISO 650 and in the (now superseded) 1960 issue of British Standard 718. Three of the 'series' of hydrometers are listed below and a further series is on the next page with some wider range types.

All hydrometers can be supplied with UKAS certification, certificate traceable to Recognised National Standard or Statement of Conformity, if required.



- Series S50** 190mm long, covering a range span of 0.050°, divided in 0.002°
- Series M50** 270mm long, covering a range span of 0.050°, divided in 0.001°
- Series L50** 335mm long, covering a range span of 0.050°, divided in 0.0005°.

Range °SG	To suit Surface Tension	Product Number		
		Series S50	Series M50	Series L50
0.60 to 0.65°SG	Low	10/899/0	10/960/0	10/870/0
0.65 to 0.70°SG		10/900/0	10/961/0	10/871/0
0.70 to 0.75°SG		10/901/0	10/962/0	10/872/0
0.75 to 0.80°SG		10/902/0	10/963/0	10/873/0
0.80 to 0.85°SG		10/903/0	10/964/0	10/874/0
0.85 to 0.90°SG		10/904/0	10/921/0	10/875/0
0.90 to 0.95°SG		10/905/0	10/922/0	10/876/0
0.95 to 1.00°SG		10/906/0	10/923/0	10/877/0
1.00 to 1.05°SG	Medium	10/907/0	10/924/0	10/878/0
1.05 to 1.10°SG		10/908/0	10/925/0	10/879/0
1.10 to 1.15°SG		10/909/0	10/926/0	10/880/0
1.15 to 1.20°SG		10/910/0	10/927/0	10/881/0
1.20 to 1.25°SG		10/911/0	10/928/0	10/882/0
1.25 to 1.30°SG		10/912/0	10/929/0	10/883/0
1.30 to 1.35°SG		10/913/0	10/930/0	10/884/0
1.35 to 1.40°SG		10/914/0	10/931/0	10/885/0
1.40 to 1.45°SG		10/915/0	10/932/0	10/886/0
1.45 to 1.50°SG		10/916/0	10/970/0	10/887/0
1.50 to 1.55°SG		10/917/0	10/971/0	10/888/0
1.55 to 1.60°SG		10/918/0	10/972/0	10/889/0
1.60 to 1.65°SG		10/919/0	10/973/0	10/890/0
1.65 to 1.70°SG		10/990/0	10/974/0	10/891/0
1.70 to 1.75°SG		10/991/0	10/975/0	10/892/0
1.75 to 1.80°SG		10/992/0	10/976/0	10/893/0
1.80 to 1.85°SG		10/993/0	10/977/0	10/894/0
1.85 to 1.90°SG		10/994/0	10/978/0	10/895/0
1.90 to 1.95°SG		10/995/0	10/979/0	10/896/0
1.95 to 2.00°SG		10/996/0	10/980/0	10/897/0



The hydrometers on this page are adjusted at 60°F (15.6°C).
 All hydrometers can be supplied with UKAS certification, certificate traceable to
 Recognised National Standard or Statement of Conformity, if required.



Series M100
 250mm long,
 covering a span of 0.100°,
 divided in 0.002°

Range °SG	To suit Surface Tension	Product Number
0.60 to 0.70°SG	Low	10/940/0
0.70 to 0.80°SG		10/941/0
0.80 to 0.90°SG		10/942/0
0.90 to 1.00°SG		10/943/0
1.00 to 1.10°SG	Medium	10/944/0
1.10 to 1.20°SG		10/945/0
1.20 to 1.30°SG		10/946/0
1.30 to 1.40°SG		10/947/0
1.40 to 1.50°SG		10/948/0
1.50 to 1.60°SG		10/949/0
1.60 to 1.70°SG		10/950/0
1.70 to 1.80°SG		10/951/0
1.80 to 1.90°SG		10/952/0
1.90 to 2.00°SG		10/953/0

200 Series
 250mm long, covering a span of 0.200°, divided in 0.002°

Range °SG	To suit Surface Tension	Product Number
0.60 to 0.80°SG	Low	10/500/0
0.80 to 1.00°SG		10/501/0
1.00 to 1.20°SG	Medium	10/502/0
1.20 to 1.40°SG		10/503/0
1.40 to 1.60°SG		10/504/0
1.60 to 1.80°SG		10/505/0
1.80 to 2.00°SG		10/506/0



Range Finder Hydrometers

These instruments are suitable for less accurate readings and are frequently used to help select the appropriate hydrometer for subsequent accurate determinations.

Range °SG	To suit Surface Tension	Length mm	Division	Product Number
0.70 to 1.00°SG	Low	250mm	0.005	10/530/0
1.00 to 1.50°SG	Medium	250mm	0.005	10/531/0
1.50 to 2.00°SG	Medium	250mm	0.005	10/532/0
0.70 to 2.00°SG	Medium	320mm	0.010	10/550/0
1.00 to 2.00°SG	Medium	250mm	0.010	10/551/0

Twaddle Hydrometers

The Twaddle scale is a simplified scale based on specific gravity where 0° Twaddle equates to SG60/60°F of 1.00 (that of water) and each degree Twaddle equals 0.005°SG. These hydrometers are available in 2 lengths, 160mm or 300mm, each with single degree divisions and are adjusted for use at 15.6°C (60°F) for medium surface tension liquids.

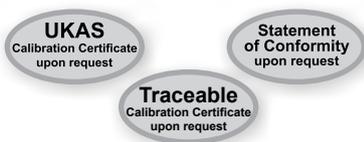
Twaddle Number	Range	Division	Product Number	
			L = 160mm	L = 300mm
1	0 to 24	1	10/101/0	10/151/0
2	24 to 48	1	10/102/0	10/152/0
3	48 to 74	1	10/103/0	10/153/0
4	74 to 102	1	10/104/0	10/154/0
5	102 to 138	1	10/105/0	10/155/0
6	138 to 170	1	10/106/0	10/156/0

Baumé Hydrometers

The Baumé hydrometers listed are for liquids heavier than water. Zero degrees Baumé equates to an SG 60/60°F of 1.00. This scale uses the accepted relationship for degrees Baumé where:

$$1 = 145 - \frac{145}{\text{SG } 60/60^\circ\text{F}}$$

The instruments are all 250mm long and are adjusted at 15.6°C (60°F) and suitable for medium surface tension liquids.



Range	Division	Product Number
0 to 30	0.5	10/200/0
0 to 50	1.0	10/201/0
0 to 70	1.0	10/202/0
0 to 10	0.1	10/203/0
10 to 20	0.1	10/204/0
20 to 30	0.1	10/205/0
30 to 40	0.1	10/206/0
40 to 50	0.1	10/207/0
50 to 60	0.1	10/208/0
60 to 70	0.1	10/209/0



Milk Hydrometers



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Specific Gravity & Quevenne Lactometers

160mm long milk hydrometers, adjusted at 15.6°C (60°F). Scales calibrated in specific gravity or Quevenne. 1° Quevenne equals 0.001°SG.

Range	Length mm	Division	Product Number
1.025 to 1.035°SG	160mm	0.001	10/601/0
1.015 to 1.025°SG	160mm	0.1	10/660/0

Lactometers to BS 734 : Part 1 : 1973

Calibrated in grams/ml and adjusted at 20°C. Designations 1 and 2 are for milk of normal density, 1A and 2A for milk of low density.

Designation	Range	Length mm	Division	Product Number
No 1	1.025 to 1.035°SG	220mm	0.0002	10/602/0
No 1A	1.015 to 1.025°SG	220mm	0.0002	10/603/0
No 2	1.025 to 1.035°SG	215mm	0.0005	10/604/0
No 2A	1.015 to 1.025°SG	215mm	0.0005	10/605/0

Colostrum Hydrometers

232mm long hydrometers to estimate immunoglobins in colostrum by measuring the specific gravity of colostrum and assist with dairy/milk production. Also available with glass hydrometer jar.

Description	Range	Length mm	Division	Product Number
Colostrum Hydrometer	1.025 to 1.075°SG	232mm	0.1	10/690/0
Colostrum Hydrometer with Jar	1.025 to 1.075°SG	232mm	0.1	10/691/0

Battery Testing Hydrometer Kit

Adjusted for use at 15.6°C and comprising a glass or plastic body with rubber bulb and nozzle, to withdraw a sample of the electrolyte, and a glass hydrometer with a range of 1.08 to 1.3°SG.

Body Material	Range	Division	Product Number
Plastic	1.080 to 1.300°SG	0.005	10/722/0
Glass	1.080 to 1.300°SG	0.005	10/723/0



Draft Survey Hydrometer

320mm long and adjusted for use at 15°C. Supplied with or without certificate. Measuring the apparent density in kg/litres, commonly used for ship draft survey calculations.

Description	Range	Length mm	Division	Product Number
Hydrometer with Chart	0.99 to 1.04	320mm	0.0005	10/750/0
Hydrometer without Chart	0.99 to 1.04	320mm	0.0005	10/751/0

All hydrometers can be supplied with UKAS certification, certificate traceable to Recognised National Standard or Statement of Conformity, if required.



Sea Water Hydrometers

Measuring the percentage of salt in seawater. Adjusted at 15°C. Can also be supplied adjusted at 20°C on request.

Range g/l	Length mm	Division	Product Number
1.000 to 1.030g/ml	175mm	0.002	10/630/0
1.000 to 1.040g/ml	220mm	0.001	10/631/0
1.000 to 1.030g/ml	200mm	0.002	10/632/0
1.000 to 1.040g/ml	200mm	0.002	10/633/0
1.000 to 1.030g/ml	250mm	0.002	10/634/0
1.000 to 1.040g/ml	250mm	0.002	10/635/0
1.000 to 1.050g/ml	250mm	0.002	10/636/0

Brinometer

Measuring the percentage saturated solution of brine in water at 15.6°C (60°F), these hydrometers are 230mm long.

Range % Brine	Length mm	Division	Product Number
0 to 100	230mm	1.0	10/621/0

Latexometer

These instruments are calibrated in grams of dry rubber per litre of latex and adjusted at 15.6°C (60°F). 160mm long.

Range g/l	Length mm	Division	Product Number
50 to 450	160mm	10.0	10/611/0
50 to 250	160mm	10.0	10/612/0

Urinometer

Measuring the specific gravity of urine at 15.6°C (60°F), these hydrometers are 160mm long.

Range °SG	Length mm	Division	Product Number
1.00 to 1.06	160mm	0.001	10/650/0

Aviation Fuel Hydrometers

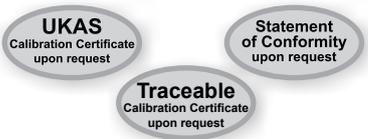
Measuring in specific gravity or density.

Range S60/60F	Adjusted	Length mm	Division	Product Number
0.75 to 0.85	60°F	185mm	0.002	10/640/0

Range °SG	Adjusted	Length mm	Division	Product Number
0.775 to 0.825	15°C	270mm	0.001	10/641/0

Wine & Beer Hydrometer

Measuring the specific gravity of wine and beer and designed for home use, this hydrometer will monitor the fermentation process and allows the percentage of alcohol to be determined easily with a zoned scale. Adjusted for use at 20°C.



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Range °SG	Length mm	Division	Product Number
0.98 to 1.120	230mm	0.002	10/801/0

Wine & Beer Thermometer

Red spirit filled tube with easy to read scale. Suitable for use with wine and beer hydrometer.

Range °C&F	Length mm	Division	Product Number
15 to 105°C&F	205mm	1°C	21/594/3

Brix Hydrometer

Measuring the percentage of sugar and commonly used in wine production. The Brix scale is the equivalent to Balling and Plato scales. Adjusted for use at 15.6°C (60°F), for a surface tension 55mN/m.

Range	Length mm	Division	Product Number
0 to 10	300mm	0.1	10/250/0
10 to 20	300mm	0.1	10/251/0
20 to 30	300mm	0.1	10/252/0
30 to 40	300mm	0.1	10/253/0
40 to 50	300mm	0.1	10/254/0
50 to 60	300mm	0.1	10/255/0
60 to 70	300mm	0.1	10/256/0
0 to 20	250mm	0.2	10/257/0
20 to 40	250mm	0.2	10/258/0
40 to 60	250mm	0.2	10/259/0
60 to 80	250mm	0.2	10/260/0

Gay Lussac (Alcoholometer)

250mm hydrometer, measuring alcohol % by volume and adjusted at 15°C.

Range % Alcohol	Length mm	Division	Product Number
0 to 100	250mm	1.0	10/670/0

Alcohol Sikes Hydrometer

These Alcohol Sikes Hydrometers, for measuring ethanol/water mixtures using an arbitrary Sikes scale at 51°C. Overall length 255mm.

Range Sikes	Length mm	Division	Product Number
0 to 20 A	255mm	0.2	10/810/0
0 to 20	255mm	0.2	10/811/0
20 to 40	255mm	0.2	10/812/0
40 to 60	255mm	0.2	10/813/0
60 to 80	255mm	0.2	10/814/0
80 to 90	255mm	0.2	10/815/0

Alcohol Hydrometer

These Alcohol Hydrometers, for measuring the density of ethanol/water mixtures in kg/m³ at 20°C are to BS 5470.

Range kg/m ³	Length mm	Division	Product Number
780 to 800	300mm	0.2	10/850/0
800 to 820	300mm	0.2	10/851/0
820 to 840	300mm	0.2	10/852/0
840 to 860	300mm	0.2	10/853/0
860 to 880	300mm	0.2	10/854/0
880 to 900	300mm	0.2	10/855/0
900 to 920	300mm	0.2	10/856/0
920 to 940	300mm	0.2	10/857/0
940 to 960	300mm	0.2	10/858/0
960 to 980	300mm	0.2	10/859/0
980 to 1000	300mm	0.2	10/860/0

BS 718 : 1991 is generally aligned with ISO 387 and ISO 649. The specification includes five series and three sub-series of hydrometers, of which the most widely used are listed below. They are calibrated using the accepted units of grams per millilitre (g/ml) and are adjusted, except for the “SP” sub-series, at 20°C.

- Series S50** 190mm long, divided in 0.002g/ml, range spans of 0.050g/ml
- Series M50** 270mm long, divided in 0.001g/ml, range spans of 0.050g/ml
- Series L50** 330mm long, divided in 0.0005g/ml, range spans of 0.050g/ml



Range g/ml	To suit Surface Tension	Product Number		
		Series S50	Series M50	Series L50
0.60 to 0.65g/ml	Low	10/300/0	10/330/0	10/360/0
0.65 to 0.70g/ml		10/301/0	10/331/0	10/361/0
0.70 to 0.75g/ml		10/302/0	10/332/0	10/362/0
0.75 to 0.80g/ml		10/303/0	10/333/0	10/363/0
0.80 to 0.85g/ml		10/304/0	10/334/0	10/364/0
0.85 to 0.90g/ml		10/305/0	10/335/0	10/365/0
0.90 to 0.95g/ml		10/306/0	10/336/0	10/366/0
0.95 to 1.00g/ml		10/307/0	10/337/0	10/367/0
1.00 to 1.05g/ml	Medium	10/308/0	10/338/0	10/368/0
1.05 to 1.10g/ml		10/309/0	10/339/0	10/369/0
1.10 to 1.15g/ml		10/310/0	10/340/0	10/370/0
1.15 to 1.20g/ml		10/311/0	10/341/0	10/371/0
1.20 to 1.25g/ml		10/312/0	10/342/0	10/372/0
1.25 to 1.30g/ml		10/313/0	10/343/0	10/373/0
1.30 to 1.35g/ml		10/314/0	10/344/0	10/374/0
1.35 to 1.40g/ml		10/315/0	10/345/0	10/375/0
1.40 to 1.45g/ml		10/316/0	10/346/0	10/376/0
1.45 to 1.50g/ml		10/317/0	10/347/0	10/377/0
1.50 to 1.55g/ml		10/318/0	10/348/0	10/378/0
1.55 to 1.60g/ml		10/319/0	10/349/0	10/379/0
1.60 to 1.65g/ml		10/320/0	10/350/0	10/380/0
1.65 to 1.70g/ml		10/321/0	10/351/0	10/381/0
1.70 to 1.75g/ml		10/322/0	10/352/0	10/382/0
1.75 to 1.80g/ml		10/323/0	10/353/0	10/383/0
1.80 to 1.85g/ml		10/324/0	10/354/0	10/384/0
1.85 to 1.90g/ml		10/325/0	10/355/0	10/385/0
1.90 to 1.95g/ml		10/326/0	10/356/0	10/386/0
1.95 to 2.00g/ml		10/327/0	10/357/0	10/387/0

Series M100

Adjusted at 20°C, these hydrometers have a range span of 0.100g/ml with a length of 250mm and are divided every 0.002g/ml.

Range g/ml	To suit Surface Tension	Product Number
0.60 to 0.70g/ml	Low	10/400/0
0.70 to 0.80g/ml		10/401/0
0.80 to 0.90g/ml		10/402/0
0.90 to 1.00g/ml		10/403/0
1.00 to 1.10g/ml	Medium	10/404/0
1.10 to 1.20g/ml		10/405/0
1.20 to 1.30g/ml		10/406/0
1.30 to 1.40g/ml		10/407/0
1.40 to 1.50g/ml		10/408/0
1.50 to 1.60g/ml		10/409/0
1.60 to 1.70g/ml		10/410/0
1.70 to 1.80g/ml		10/411/0
1.80 to 1.90g/ml		10/412/0
1.90 to 2.00g/ml		10/413/0



BS 718 : 1991 Density Hydrometers

Sub-series M50 SP

BS 718 : 1991 is generally aligned with ISO 387 and ISO 649. This sub-series has a greater accuracy than the standard M50 Series and is only available over a limited range of density. The length is 270mm and the range span covers 0.050 g/ml with divisions 0.001g/ml. They are adjusted at 15°C and suitable for low surface tension. This sub-series is commonly used in the Petroleum industry and corresponds to IP160.

Range g/ml	To suit Surface Tension	Product Number
0.60 to 0.65	Low	10/450/0
0.65 to 0.70		10/451/0
0.70 to 0.75		10/452/0
0.75 to 0.80		10/453/0
0.80 to 0.85		10/454/0
0.85 to 0.90		10/455/0
0.90 to 0.95		10/456/0
0.95 to 1.00		10/457/0
1.00 to 1.05		10/458/0
1.05 to 1.10		10/459/0

Sub-series L50 SP

BS 718 : 1991 is generally aligned with ISO 649. This sub-series has a greater accuracy than the standard L50 Series and is only available over a limited range of density. The length is 335mm and the range span covers 0.050 g/ml with divisions 0.0005g/ml. They are adjusted at 15°C and suitable for low surface tension. This sub-series is commonly used in the Petroleum industry and corresponds to IP160.

Range g/ml	To suit Surface Tension	Product Number
0.60 to 0.65	Low	10/460/0
0.65 to 0.70		10/461/0
0.70 to 0.75		10/462/0
0.75 to 0.80		10/463/0
0.80 to 0.85		10/464/0
0.85 to 0.90		10/465/0
0.90 to 0.95		10/466/0
0.95 to 1.00		10/467/0
1.00 to 1.05		10/468/0
1.05 to 1.10		10/469/0

BS 718 : 1960 Specific Gravity Hydrometers

Sub-series S60/60F M50 SP

BS 718 : 1960 is generally aligned with ISO 387 and ISO 650. This sub-series has a greater accuracy than the standard M50 Series and is only available over a limited range of density. The length is 270mm and the range span covers 0.050 S60/60F with divisions 0.001 S60/60F. They are adjusted at 60/60°F and suitable for low surface tension. This sub-series is commonly used in the Petroleum industry and corresponds to IP 160.

Range S60/60F	To suit Surface Tension	Product Number
0.60 to 0.65	Low	10/450/5
0.65 to 0.70		10/451/5
0.70 to 0.75		10/452/5
0.75 to 0.80		10/453/5
0.80 to 0.85		10/454/5
0.85 to 0.90		10/455/5
0.90 to 0.95		10/456/5
0.95 to 1.00		10/457/5
1.00 to 1.05		10/458/5
1.05 to 1.10		10/459/5

Sub-series S60/60F L50 SP

BS 718 : 1960 is generally aligned with ISO 650. This sub-series has a greater accuracy than the standard M50 Series and is only available over a limited range of density. The length is 335mm and the range span covers 0.050 S60/60F with divisions 0.0005 S60/60F. They are adjusted at 60/60°F and suitable for low surface tension. This sub-series is commonly used in the Petroleum industry and corresponds to IP160.

Range S60/60F	To suit Surface Tension	Product Number
0.60 to 0.65	Low	10/460/5
0.65 to 0.70		10/461/5
0.70 to 0.75		10/462/5
0.75 to 0.80		10/463/5
0.80 to 0.85		10/464/5
0.85 to 0.90		10/465/5
0.90 to 0.95		10/466/5
0.95 to 1.00		10/467/5
1.00 to 1.05		10/468/5
1.05 to 1.10		10/469/5



The American Society for Testing and Materials (ASTM) Specification E 100 describes hydrometers using the API (American Petroleum Institute) scale and others in degrees Specific Gravity.

Statement of Conformity upon request

UKAS Calibration Certificate upon request

Traceable Calibration Certificate upon request

Hydrometers

330mm Long Plain Hydrometers

Adjusted at 60°F for petroleum products and other liquids of low surface tension.

ASTM Number	API Range	Division	Product Number
1H	-1 to 11	0.1	09/001/0
2H	9 to 21	0.1	09/002/0
3H	19 to 31	0.1	09/003/0
4H	29 to 41	0.1	09/004/0
5H	39 to 51	0.1	09/005/0
6H	49 to 61	0.1	09/006/0
7H	59 to 71	0.1	09/007/0
8H	69 to 81	0.1	09/008/0
9H	79 to 91	0.1	09/009/0
10H	89 to 101	0.1	09/010/0

ASTM Number	Range °SG	Division	Product Number
82H	0.650 to 0.700°SG	0.0005	09/082/0
83H	0.700 to 0.750°SG	0.0005	09/083/0
84H	0.750 to 0.800°SG	0.0005	09/084/0
85H	0.800 to 0.850°SG	0.0005	09/085/0
86H	0.850 to 0.900°SG	0.0005	09/086/0
87H	0.900 to 0.950°SG	0.0005	09/087/0
88H	0.950 to 1.000°SG	0.0005	09/088/0
89H	1.000 to 1.050°SG	0.0005	09/089/0
90H	1.050 to 1.100°SG	0.0005	09/090/0

330mm Long Hydrometers

Adjusted at 60°F for heavier liquids of medium surface tension.

ASTM Number	Range °SG	Division	Product Number
98H	0.950 to 1.000°SG	0.0005	09/098/0
111H	1.000 to 1.050°SG	0.0005	09/111/0
112H	1.050 to 1.100°SG	0.0005	09/112/0
113H	1.100 to 1.150°SG	0.0005	09/113/0
114H	1.150 to 1.200°SG	0.0005	09/114/0
115H	1.200 to 1.250°SG	0.0005	09/115/0
116H	1.250 to 1.300°SG	0.0005	09/116/0
117H	1.300 to 1.350°SG	0.0005	09/117/0
118H	1.350 to 1.400°SG	0.0005	09/118/0
119H	1.400 to 1.450°SG	0.0005	09/119/0
120H	1.450 to 1.500°SG	0.0005	09/120/0



Soil Hydrometers

ASTM Soil Hydrometers

ASTM Specification E 100 describes hydrometers using the API (American Petroleum Institute) scale and others in degrees Specific Gravity.

200mm long and adjusted at 68°F.

ASTM Number	Range °SG	Division	Product Number
151H	0.995 to 1.038°SG	0.001	09/151/0

ASTM Number	Range g/ml	Division	Product Number
152H	-5 to 60g/ml	1.0	09/152/0

BS 1377 Soil Hydrometers

This soil hydrometer is to BS 1377 for the determination of particle size distribution in soil.

345mm long, adjusted at 20°F.

BS Number	Range °SG	Division	Product Number
1377	0.995 to 1.030°SG	0.001	10/681/0



Hydrometer Cylinders

These three hydrometer jars are available with a standard internal diameter of 37mm.

Internal Depth	Suitable for Hydrometer Series	Product Number
200mm	S50	10/000/0
300mm	M50 & M100	10/000/1
330mm	L50	10/000/2

Notes

The following certificates and documentation are current at time of print. For most up to date certificates, please see our website.

Brannan Conflict Minerals Policy

Tel: +44 (0) 1948 818600 • Fax: +44 (0) 1948 818623 • email: sales@brannan.co.uk • web: www.brannan.co.uk

In August 2012 the US Securities and Exchange Commission (SEC) approved a conflict minerals rule as mandated by the Dodd-Frank Wall Street Reform and Consumer Protection Act. This rule imposes new supply chain reporting requirements on publicly traded companies to promote transparency and consumer awareness regarding the use of "conflict minerals" (specifically the metals tantalum, tin, tungsten and gold) in their products.

The new reporting requirements are based on concerns that revenues obtained from mining and transport of conflict minerals finance the ongoing conflict in the Democratic Republic of Congo (DRC) and surrounding countries and the resulting humanitarian crises.

Although reporting requirements only apply to publicly traded companies required to report to the SEC, these requirements are expected to affect the entire electronics industry supply chain. Any company supplying products to an affected company is expected to be asked for conflict minerals information.

S. Brannan & Sons Limited has a proud reputation for delivering quality products and is committed to sourcing only from reputable suppliers. We can confirm that we have received confirmation from all our suppliers that their products adhere to this new ruling.

This policy is available for customers and members of the public on request or via our website www.brannan.co.uk.



Signed: _____ Date: 16 January 2017

Andrew Brannan
Joint Managing Director

S. Brannan & Sons Ltd
111, Laurel Path, Colchester, Essex, CO1 1JG, UK

Brannan Environmental Policy

Tel: +44 (0) 1948 818600 • email: sales@brannan.co.uk • web: www.brannan.co.uk

S. Brannan & Sons are committed to the implementation and maintenance of an effective Environmental Management System that meets the requirements of BS EN ISO 14001.

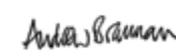
The company recognises that its activities, products, and services have an environmental impact at all stages of the product life cycle and are committed to making continual reductions in this impact.

It is our policy to:

- Prevent pollution in the form of waste, emissions, and noise.
- Protect the Environment in all aspects of our business and in particular significant aspects of our operations, to prevent negative environmental effects.
- Ensure efficient use of electricity and gas in production, lighting and heating by adopting & using more energy efficient processes and equipment.
- Work with customers, suppliers, and employees to raise awareness of environmental issues and to stress the importance of reducing our environmental impact.
- Minimise the amount of waste to landfill by adoption of the waste hierarchy: ELIMINATE, REDUCE, REUSE, RECYCLE & by focusing on eliminating single use plastic from our operations.

The company will comply with all relevant legislation and customer standards and conduct a regular review of its environmental impact with the aim of continuous improvement in all aspects of its operations.

This policy is available for customers and members of the public on request or via our website www.brannan.co.uk.



Signed: _____ Date: 1st April 2020

Anna Brannan
Managing Director

S. Brannan & Sons Ltd
111, Laurel Path, Colchester, Essex, CO1 1JG, UK

Brannan Quality Policy

Tel: +44 (0) 1948 818600 • email: sales@brannan.co.uk • web: www.brannan.co.uk

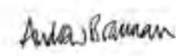
S. Brannan & Sons are committed to the implementation and maintenance of an effective Quality Management system that meets the requirements of BS EN 9001. The Company has a proud reputation for delivering quality products and is totally committed to understanding and meeting the needs and expectations of all our customers.

In order to achieve this objective, S. Brannan & Sons Limited will:

- actively promote the philosophy that quality is the responsibility of every employee and that customer satisfaction is paramount.
- conduct our business in a professional and ethical manner.
- deliver products and services on time and at the agreed price.
- insure the quality of products and services through structured staff training and development.
- make informed business decisions based on data gathered from our processes.

The Company will comply with all relevant legislation and customer standards and conduct a regular review of its quality management system with the aim of continuous improvement in all aspects of its operations.

This policy is available for customers and members of the public on request or via our website www.brannan.co.uk.



Signed: _____ Date: 1st April 2020

Anna Brannan
Managing Director

S. Brannan & Sons Ltd
111, Laurel Path, Colchester, Essex, CO1 1JG, UK

Brannan Ethical Policy

Tel: +44 (0) 1948 818600 • Fax: +44 (0) 1948 818623 • email: sales@brannan.co.uk • web: www.brannan.co.uk

- Scope**
This Ethical Policy covers all activities of all S. Brannan & Sons Ltd business activities and should be followed by all S. Brannan employees.
- Working within the Law**
S. Brannan will conform to all applicable laws and regulations in force in the country of operation and will regularly update these into break down laws and regulations.
- Treating People Fairly**
S. Brannan is committed to:
Treating employees, customers and business partners with respect and dignity.
Providing safe working conditions.
Ensuring no use of child labour, forced labour or prison labour.
S. Brannan will not work with partners who do not uphold such commitments.
S. Brannan has a specific **Dignity at Work Policy**.
Report any illegal or unethical behaviour - Any observed potentially illegal or unethical activity should be reported to a member of the S. Brannan management team immediately. Any substantiated reports of such behaviour will be corrected in good faith and will not result in retaliatory action against the informer.
- Acting with integrity**
S. Brannan is committed to acting with integrity and in good faith at all times.
Avoid giving or receiving inappropriate gifts - S. Brannan does not permit or condone the gift or receipt of any other than token gifts. S. Brannan has a specific **Anti-Slavery Policy**.
Market, sell and negotiate in good faith - S. Brannan does not permit or condone the sale of misleading securities, marketing, selling or negotiating techniques.
Maintain confidentiality - S. Brannan's production methods, business methods, dealings with customers, sources of supply and other proprietary information are among our most valuable assets. S. Brannan is committed to safeguarding such proprietary assets and providing confidentiality to its customers.
- Ensuring Financial Probity**
S. Brannan will ensure that its financial reporting accurately reflects the business performance conditions and continues with the applicable laws and regulations.
- Annual Review**
This policy will be annually reviewed for suitability and efficacy.



Signed: _____ Date: 18 January 2017

Andrew Brannan
Joint Managing Director

S. Brannan & Sons Ltd
111, Laurel Path, Colchester, Essex, CO1 1JG, UK

Brannan Anti-Bribery Policy

Tel: +44 (0) 1948 819999 | Fax: +44 (0) 1714 810000 | Email: sales@brannan.co.uk | www.brannan.co.uk

Definition of Bribery:
Bribery is committed when an inducement or reward is provided, in order to gain any commercial, technical, regulatory or economic advantage for S. Brannan & Sons Ltd or another party.

Company Policy on bribery
S. Brannan & Sons Ltd maintains:
the offering, the giving, the acceptance or the commission of any bribe, reward, gift or other inducement to or from any person or persons, wherever they are situated and whether they are a public official or body or private person or company by any individual employee, agent or other person or body acting on the Company's behalf in order to gain any commercial, contractual or regulatory advantage for the Group in a way which is prohibited or in order to gain any personal advantage, pecuniary or otherwise, for the individual or agents concerned with the individual.

This offence of bribery will be treated most seriously and constitutes gross misconduct in the company rules.

Company Policy with relation to receiving gifts:
S. Brannan & Sons Ltd does not prohibit the accepting of appreciation gifts or hospitality and entertainment that is given as a gift. In certain circumstances and/or countries would cause offence to our trading partners. An acceptable gift is one that would be judged by a reasonable observer to be suitable. Repeated and regular offers of gifts should be declined. A gift should not be accepted for something in return.

Company Policy with relation to offering gifts:
S. Brannan & Sons Ltd accepts the giving of promotional items or gifts on a festival or at another special time, so long as not exceeding the value of £50.

Raising concerns and asking for guidance
Decisions as to what is and what is not acceptable may be difficult. If any employee is in doubt as to whether it potential act constitutes bribery, the matter should be referred to a director of the Company.

Employees are encouraged to raise concerns about, or suspicion of, irregularities at the earliest possible stage and no employee will suffer any detriment as a result of raising genuine concerns about bribery, even if they are not to be mistaken.

Signature: Andrew Brannan
Andrew Brannan
Joint Managing Director

Download, Terms and Conditions & Instructions
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Brannan Health & Safety Policy

Tel: +44 (0) 1948 819999 | Fax: +44 (0) 1714 810000 | Email: sales@brannan.co.uk | www.brannan.co.uk

S. Brannan & Sons Limited understands that our employees are our most valuable resource and that their health, safety and welfare is of paramount importance.

We recognise that good health and safety practices are an integral part of our business performance and consider them to be a key management objective.

In order to achieve this objective S. Brannan & Sons Limited will:

- consult with employees on matters affecting their health and safety,
- provide employees with suitable and sufficient information, training and supervision,
- always adequate control of the health and safety risks arising from the company's work activities,
- provide and maintain safe plant and equipment,
- ensure safe handling and use of substances,
- actively aim to reduce accidents and cases of work related ill health,
- maintain safe and healthy working conditions.

All employees are required to take reasonable care for their own health and safety and of others who may be affected by their actions or omissions, and cooperate with S. Brannan & Sons Limited to ensure compliance with all legislative requirements and standards.

The Company will conduct a regular review of its health and safety performance with the aim of continuous improvement in all aspects of its operations.

This policy is available for customers and members of the public on request of via our website www.brannan.co.uk.

Signature: Andrew Brannan
Managing Director
17th February 2020
Date



Tel: +44 (0) 1948 819999 | Fax: +44 (0) 1714 810000 | Email: sales@brannan.co.uk | www.brannan.co.uk

Brannan Mission Statement

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Brannan is dedicated to providing high quality measurement instruments backed by exceptional customer service. The success and growth of our business is built on consistently exceeding customer expectations through, innovation, continuous improvement and our passion for what we do



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twitter.com/Brannan_UK

S. Brannan & Sons Ltd.

Cleator Moor, Cumbria CA25 5QE, UK

Tel: +44 (0)1946 816600

Fax: +44 (0)1946 816625

Web: www.brannan.co.uk

Email: sales@brannan.co.uk