# Scientific catalogue



- Laboratory thermometers
- Hydrometers
- Hygrometers
- Digital meters
- Environmental meters

### DISTRIBUTOR:-BLUE HORIZON

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- Data loggers
- Pocket thermometers
- Timers & counters
- Scientific accessories



### General purpose, liquid-in-glass thermometers

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. Brannan 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, in resealable, individual telescopic tubes.

#### LO-*tox*<sup>™</sup> laboratory thermometers

Brannan LO-tox<sup>™</sup> 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.



#### ECO-therm<sup>™</sup>laboratory thermometers

The ECO-therm™ laboratory thermometers are filled with food safe oils, recently developed by Brannan's own product

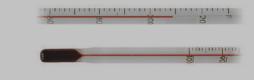


development team. Using a green coloured liquid, this thermometer covers the most popular temperature ranges at present, although it is intended to add further ranges in the future.



#### Spirit filled 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.



### Precision laboratory thermometers

Following the ban on specification mercury laboratory thermometers in October 2017, Brannan 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 cylinder for storage. The thermometers are made to the highest possible standards and checked at every stage of manufacture to the requirements of our ISO 9001 quality management system. These high precision specification thermometers are calibrated at two or three separate points across their working range.

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#### **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



Laboratory thermometers



### LO-*tox*<sup>™</sup> laboratory thermometers

**LO**-*tox*<sup>TM</sup> 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*<sup>TM</sup> 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.



Calibration needed? See page 52

Range			Filling	76mm im	76mm immersion		nersion
°C only	Division	Length	colour	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	+/-1.5°C @ 90°C	44/802/8	+/-1.5°C @ 90°C	44/810/8
-20 to +110°C	0.5°C	305mm	Blue	+/-1.5°C @ 90°C	44/802/9	+/-1.5°C @ 90°C	44/810/9
-20 to +150°C	1.0°C	305mm	Blue	+/-1.5°C @ 90°C	44/803/8	+/-1.5°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	+/-1.0°C @ 90°C	44/825/0
Range			Filling	76mm im	mersion	Total immersion	
°F only	Division	Length	colour	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	Range		Filling	76mm im	mersion	Total immersion	
°C&F	Division	Length	colour	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	-	-
	1			<u> </u>			

+/-2.0°C @ 90°C

44/804/5

-10 to +260°C&F

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1.0°C&F

405mm

Blue



### General purpose, spirit filled laboratory thermometers



These thermometers use specially selected filling material covering temperatures down to -100°C. Normal fillings are coloured red on a white back glass but alternative colours are available as shown.

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 individual, resealable, telescopic tubes, 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.

> Calibration needed? See page 52



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Range	<b>_</b>		Filling	76mm imr	nersion	Total immersion		
°C only	Divisions	Length	colour	Accuracy	Product no	Accuracy	Product no	
-10 to +50°C	1.0°C	150mm	Red	-	-	+/-1.0°C @ 35°C	44/450/0	
-10 to +110°C	1.0°C	150mm	Red	-	-	+/-1.5°C @ 35°C	44/430/0	
-10 to +110°C	1.0°C	150mm	Green	-	-	+/-1.5°C @ 35°C	44/430/5#	
-10 to +110°C	1.0°C	150mm	Blue	-	-	+/-1.5°C @ 35°C	44/430/7	
-10 to +60°C	1.0°C	205mm	Red	+/-1.5°C @ 35°C	44/105/1	+/-1.5°C @ 35°C	44/105/2	
-10 to +110°C	1.0°C	205mm	Red	+/-1.5°C @ 35°C	44/423/0	+/-1.5°C @ 35°C	44/100/4	
-10 to +150°C	1.0°C	205mm	Red	+/-2.0°C @ 35°C	44/441/0	+/-2.0°C @ 35°C	44/442/0	
-10 to +110°C	1.0°C	205mm	Green	+/-1.5°C @ 35°C	44/423/5#	-	-	
-10 to +110°C	1.0°C	250mm	Red	+/-1.0°C @ 35°C	44/417/0	+/-1.0°C @ 35°C	44/107/1	
-10 to +150°C	1.0°C	250mm	Red	+/-1.0°C @ 35°C	44/105/5	+/-1.0°C @ 35°C	44/100/5	
-100 to +50°C	1.0°C	305mm	Red	+/-2.0°C @ 0°C	46/457/0	+/-2.0°C @ 0°C	46/456/0	
-80 to +30°C	1.0°C	305mm	Red	-	-	+/-2.0°C @ 0°C	46/438/0	
-50 to +50°C	1.0°C	305mm	Blue	+/-1.0°C @ 0°C	46/540/0	+/-1.5°C @ 35°C	46/539/0	
-10 to +50°C	0.5°C	305mm	Red	+/-0.5°C @ 35°C	44/401/0	+/-0.5°C @ 35°C	44/401/1	
-10 to +110°C	1.0°C	305mm	Red	+/-1.0°C @ 35°C	44/403/0	+/-1.0°C @ 35°C	44/010/8*	
-10 to +110°C	1.0°C	305mm	Green	+/-1.0°C @ 35°C	44/403/5#	-	-	
-10 to +110°C	1.0°C	305mm	Blue	+/-1.0°C @ 35°C	44/403/7	+/-1.0°C @ 35°C	44/010/7**	
-10 to +110°C	0.5°C	305mm	Red	+/-2.0°C @ 90°C	44/803/0	-	-	
-10 to +150°C	1.0°C	305mm	Red	+/-1.0°C @ 35°C	44/406/0	+/-1.0°C @ 35°C	44/011/8*	
-10 to +200°C	1.0°C	305mm	Blue	+/-2.0°C @ 90°C	44/408/0	+/-2.0°C @ 90°C	44/408/1	

Range: -20 to+150°C.

\* Range: -20 to+110°C.

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# Tri-top tube, rather than non-roll cap. See page 12 of this catalogue for details of Tri-top thermometers.

The tables below shows thermometers with yellow back glass:

Range			Filling	76mm imr	nersion	Total immersion	
°C only	Divisions	Length	colour	Accuracy	Product no	Accuracy	Product no
-20 to +110°C	1.0°C	305mm	Red	+/-1.0°C @ 35°C	44/302/8	+/-1.0°C @ 35°C	44/310/8
-20 to +150°C	1.0°C	305mm	Red	+/-1.5°C @ 35°C	44/303/8	+/-1.5°C @ 35°C	44/311/8

Range	Divisions	Length	Filling	76mm imr	nersion	Total immersion	
°C&F			colour	Accuracy	Product no	Accuracy	Product no
-20 to +110°C&F	1°C/2°F	305mm	Red	+/-1.0°C @ 35°C	44/302/9	-	-
-20 to +150°C&F	1°C/2°F	305mm	Red	+/-1.5°C @ 35°C	44/303/9	-	-



### Infrared thermometers

**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 38/719/0), battery, protective bag and full instructions. 3 point traceable calibration certificates available on request (Ref: 49/709/0 - additional charge applies).

### Pocket infrared thermometer

Pocket infrared thermometer supplied with wrist strap. Range: -50 to +260°C&F Distance to spot: 2:1 Accuracy: +/-2°C LCD dimensions: 19mm x 27mm Dimensions: 92.5mm x 45mm x 29.5mm **Product number: 38/719/0** 

**Compact infrared** 

Simple and compact

instruments with built in laser

LCD dimensions: 24mm x 26mm

Product numbers: 38/703/0

Dimensions: 134mm x 89mm x 36mm

Range: -50 to +500°C&F

Distance to spot: 12:1

Accuracy: +/-2°C

thermometer

targeting.

Brannan

Calibration needed? See page 52

> Brannan) England \* Infrañed Thermometer \* 388 a to 590 V 1-58.0 to 682 F ŁK ( C jił



### Standard infrared thermometer

A simple and stable instrument providing easy and safe temperature measurement with built in laser targeting and max min recording function. Range: -50 to +350°C&F Distance to spot: 13:1 Accuracy: +/-2°C LCD dimensions: 26mm x 25mm Dimensions: 155mm x 99mm x 27mm **Product numbers: 38/701/0** 



## Rai Dis Acc LC Din Pro

### Infrared thermometer with multi-spot laser

Infrared thermometer with 13 laser spots to increase targeting accuracy. Max min recording function. Range: -30 to +950°C&F Distance to spot: 30:1 Accuracy: +/-2°C LCD dimensions: 30mm x 26mm Dimensions: 155mm x 99mm x 27mm **Product number: 38/707/0** 









### **Advanced infrared thermometers**

#### Advanced, dual laser infrared thermometer High specification, dual laser infrared thermometer with precise infrared measurement using built in laser pointers and K-type input capabilities. Compatible with Brannan range of K-type thermocouple probes. Range: -50 to +1050°C&F K-type range: -50 to 1370°C&F Distance to spot: 30:1

Dimensions: 192mm x 97mm x 59mm Product number: 38/706/0 Replacement Thermocouple: 38/698/03

LCD dimensions: 35mm x 35mm

Calibration needed? See page 52

Accuracy: +/-2°C



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### 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.

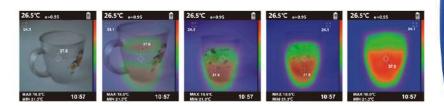
Supplied complete with factory certificate of calibration and presented in protective box.

Range: -20 to +300°C&F Accuracy\*: +/-2% LCD dimensions: 50mm x 38mm Dimensions: 223mm x 88mm x 65mm **Product number: 38/709/0** 



Visual Infrared

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**Digital meters** 



### K-type thermometer and probes

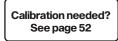


#### K-type/J-type 4-input thermocouple thermometer

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.

Beaded probe range: -50 to 330°C&F K-Type range: -200 to 1372°C&F\* J-Type range: -210 to 1100°C&F\* Accuracy: +/-0.15% rdg +1°C&F LCD dimensions: 55mm x 45mm Dimensions: 184mm x 66mm x 33mm **Product number: 38/685/0** 







#### K-type probes

**Brannan** range of stainless steel 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.

K-type probe for solids and liquids temperature 200mm probe with 130mm handle.

Range: -50 to +800°C&F Product number: 38/690/0

**Note:** Handles should be protected against the effects of radiant heat when using at temperatures above 500°C&F.

K-type probe for contact and surface measurement 210mm probe with 130mm handle. Range: -50 to +450°C&F Product number: 38/692/0

#### K-type probe for contact and surface measurement K-type set into 115mm handle. Range: -50 to +450°C&F Product number: 38/693/0

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