



# TPI Food Safety Catalogue

*Instruments designed for food processing & preparation to help you meet HACCP:*

## Hazard Analysis and Critical Control Point Principles



### Take the right steps with TPI Food Safety Instruments:

- Conduct a hazard analysis
- Determine critical control points
- Establish critical limits, monitoring procedures, corrective actions, verification procedures, record keeping and documentation procedures

The **367D** and **341K** can be **auto field calibrated** to a system accuracy (tester & probe) of  $\pm 0.5^{\circ}\text{C}$ .

See page 12 for details.

The **306C**, **312C**, **316C**, **318C**, **319C** and **320C** can be **auto field calibrated** to  $\pm 1^{\circ}\text{C}$ .

See page 12 for details.

**Three-year limited warranty for TPI temperature products**

**[www.jenton.co.uk](http://www.jenton.co.uk)**  
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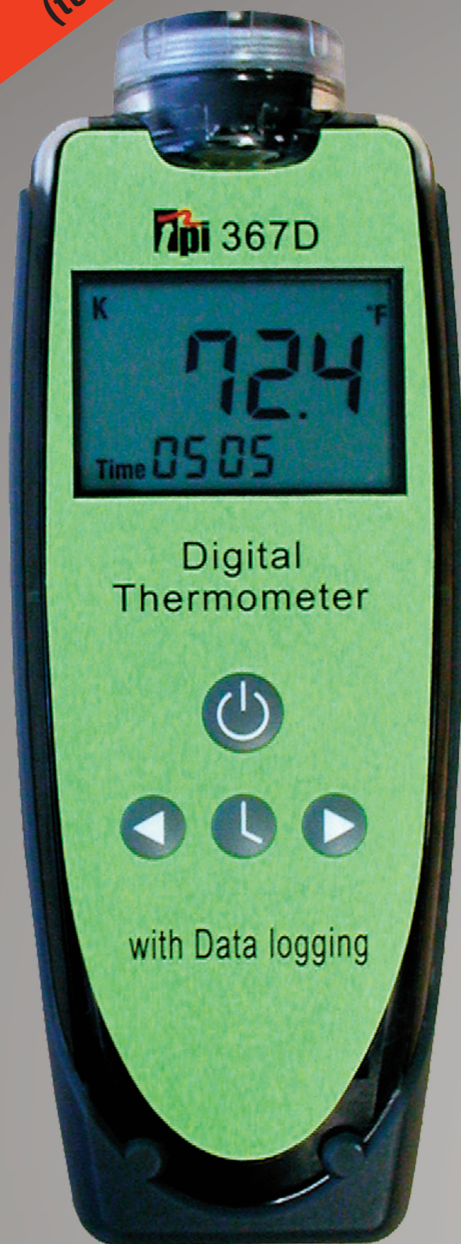


**367D Auto Field Calibration to  $\pm 0.5^{\circ}\text{C}$  system (tester + probe)**

## Waterproof IP67. 0.1% basic accuracy hand held digital thermometer

*The 365/365T and 367D digital thermometers feature:*

- Selectable  $^{\circ}\text{C}/^{\circ}\text{F}$  • Up to 14,000 hours battery life
- Overmolded ergonomic case



163mm x 58mm x 33mm 272g

### Applications

- Validate the temperature of incoming food product prior to accepting deliveries
- Measure food storage temperature
- Verify cooking and serving temperature
- Confirm hot and cold holding cabinet temperatures
- Measure food reheating temperatures
- Monitor frozen food thawing temperature
- Data log temperatures of food overnight (only 367D with optional A367)

#### 365/365T

- Submini connector
  - Type-K thermocouple (365)
  - Type-T thermocouple (365T)
- Long battery life time (low battery detect)
- Large LCD display

#### 367D

- **AUTO FIELD CALIBRATION**  
Perform ice bath calibration to achieve  $\pm 0.5^{\circ}\text{C}$  system (tester and probe) accuracy within the  $-1^{\circ}\text{C}$  to  $49^{\circ}\text{C}$  temperature range. Calibration is easy two-step process performed with key pad, no additional tools needed.
- Data log temperature of food overnight with the optional A367 docking station and software allows data logging up to 16,000 readings with real time and logged data transfer to PC. The sample interval for logged readings can be set from 1 second up to 24 hours.
- Lumberg connector
  - Thermistor
  - Type-K thermocouple
  - Type-T thermocouple
- Store 16 readings
- Real time data transfer to PC via optional USB docking station
- Multi use belt clip: can be used as a wall mount
- Large two line LCD display
- Current time display
- Alarm clock
- Alarm timer
- Long battery life (low battery detect)
- Data hold
- Over/ under temperature alarm
- Field calibration
- Fast reading mode

		365/365T	367D
	Thermistor	NA	$-50^{\circ}\text{F}$ to $150^{\circ}\text{C}$
Range	Type-K	$-200^{\circ}\text{C}$ to $600^{\circ}\text{C}$	$-200^{\circ}\text{C}$ to $600^{\circ}\text{C}$
	Type-T	$-200^{\circ}\text{C}$ to $400^{\circ}\text{C}$	$-200^{\circ}\text{C}$ to $400^{\circ}\text{C}$
Instrument Accuracy at $23^{\circ}\text{C}$		$0.1\% \pm 0.2^{\circ}\text{C} / 0.4^{\circ}\text{C}$	
Resolution	$> -100^{\circ}\text{C}$	$0.1^{\circ}\text{C}$	
	$-100^{\circ}\text{C}$	$1^{\circ}\text{C}$	
Battery Life Time (for all models)		Up to 14,000 hours (7,000 hours when PC communication is enabled 367D only)	
IP Rating		IP67	
Operating Temperature		$-20^{\circ}\text{C}$ to $50^{\circ}\text{C}$	
Scale		$^{\circ}\text{C}/^{\circ}\text{F}$	
Countdown Timer		N/A	(1 second ~ 24 hour) 3 user selectable
Real Time Clock		N/A	Yes
Auto Power Off		Yes	
Over / under Temperature Alarm		N/A	Yes
Field Calibration (user calibration)		N/A	Yes $+5^{\circ}\text{C}$
Fast Reading Mode		N/A	Yes
Data Logging		N/A	Yes
PC Communication		N/A	Yes
Battery		2 x LR6 size AA	

## USB Docking Station A367

Use with the 367D thermometer to communicate to a computer. Enables real time data to be displayed and recorded. Test data logged with the 367D can be downloaded to a PC. Includes the docking station, USB interface cable, and 367D PC interface software.



## Belt Clip A366

Use with the 365 and 367D thermometers for secure carry on a belt. Belt clip holds the thermometer ready for use. The 365 or 367D can be used while held by the clip or can be removed from the clip and used.



## Lumberg Thermistor Test Caps

VX11L	-18 °C
VX12L	0 °C
VX13L	70 °C

## K-Type Thermocouple Calibrator VKC300M

Reliable K-type thermocouple, low battery indicator, and easy on-site thermometer calibration checking. Accuracy at 23°C is ±0.5°C

## What are the advantages of Lumberg connectors?

Lumberg connectors are designed for the rigors of food processing environments. Advantages include:

- Strong connection - stainless steel collar holds and protects connection. Probe will not pull out of instrument without unscrewing the collar.
- Waterproof stainless steel will not rust and is ideal for wet, humid conditions.
- Lumberg connectors are manufactured following ISO9000 quality control guidelines.

## Temperature Testers for Demanding Environments

**Designed for rigorous use in extreme food processing conditions.**

The TPI 353 and 354 are highly durable instruments designed to perform in challenging environments where high humidity and condensation can create problems. Combine these testers with a heavy-duty probe and you have the ultimate combination to meet extreme demands.



## A305

### Protective Tilt Boot

Store your instrument face down inside boot to protect the screen. The A305 comes standard on the 353 and 354 temperature testers.

FEATURES	353	354
Min/Max Record	NA	YES
Data Hold	NA	YES
Selectable Res.	NA	YES
C°/F° Selectable	NA	YES
Auto Off	YES (after 20 min)	YES (after 20 min)
Open Probe Indication	YES	YES
Connector Type	Lumberg	Lumberg
IP Rating	IP 63	IP 63
Range Thermistor	-40° to 110°C	-40° to 110°C
Thermistor Accuracy	±0.5°C	±1°C
Range T-Type	-200° to 400°C	-200° to 400°C
Thermocouple Accuracy*	±0.3%, ±1°C	±0.3%, ±1°C
Size	41mm x 152mm x 77mm	41mm x 152mm x 77mm
Weight	278g w/boot	278g w/boot
Battery	9V	9V

\*Accuracy will depend on selection of probe.



## Hand-Held Digital Thermometer

**Affordable. Dependable. Easy to Use.**



Verify calibration with our special 351 test caps. Surface, liquid, or air thermistor probes can be used with the 351 to measure temperature between -40° and 104°C.

### 351X

- **Single button operation**
- **Accuracy** with Thermistor is  $\pm 1^\circ \text{C}$  ( $0^\circ$  to  $70^\circ \text{C}$ )
- **Verify Calibration** Optional test caps available
- **Water Resistant** Measurements can be taken in any environment
- **Automatic Power Off** 3-minute shut down with inactivity
- **Open Probe Indicator** "Open" is displayed when probe is open or not attached.

### SPECIFICATIONS

IP Rating	IP63
Thermistor Probe Range	-40° to 104°C

### Kit 351F1X

**Get the whole works!**

The 351F1X Kit comes complete with instrument, A304 protective rubber boot and an FX12B probe.

### A304

#### Protective Tilt Boot

Enjoy upright viewing. Built-in stand also frees the hand. Store your instrument face down inside boot to protect the screen. The A304 comes standard on the 340, 341, and 351 temperature testers



### Thermistor Probes with Bipolar Connector 351

Liquid Immersion Probe .....	FX12B
Liquid Immersion Probe w/8" stem .....	FX13B
Air Probe .....	GX15B
3-Foot Extension lead.....	EX11B

### Bi-Pole Thermistor Test Cap

VX11B .....	-18°C
VX13B .....	70°C

### How do I field calibrate the 341K digital thermometer?

1. Connect the temperature probe to the 341K.
2. Press and hold down the **MIN/MAX** and **HOLD** buttons and turn on the 341K.
3. Insert the temperature probe into an ice bath and allow the reading to stabilize.
4. Press the **HOLD** button and calibration is complete.

### What is the difference between a thermistor and a thermocouple?

Thermistors are more accurate, but have a much shorter temperature range than thermocouples.

### What are the advantages of Sub-Mini connectors?

Sub-mini connectors are quick and easy to use, simply push in and pull out. A wide variety of economical probes are available with sub-mini connectors, enhancing the versatility and affordability of the temperature tester.

### What can test caps be used for?

Test caps provide accuracy confirmation of your TPI thermistor input thermometer



### AUTO FIELD CALIBRATION 341K

Perform ice bath calibration to achieve  $\pm 1^\circ \text{C}$  system tester and probe accuracy within the -1°F to 49°C temperature range. Calibration is easy two-step process performed with keypad, no additional tools needed.

Features	340	341K
Min/Max Record	NA	YES
Selectable Res.	NA	YES
C°/F° Selectable	YES	YES
Auto Off	YES (after 20 min)	YES (after 20 min)
Connector Type	Sub Mini	Sub Mini
Range K-Type	-50° to 1036°C	-50° to 1350°C
Basic Accuracy*	$\pm 0.5\% + \pm 1^\circ \text{C}$	$\pm 0.3\%, \pm 1^\circ \text{C}$
IP Rating	IP63	IP63
Size	41mm x 152mm x 77mm	41mm x 152mm x 77mm
Weight	278g w/boot	278g w/boot
Battery	1.5V (2)	9V

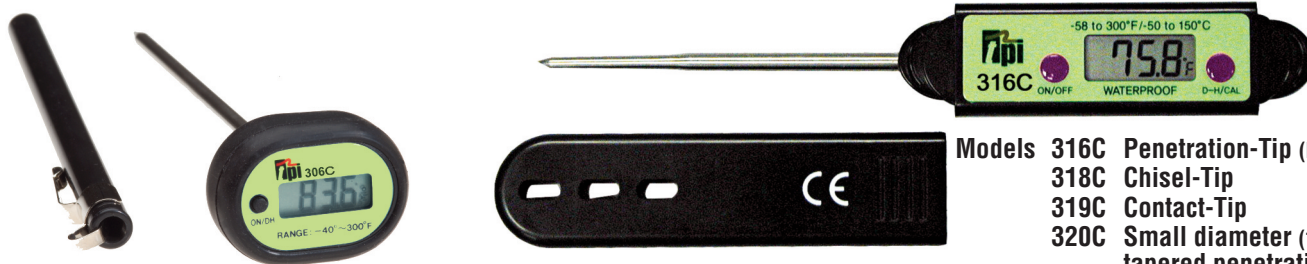
\*Accuracy will depend on selection of probe.

*the 340 and 341K digital thermometers come with A304 tilt stand protective boot and no probes*



## Pocket Digital Thermometers

All "C" version pocket digital thermometers can be auto field calibrated in 0° C ice water to  $\pm 1^\circ\text{C}$



Models 306CX Penetration tip comes with A306



**A306**  
Protective rubber boot for the 306C and 306CX.



Models 312C Penetration-Tip  
323 Chisel-Tip

326 Needle-Tip  
329 Contact-Tip  
(no protective sheath)

323, 326, and 329 have white case colour

## Pocket Digital Thermometers

### Features and Specifications

FEATURES	306CX	312C	316C	318C	319 C	320C	323	326	329
* IP rating	63	67	67	65	65	67	67	67	65
Tip Type	penetration	penetration	penetration	chisel	contact	needle	chisel	needle	contact
Tip Diameter at Sensor	(3.8mm)	(3.1mm)	(2.9mm)	(3.1mm)	(6mm)	(1.6mm)	(3.1mm)	(1.6mm)	(6mm)
Stem Length	(127mm)	(127mm)	(71mm)	(71mm)	(71mm)	(71mm)	(125mm)	(125mm)	(125mm)
Field Calibration	•	•	•	•	•	•	•	•	•
Data Hold	•	•	•	•	•	•	•	•	•
°C/°F Switchable		•	•	•	•	•	•	•	•
Range									
Min. Temp°C	-40°C	-50°C	-50°C	-50°C	-50°C	-50°C	-50°C	-50°C	-50°C
Max. Temp°C	149°C	150°C	150°C	150°C	150°C	150°C	150°C	150°C	288°C
Accuracy °C	$\pm 1^\circ\text{C}$	$\pm 1^\circ\text{C}$	$\pm 1^\circ\text{C}$	$\pm 1^\circ\text{C}$	$\pm 1^\circ\text{C}$	$\pm 0.5^\circ\text{C}$ (0 to 70°C) $\pm 1^\circ\text{C}$ (<0 and >70°C)	$\pm 1^\circ\text{C}$	$\pm 1^\circ\text{C}$	$\pm 1^\circ\text{C}$
Resolution	0.1°C	0.1°C	0.1°C	0.1°C	0.1°C	0.1°C	0.1°C	0.1°C	0.1°C
Auto Off	•	•	•	•	•	•	•	•	•
Sample Time	1.5sec	1.5sec	1.5sec	1.5sec	1.5sec	1.5sec	1.5sec	1.5sec	1.5sec
Battery	All TPI Digital Pocket Thermometers use an LR44 battery								

#### Centigrade versions 306CX

#### \* IP Ratings

Ingress Protection (IP) ratings are developed by the European Committee for Electro Technical Standardization and specify the environmental protection an enclosure provides.

#### Definitions for the IP ratings TPI products carry are:

**IP61** - Totally protected against dust and against vertically falling drops of water e.g. condensation

**IP63** - Totally protected against dust and against direct sprays of water up to 60° from the vertical.

**IP65** - Totally protected against dust and against low pressure jets of water from all directions; limited ingress.

**IP67** - Totally protected against dust and protected against the effect of immersion between 15cm (6") and 1m (39").

#### How do I check calibration of my pocket thermometer?

You put the thermometer in a solution of crushed ice and water, swirl the water around and it should read close to 0°C.

#### Does the whole stem need to be immersed to get an accurate reading?

The sensor is in the tip of the probe and needs to be 1/2 inch into what you are measuring.

#### How do I calibrate the "C" version digital thermometer?

1. Insert the stainless steel shaft of the thermometer into an ice water bath and allow the reading to stabilize
2. Press and hold the D-H/Cal button for approximately 8 seconds until "CAL" is displayed. Calibration is complete.

### Contact/Surface Probe Applications (C)

- Measure griddle temperatures to assure correct cooking temperatures.
- Check frozen food to assure proper storage temperatures.
- Measure temperatures between package to ensure proper quality control.
- Check any surface for correct process control temperatures.
- Measure superheats on condensers.
- Measure griddle temperatures.
- Measure machinery or mold temperatures with a surface probe.
- Measure pipe temperatures in any industrial application.

### Penetration / Immersion Probe Applications (F)

- Check internal food temperatures to assure quality control.
- Measure deep fat fryers with a high temp immersion probe.
- Measure liquids and semi-solid temperatures in food processing applications.
- Use a reduced tip probe for quicker response times where time is crucial to the process.

### Air Probe Applications (G)

- Measure air temperatures in duct work.
- Measure air temperature coming from diffusers while Trouble-shooting heating and air conditioning systems.
- Measure flame temperatures to trouble-shoot industrial heating applications.
- Calibrate thermostats using an ambient air probe.

### Probe Type

- F: Penetration/Immersion
- C: Contact/Surface
- G: Air/Gas

**F**

### Sensor Type

- K: Type K-thermocouple
- T: Type T-thermocouple
- X: Thermistor (PST)

**K**

**21**

Sequential Number

### Connector Type

- M- Sub-miniature
- L- Lumberg connector
- B- Bipole

**M**

### Probe Tips

#### Penetration / Immersion (F)

20 Pointed penetration



21 Tapered penetration



24 Rounded Immersion



26 Corkscrew penetration



28 Alligator Immersion



22 Chisel penetration



#### Contact/Surface (C)

30 Flat disk (Thermistor)



32 Ribbon



34 Between pack



36 Heavy duty spring



#### Air/Gas (G)

40 Air (Thermistor)



44 Hooded



48 Caged with rack clip



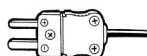
42 Beaded thermocouple



46 Caged



Sub-Mini Connector



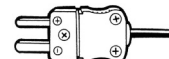
Lumberg Connector



Bipolar Connectors



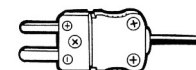
## K-Type Thermocouple Probe with Sub-Mini Connector



Model # Description	Application	Range °C	Probe tip	Dimensions	Insulation Material
Contact surface probe with ribbon sensor Water proof CK11M	Surface Temperatures Grills	-50° to 250°C	32	Stem Length: 102mm Diameter: 7.5mm Lead Length: 1M IP Rating: N/A	PTFE
Contact surface probe, right angle, waterproof CK12M	Contact temperatures on flat and uneven surfaces	-50° to 250°C	32	Stem Length: 102mm w/90° bend Diameter: 7.5mm Lead Length: 1M IP Rating: N/A	PTFE
Heavy-duty contact surface probe CK13M	Contact temperatures on flat and uneven high temperature surfaces	-50° to 650°C	36	Stem Length: 102mm Diameter: 14mm Lead Length: 1M	PTFE
Right angle heavyduty contact surface probe CK14M	Contact temperatures on flat and uneven high temperature surfaces	-50° to 650°C	36	Stem Length: 102mm Diameter: 3.2mm Lead Length: 1M IP Rating: N/A	PTFE
Wide contact surface probe CK18M	Restaurant Grills	-50° to 250°C	32	Stem Length: 102mm w/45° bend Diameter: 7.5mm Lead Length: 1M IP Rating: N/A	PTFE
45° Contact surface probe with ribbon sensor CK22M	Surface Temperatures Grills	-50° to 250°C	32	Stem Length: N/A Diameter: 60mm Lead Length: 1M IP Rating: N/A	PTFE
Pointed penetration probe FK11M	General Purpose Penetration	-50° to 250°C	22	Stem Length: 114mm w/45° bend Diameter: 12.7mm Lead Length: 1M IP Rating: N/A	PTFE



# K-Type Thermocouple Probe with Sub-Mini Connector



Model # Description	Application	Range °C		Probe tip	Dimensions	Insulation Material
Heavy duty Penetration Waterproof FK12M	Deep fat fryers and food processing	-50° to 250°C		21	Stem Length: 300mm Diameter: 6.4/2.5mm Lead Length: 1M IP Rating: 67	PTFE
Chisel tip penetration probe FK14M	General purpose penetration into semi-solids and liquids	-40° to 850°C		20	Stem Length: 203mm Diameter: 3.75mm Lead Length: 1M IP Rating: 67	PTFE
Tapered end for food penetration FK15M	Food Penetration	-50° to 250°C		20	Stem Length: 80mm Diameter: 1.6mm Lead Length: 1M IP Rating: 67	PTFE
Tapered tip chisel penetration probe waterproof FK21M	Food Penetration	-50° to 250°C		21	Stem Length: 101.6mm Diameter: 3.2/1.6mm Lead Length: 1M IP Rating: 67	PTFE
Oven food probe FK22M	Food Processing Test- ing food temperatures during cooking	-50° to 250°C		21	Stem Length: 101.6mm Diameter: 3.2/2.5mm Lead Length: 1M IP Rating: 67	PTFE
Rack clamp probe FK23M	Dishwasher Tests	-40° to 510°C		28	Stem Length: N/A Diameter: N/A Lead Length: 4.5M IP Rating: 67	PTFE
Flat sensor pack probe FK25M	Between Pack	-40° to 204°C		34	Stem Length: NA Diameter: NA Lead Length: 1.2M IP Rating: 67	PTFE
Waterproof Penetration probe FK27M	Food processing	-50° to 250°C		21	Stem Length: 300mm Diameter: 6.4mm/2.5mm Lead Length: 1M IP Rating: 67	PTFE
Long stem heavy duty T-handle penetration probe FK30M	Heavy duty penetration into semi-solids and liquids tapered shaft resist bending	-50° to 250°C		22	Stem Length: 609.60mm Diameter: 9.5mm Lead Length: 1M IP Rating: 67	PTFE
Beaded probe w/ FDA approved insulation GK13M	General purpose Air	-110° to 204°C		42	Stem Length: N/A Diameter: 24 gauge Lead Length: 1.2M IP Rating: N/A	PTFE
Armored probe GK18M	Special hanging clip for ovens. Air.	-40° to 308°C		48	Stem Length: N/A Diameter: N/A Lead Length: 1M IP Rating: N/A	SS*
Pointed tip penetration probe for HK11M handle or with any Sub-mini "K" input connector. FK13M	General purpose penetration into semi-solids and liquids	-40° to 850°C		20	Stem Length: 203mm Diameter: 3.75mm Lead Length: N/A IP Rating: 67	N/A
General purpose caged air probe for use with HK11M handle or with any Sub-mini "K" input connector. GK16M	Caged exposed junction for fast re- sponse in air	-40° to 260°C		46	Stem Length: 203mm Diameter: 6.5mm Lead Length: 1M IP Rating: N/A	N/A
Handle for use with K-type interchangeable probe tips HK11M	Use with FK13M, CK15M, and GK16M	N/A		N/A	Stem Length: N/A Diameter: N/A Lead Length: 1M IP Rating: N/A	PTFE

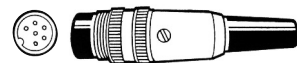
REFER TO THE TPI WEBSITE FOR ADDITIONAL OR OEM PROBE OPTIONS

## K-Type Thermocouple Probe with Lumberg connector



Model # Description	Application	Range °C		Probe tip	Dimensions	Insulation Material
Tapered tip chisel penetration probe waterproof FK21L	Food Penetration	-50° to 250°C		21	Stem Length: 101.6mm Diameter: .32/1.6mm Lead Length: 1M IP Rating: 67	PTFE
Oven food probe FK22L	Testing food tempera- tures during cooking	-50° to 250°C		20	Stem Length: 101.6mm Diameter: 2.4/1.6mm Lead Length: 1.2M IP Rating: 67	PTFE
Immersion / Penetration probe no handle or lead FK23L	Food Penetration	-50° to 250°C		21	Stem Length: 100mm Diameter: .32/2.2mm Lead Length: N/A IP Rating: 67	NA
Flat snsr pack probe FK25L	Between pack	-40° to 204°C		34	Stem Length: N/A Diameter: N/A Lead Length: 1.2M IP Rating: 67	PTFE

## T-Type Thermocouple Probe with Lumberg Connector



Model # Description	Application	Range °C		Probe tip	Dimensions	Insulation Material
Needle probe FT11L	Weiner probe for food processing	-100° to 250°C		20	Stem Length: 101.6mm Diameter: 3.2mm Lead Length: 1M IP Rating: 67	PTFE
Tapered end for food penetration waterproof FT21L	Food penetration	-100° to 250°C		21	Stem Length: 95.3mm Diameter: 3.2/1.6mm Lead Length: 1M IP Rating: 67	PVC
Oven food probe FT22L	Testing food temperature during cooking	-50° to 250°C		20	Stem Length: 100mm Diameter: 3.2mm Lead Length: 2.5M IP Rating: 67	PTFE
Rack clamp probe FT23L	Dishwasher Tests	-40° to 510°C		28	Stem Length: N/A Diameter: N/A Lead Length: 4.5M IP Rating: N/A	PTFE
Heavy duty T-handle long stem penetration probe FT24L	General purpose penetration into semi- solids and liquids	-40° to 250°C		21	Stem Length: 610mm Diameter: 9.5mm/3.76mm Lead Length: 1M IP Rating: 67	PTFE
Beaded probe with FDA approved insulation GT13L	General Purpose. Air	-100° to 250°C		42	Stem Length: NA Diameter: NA Lead Length: 1.2M IP Rating: 67	PTFE
Oven clamp probe GT19L	Special hangingClip for ovens. Air.	-40° to 510°C		48	Stem Length: NA Diameter: NA Lead Length: 1M IP Rating: 67	SS

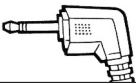
## Thermistor Probe with Lumberg Connector



Model # Description	Application	Range°F°C		Probe tip	Dimensions	Insulation Material
Liquid immersion probe FX11L	General Purpose, Liq- uid	-40° to 150°C		24	Stem Length: 102mm Diameter: 3.2mm Lead Length: 1M IP Rating: 67	PVC



Thermistor Probe with Bipolar Connector



Model # Description	Application	Range°F/°C		Probe tip	Dimensions	Insulation Material
Liquid immersion probe FX12B	General Purpose	-40° to 150°C		24	Stem Length: 80mm Diameter: 3.2mm Lead Length: 0.4M IP Rating: 67	PVC
Liquid immersion probe FX13B	General Purpose	-40° to 150°C		24	Stem Length: 203mm Diameter: 3.2mm Lead Length: 0.4M IP Rating: 67	PVC
Shielded air probe GX15B	Air	-40° to 150°C		44	Stem Length: 80mm Diameter: 3.2mm Lead Length: 0.4M IP Rating: N/A	PVC
extension lead male to female EX11B	Thermistor probes	N/A		NA	Stem Length: N/A Diameter: N/A Lead Length: 0.9M IP Rating: N/A	PVC

REFER TO THE TPI WEBSITE FOR ADDITIONAL OR OEM PROBE OPTIONS



Bi-Pole Thermistor  
Test Cap

VX11B	-18°C
VX13B	70°C



Lumberg Thermistor  
Test Caps

VX11L	-18 °C
VX12L	0 °C
VX13L	70 °C

Salt Meter 390a

Measure Salt Concentration and Temperature

LCD Display

Power (ON/OFF) Switch

Measurement Selection  
(MODE) Switch

Hold (TEST) switch

Sensor Probe

Sensor Part

Detachable Spoon

- Food:** Test the amount of salt in food, seafood, or processed foods
- Health:** Monitor the amount of salt intake
- Water:** Test TDS levels to determine purity

What is TDS?

Water contains a variety of minerals and salts such as calcium, magnesium, carbonate, chloride, nitrate, etc. TDS is the sum of these amounts.

## Food Applications:

Grill & Surface Temperatures, Holding Cabinets, Serving Temperatures, and Storage Temperatures



**3-YEAR  
LIMITED  
WARRANTY**

### FEATURES 381F

- High accuracy  $\pm 1^{\circ}\text{C}$  within the food temperature range  $-35^{\circ}\text{C}$  to  $100^{\circ}\text{C}$

### Features 380/381a/381F

- Easy-to-use one button operation
- 0.1 resolution for best reading
- Last reading hold
- Soft holster pouch
- Large, easy to read display
- $^{\circ}\text{C}$  and  $^{\circ}\text{F}$  selectable
- 9V battery included



FREE GK13M  
included with  
the 381a

155mm x 127mm x 35mm 7oz (200g)

FUNCTION	380 (w/o laser)	381a(laser)	381F(laser)
Temp. Ranges	$-20^{\circ}$ to $300^{\circ}\text{C}$	$-20^{\circ}$ to $300^{\circ}\text{C}$	$-35^{\circ}$ to $300^{\circ}\text{C}$
Laser Sighting	No	Yes	Yes
Accuracy @ $25^{\circ}\text{C}$ and	$\pm(2\%$ of reading, $\pm 2^{\circ}\text{C}$ : whichever is greater		$0^{\circ}\text{C} \sim 70^{\circ}\text{C} : \pm 1^{\circ}\text{C}$ $<0^{\circ}\text{C}$ or $>70^{\circ}\text{C} : \pm (2\%$ of reading, $\pm 2^{\circ}\text{C})$ : whichever is greater
Response Time	500 milliseconds		
Emissivity	0.95 fixed	0.95 fixed	0.97 fixed
Distance to Spot Ratio	9:1		4:1
Spectral Response	7~14 $\mu\text{m}$		
Operating Temperature	$32^{\circ}$ to $120^{\circ}\text{F}$ and $0^{\circ}$ to $50^{\circ}\text{C}$		
Battery Type	9V alkaline		

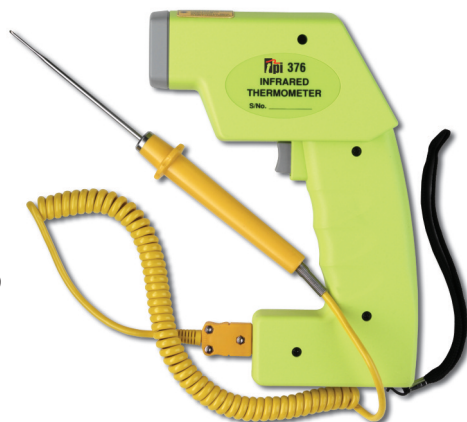
## Two instruments in one. Plug in optional K-type surface probe to convert non-contact IR to contact. 376

### APPLICATIONS

- Use contact thermometer probe to obtain correct temperatures of stainless steel grills.
- Transport temperatures are made easy. Use the laser to determine surface temperature of frozen delivery. Then use the contact probe to determine internal temperature if the delivery is suspect.

### FEATURES

- Laser pointer
- 11:5 distance to spot ratio
- Record function
- $^{\circ}\text{C}$  and  $^{\circ}\text{F}$  selectable temp
- Display data hold function
- Gun-type compact design
- Back light
- Operation lock function
- Trigger switch
- 9V battery and soft pouch included



Refer to "K" type temperature probes  
pages 6, 7 and 8.

FUNCTION	376(laser)
Temp. Ranges	$18^{\circ}$ to $510^{\circ}\text{C}$
Laser Sighting	Yes
Accuracy @ $25^{\circ}\text{C}$ and	$\pm(2\%$ of reading, $\pm 3.5^{\circ}\text{F}$ ) : whichever is greater
Response Time	500 milliseconds
Emissivity	Variable 0.1x to 0.7
Distance to Spot Ratio	11.5 to 1
Spectral Response	7~14 $\mu\text{m}$
Operating Temperature	$32^{\circ}$ to $120^{\circ}\text{F}$ and $0^{\circ}$ to $50^{\circ}\text{C}$
Battery Type	9V alkaline

As food moves in and out of the temperature danger zone ( $4^{\circ}$  to  $60^{\circ}\text{C}$ ) during transit, storage and preparation an IR thermometer with optional contact probe is an ideal all-in-one instrument.

## Close-Focus, Pocket-Size Infrared Thermometer

Instantly read surface temperatures.

### Infrared Thermometer 368

- Minimum Spot Size 1/8
- Selectable Fahrenheit or Centigrade
- Compact
- Auto Data Hold:
- Min/Max
- AUTO



38.1mm W x 69.85mm H

• NOTE: For optimum results, close focus IR thermometers should be held a distance of 2.54mm to 38.1mm from the surface to be measured to obtain an accurate reading

### SPECIFICATIONS

Range	$-22^{\circ}$ to $120^{\circ}\text{C}$
Operating Temp	$0^{\circ}$ to $40^{\circ}\text{C}$
Accuracy	2% or reading or $\pm 2^{\circ}\text{C}$ , whichever is greater
Response Time	Less than 0.5 second
Resolution	0.1 $^{\circ}\text{F}/^{\circ}\text{C}$
Emmissivity	0.95 fixed
Distant to Spot Ratio	1:1.3

- Detect hot spots or leaks by taking sample spot readings of freezers, and walk-in coolers.
- Safely check the temperature and performance of ovens, ranges, rotisseries, deep fryers and dishwashers.
- Check clean dishes immediately after washing to ensure that high enough temperature levels were achieved in the dishwasher for sanitation purposes.

### What does "distance to spot ratio" mean?

The laser spot needs to be showing inside the target area. An 8:1 "distance to spot ratio" means you are measuring a 1" diameter area at a distance of 8".

### How far can I measure?

Distance is unlimited. The size of the target area sets the limit on distance for accurate measurements. Example: If the area you wish to measure is 1 foot in diameter, then you will need to be within 8 feet to record an accurate temperature.

### What is the smallest target I can read?

Approximately one-half inch in diameter. except 1/8 for 368



Digital Air Velocity / Air Flow Meter 556C1



**Air Velocity:**  
0.4m/s to 30m/s

**Air Flow:**  
0cfm to 9999cfm

**Temperature:**  
-20°C to 80°C

- Features**
- Measure air velocity, air flow, and temperature
  - Five units of air velocity (m/s, km/hr, mile/hr, knots, ft/min)
  - Two units of air flow (cfm, cmm)
  - Send real time and logged data to a PC via optional A500 interface cable
  - Four digit dual line display simultaneously shows air flow and temperature
  - Data record displays minimum, maximum, and average readings
  - Data log up to 1000 readings in 1 sec to 999 sec intervals

Digital Combo vane & hotwire anemometer 575C1



**Air Velocity** Vane: 0.4 to 25m/s

HotWire: 0.2 to 20m/s

**Temperature** -20°C to +50°C

- Features & Benefits**
- Measure air velocity and temperature simultaneously
  - Record maximum, minimum and average
  - Multiple units of measure
  - Download to a computer using optional A500 cable
  - Soft padded carrying case with shoulder strap A755
- Applications**
- Building maintenance
  - Computer rooms
  - Heating & air conditioning systems
  - Bakeries
  - Humidistat calibration

Indoor Air Quality (IAQ): particle counters, air flow, humidity, temperature, CO2, & CO

PRODUCT NO.	MEASUREMENTS	RANGES	FEATURES & BENEFITS	APPLICATIONS
Handheld Indoor Air Quality Meter 1008a	CO2 Temperature	0 to 5000ppm -20 to 60°C	<ul style="list-style-type: none"><li>• Measure Carbon Dioxide (CO2) levels</li><li>• Measure ambient air temperature</li><li>• Log up to 48 readings in 30 minute intervals</li><li>• Print via I/R to optional printer (Model A740)</li></ul>	<ul style="list-style-type: none"><li>• Check ambient CO2 levels in work and living spaces</li><li>• Monitor results of control systems</li><li>• Measure Ambient air temperature</li></ul>
Handheld Indoor Air Quality Meter w/ CO and humidity measurement 1010a	CO2 Temperature Relative Humidity Dew Point Wet Bulb CO % outside air (calculated)	0 to 5000ppm -20 to 60°C 5 to 95% -44 to 57°C -16 to 57°C 0 to 500ppm 0 to 100%	<ul style="list-style-type: none"><li>• Calculate percent outside air to maintain acceptable CO2 levels in buildings and work spaces</li><li>• Measure and display Carbon Dioxide (CO2) and Carbon Monoxide</li><li>• Measure ambient air temperature</li><li>• Measure relative humidity, dew point and wet bulb</li><li>• Log up to 10,000 readings in 1 second to 1 hour intervals</li><li>• Print via I/R to optional printer (Model A740)</li></ul>	<ul style="list-style-type: none"><li>• Check ambient CO and CO2 levels in work and living spaces</li><li>• Monitor results of air control systems</li><li>• Ambient air temperature and Humidity</li><li>• Test dew point and wet bulb humidity</li></ul>

Indoor Air Quality (IAQ): particle counters, air flow, humidity, temperature, CO2, & CO

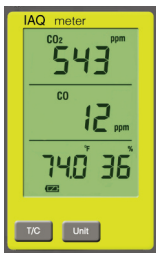
**1008a**

Measure and display carbon dioxide (CO2) and temperature



**1010a**

Measure and display carbon dioxide (CO2), carbon monoxide (CO), temperature, and humidity





## Why Use a Digital Thermometer?

With health and safety a priority in food handling, preparation and storage, it is vital to use the most accurate methods available to confirm food temperatures.

Because of this the **FDA Food Code recommends an electronic digital thermometer** with either a thermocouple or thermistor sensor rather than a bimetal thermometer for fast and accurate temperature measurement.

With the sensor located in the tip of a thermistor or thermocouple probe, **you can more accurately measure temperatures** in thin fillets of fish and poultry, and also hamburger patties.

In addition to higher accuracy, digital are more likely to maintain calibration than bimetals.

## Total Cost of Ownership Programs

Ask Jenton for a customized cost of ownership program: testers, probes, calibration, and replacements.

**Call Jenton at +44(0)1256 892194 and ask for Richard.**

## +/- 0.5°C Auto System Field Calibration With the 341K and 367D

Perform auto system field calibration in an ice bath to achieve +/-0.5°C system accuracy (tester and probe) within the -1°C to 49°C temperature range.

Calibration is an easy two step process performed with keypad, no additional tools necessary; just ice water. **Auto calibrates the system in less than 10 seconds!**

*Save time and money!*



## +/- 1°C Auto Field Calibration with the 306C, 312C, 316C, 318C, 319C and 320C



Models 316C, 320C



Auto field calibrate in 0°C ice water to achieve +/-1°C within the -1°C to 49°C temperature range.

Just press and hold the D-H/Cal button for approximately 8 seconds until "CAL" is displayed. Calibration is then complete.



Models 306C



Models 312C

**www.jenton.co.uk**  
**+44 (0) 1256 892194**  
**sales@jenton.co.uk**



Part Number	Description	UK List
365	IP67 waterproof single input sub mini k-type thermometer with ergonomic overmolded case	£129.95
365T	IP67 waterproof single input sub mini t-type thermometer with ergonomic overmolded case	£129.95
367D	auto field calibrateable, IP67 waterproof, single input, lumberg connectro, k-type or thermistor	£149.95
A367	data logging stations, USB cable, software for 367D	£59.95
A366	belt clip for 365/367	£19.95
VX11L	lumberg connector test cap for use with 353, 354 and 367D	£29.95
VX12L	lumberg connector test cap for use with 353, 354 and 367D	£29.95
VX13L	lumberg connector test cap for use with 353, 354 and 367D	£29.95
VKC300M	k-type celcius calibration box	£89.95
353	thermistor, t-type thermocouple, lumberg connector w/ tilt stand	£119.95
354	thermistor, t-type thermocouple, lumberg connector, C/F, min/max record, 1/.01 resolution	£139.95
A305	protective boot and tilt stand for 353 and 354 digital thermometers	£4.95
351X	"± 1 C accuracy, thermister, bipolar connector, protective boot and tilt stand, NO PROBES	£49.95
351F1X	kit includes 351X, protective boot and tilt stand, and FX12B (liquid immersion probe)	£59.95
A304	protective boot and tilt stand for 340, 341K and 351 digital thermometers	£4.95
340	single input k-type with A304 tilt stand	£56.95
341K	single input k-type, calibrateable, C/F, min/max, tilt stand and protective boot, NO PROBES	£72.95
FX12B	liquid immersion probe	£14.95
FX13B	liquid immersion probe c/w 8" stem	£14.95
GX15B	sheilded air probe	£24.95
EX11B	extension lead	£24.95
VX11B	bibolar test cap, use with 351	£24.95
VX13B	bibolar test cap, use with 351	£24.95
306CX	low cost pocket digital thermometer, calibrateable (centigrade version)	£9.95
A306	protective rubber boot (black) for 306	£4.95
312C	waterproof pocket digital thermometer, calibrateable	£12.95
316C	waterproof pocket digital thermometer (no magnets), calibrateable	£14.95
318C	pocket digital thermometer with magnets, chisel tip, calibrateable	£14.95
319C	pocket digital thermometer with magnets, contact tip, calibrateable	£14.95
320C	calibrateable pocket digital thermometer with reduced diameter stem	£14.95
323	water resistant pocket digital thermometer with chisel tip	£15.45
326	calibrateable water resistant pocket digital thermometer with needle tip	£15.45
329	calibrateable water resistant pocket digital thermometer with contact tip (no sheath)	£15.45
CK11M	contact surface probe with ribbon sensor, waterproof	£29.95
CK12M	contact surface probe, right angle, waterproof	£29.95
CK13M	heavy-duty contact surface probe	£34.95
CK14M	right angle heavy-duty contact surface probe	£34.95
CK18M	wide contact surface probe	£74.95
CK22M	45 degree contact surface probe with ribbon sensor	£29.95
FK11M	chisel tip penetration probe	£24.95
FK12M	heavy-duty penetration probe (waterproof)	£29.95
FK14M	chisel tip penetration probe	£24.95
FK15M	tapered end for food penetratiion	£24.95
FK21M	tapered end for food penetration probe (waterproof)	£24.95
FK22M	oven food probe	£44.95
FK23M	rack clamp probe	£44.95
FK25M	flat sensor pack probe	£29.95
FK27M	waterproof penetration probe	£39.95
FK30M	long stem heavy-duty, t-handle penetration probe	£59.95
GK13M	4" beaded probe with FDA approved insulation	£14.95
GK18M	armored probe	£19.95
FK13M	pointed tip penetrabion probe for HK11M handle	£24.95
GK16M	general purpose caged air probe for use w/ HK11M handle, or any k-type input	£24.95

Part Number	Description	UK List
HK11M	handle for use with k-type interchangeable probe tips	£19.95
FK21L	contact surface probe with ribbon sensor, waterproof	£59.95
FK22L	oven food probe	£69.95
FK23L	immersion/penetration probe, no handle or lead	£39.95
FK25L	flat sensor pack probe	£29.95
FT11L	chisel tip penetration probe	£29.95
FT21L	tapered end for food penetration	£39.95
FT22L	oven food probe	£59.95
FT23L	rack clamp probe	£39.95
FT24L	heavy-duty t-handle long stem penetration probe	£69.95
GT13L	beaded probe with FDA approved insulation	£24.95
GT19L	oven clamp probe	£41.95
FX11L	liquid immersion probe	£29.95
390A	TDS/ Salt Meter	£94.95
381F	IR gun with laser, range 14-572 F	£84.95
380	IR Gun without Laser, -4 to 572 F, 9:1 distance to spot ratio	£49.95
381a	IR Gun with Laser, -4 to 572 F, 9:1 distance to spot ratio	£64.95
368	close focus IR thermometer	£19.95
376	IR gun with adjustable emissivity, laser sight, 11.5:1 distance to spot ratio, -58 to 950 F	£159.95
556C1	digital vane anemometer w/ temperature, air flow calculation (cfm) and carrying case	£149.95
575C1	combination vane and hot wire style anemometer with temperature, carrying case	£199.95
1008A	IAQ Meter, CO2 and temperature, 50 reading storage	£549.95
1010A	IAQ Meter, CO2, CO, temperature, humidity with PC data logging software and USB cable	£649.95

All Prices Quoted are Exclusive of VAT, Packing, Shipping & Insurance Costs

All Prices are effective as of 1st September 2016



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