Pocket Digital Thermometers 08.10

Pocket Digital Thermometers Product Sheet

Delivering test and measurement advantages for HVAC/R professionals worldwide

Test the TPI advantage





310C FEATURE Reverse LCD to gain best viewing angle Insert small coin into

Insert small coin into notch and gently pry while turning head to new 180° viewing position. Shielded wires keep head and stem from separating. Head easily snaps back into original position.

APPLICATIONS HVACR

- Ambient Air
- Calibrate Thermostats
- Vents
- Compressor Heads
- RegistersFOOD
- Grill & Surface Temperatures
- Serving Temperatures ELECTRICAL
- Motor Temperatures
- Transformer Temperatures

Turn over for technical information and accessory part numbers.

The Value

Leader™

Copyright © 2010

Convenient



- **310C** shown
- Reversible head for best viewing
- Easy-to-read LCD
- Data Hold for hard to reach areas
- Auto power off

CE

air response time will be

slower than if using an

actual air probe.

Accurate



- Quick response
- Easy insertion into "Pete's" plugs with smallest diameter (3.1mm)
- Data Hold for hard to reach areas
- · Auto power off
- **323** Chisel-Tip
- **326** Needle-Tip
- **329** Contact-Tip (no sheath)
- 330C Chisel-Tip

Affordable

TPI 306C and 307C

FEATURES

- · Compact and convenient
- · Easy-to-read, large LCD
- · Auto power off
- · Data hold for hard to reach areas
- A306 protective rubber boot offers protection from drops
- 307C with needle tip



- **315C** shown
- Rugged design withstands a 10' drop
- Magnetic clip perfect for air duct applications
- · Water resistant
- Auto power off
- Low battery indicator

three times faster than

penetration or contact tips.

- 3.1mm diameter stem for "Pete's" plug
- 316C same as the 315C but no Magnetic clips
- 317C with air tip
 - 318 with chisel tip
 - 319 with contact tip
 - **320C** small diameter (1.6mm) Penetration-Tip

than chisel tip.



to +/- 2 F accuracy in less than 10 seconds in an ice water bath.

Probe Penetration Chisel Air Contact

Tips

Use for immersion and air; Need chisel tip for surface Samples air temperatures Measures three times faster

temperatures. Penetration

accurate surface reading.

and/or air tips will not give an

Pocket Digital Thermometers

Test the TPI advantage



TECHNICAL SPECIFICATIONS AND ACCESSORIES

- Digital Multimeters
- Clamp Meters
- · Hand-held Oscilloscopes
- · Refrigerant & Combustible Gas **Leak Detectors**
- Temperature Testers
- BNC Coax Cable Connectors
- Test Leads
- Accessories

Test Products International, Inc.

Headquarters: 9615 SW Allen Blvd. Beaverton, OR 97005 503-502-9197 Fax: 503-520-1225 info@tpi-thevalueleader.com

Test Products International, Ltd.

342 Bronte St. South Unit 9 Milton, Ontario L9T 5B7 Canada 905-693-8558 Toll-Free: 866-693-8558 Fax: 905-693-0888 info@tpicanada.com

Test Products International UK Ltd.

Longlev House, East Park Crawley, West Sussex RH10 6AP England Tel: +44 (0)1293 561212 Fax: +44 (0)1293813465 contactus@tpieurope.com

| FEATURES | 306C | 307C | 310C | 312C | 315C | 316C | 317C | 318 | 319 | 320C | 323 | 326 | 329 | 330C |
|------------------------|-------------|---------|-------------|-------------|----------------|-------------|---------|------------|---------|---|---------|---------|---------|--------|
| Water Resistant IP65 | • | • | | | | | | • | • | | • | • | • | • |
| Water Proof IP67 | | | | • | • | • | | | | • | • | • | | • |
| Tip Type | penetration | needle | penetration | penetration | penetration | penetration | air | chisel | contact | penetration | chisel | needle | contact | chisel |
| Tip Diameter at Sensor | 0.15" | 0.12" | 0.15" | 0.12" | 0.12" | 0.12" | 0.08 | 0.15" | 0.24" | 0.06" | 0.24" | 0.12 | 0.6" | 0.12" |
| | (3.8mm) | (2.9mm) | (3.8mm) | (3.1mm) | (3.1mm) | (3.1mm) | (1.9mm) | (3.8mm) | (6mm) | (1.6mm) | (6mm) | (3.1mm) | (1.6mm) | (3.1mm |
| Stem Length | 4.9" | 4.9" | 4.9" | 4.9" | 2.8" | 2.8" | 2.8" | 2.8" | 2.8" | 2.8" | 4.9" | 4.9" | 4.9" | 4.9" |
| | (125mm) | (125mm) | (125mm) | (125mm) | (71mm) | (71mm) | (71mm) | (71mm) | (71mm) | (71mm) | (125mm) | (125mm) | (125mm) | (125mn |
| Field Calibration | • | • | • | • | • | • | • | | | • | | | | • |
| Data Hold | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| °C/°F Switchable | | | • | • | • | • | • | • | • | • | • | • | • | • |
| Range | | | | | | | | | | | | | | |
| Min. Temp°F | -40°F | -40°F | -58°F | -58°F | -58°F | -58°F | -58°F | -58°F | -58°F | -58°F | -58°F | -58°F | -58°F | -58°F |
| Min. Temp°C | | | -50°C | -50°C | -50°C | -50°C | -50°C | -50°C | -50°C | -50°C | -50°C | -50°C | -50°C | -50°C |
| Max. Temp°F | 300°F | 300°F | 300°F | 300°F | 300°F | 300°F | 300°F | 300°F | 300°F | 300°F | 300°F | 300°F | 550°F | 550°F |
| Max. Temp°C | | | 150°C | 150°C | 150°C | 150°C | 150°C | 150°C | 150°C | 150°C | 150°C | 150°C | 288°C | 288°C |
| Accuracy | | | | | | | | | | | | | | |
| °F | 1% | 1% | ±2°F | ±2°F | ±2°F | ±2°F | ±2°F | ±2°F | ±2°F | ±1°F (32 to 158°F) ±2°F (<32 and >158) | ±2°F | ±2°F | ±2°F | ±2°F |
| °C | | | ±1°C | ±1°C | ±1°C | ±1°C | ±1°C | ±1°C | ±1°C | ± 0.5°C (0 to 70°C) ± 1°C (<0 and >70°C) | ±1°C | ±1°C | ±1°C | ±1°C |
| Resolution | 0.1°C | 0.1°C | 0.1°F/C | 0.1°F/C | 0.1°F/C | 0.1°F/C | 0.1°F/C | 0.1°F/C | 0.1°F/C | 0.1°F/C | 0.1°F/C | 0.1°F/C | 0.1°F/C | 0.1°F/ |
| Auto Off | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
| Sample Time | 1.5sec | 1.5sec | 1.5sec | 1.5sec | 1.5sec | 1.5sec | 1.5sec | 1.5sec | 1.5sec | 1.5sec | 1.5sec | 1.5sec | 1.5sec | 1.5se |
| Battery | | | | All TDI | Digital Pocket | Th | 1 | DAA batta. | | | | | | |

How do I check calibration of my pocket thermometer?

ice and water, swirl the water around and temperature should read close to 32°F.

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

Place thermometer in a solution of crushed The sensor is in the tip of the probe and needs to be 1/2 inch into whatever you are TPI pocket digital thermometers.

What battery does my pocket thermometer use?

The LR44 button battery is used in

Auto field calibrate in ice water to achieve +/- 2°F accuracy



Easy to follow procedure:

- 1. Fill a plastic or metal container with crushed ice and add clean water to a depth of at least 4 inches. Stir the ice and water for 2 to 3 minutes prior to performing calibration to ensure the water is completely chilled. Make certain there is plenty of ice in the mixture and always use clean water. Distilled water works well. The temperature of an ice bath is approximately 32°F (0°C).
- 2. Insert the stainless steel shaft of the C series thermometer into the ice bath making sure at least one inch of the tip is immersed. Allow the reading on the thermometer to stabilize.



3. Press and hold the D-H/CAL button for approximately 8 seconds until "CAL" is displayed. "CAL" will display for approximately 2 seconds and then the C series thermometer will return to normal operation. Calibration is complete.