

# ICL CALIBRATION LABORATORIES, INC.

ISO/IEC 17025 & ANSI-NCSL Z-540-1 Accredited

Setting new standards in calibration excellence!



## THERMOPROBE DIGITAL GAUGING THERMOMETER TP7-D

ISO/IEC 17025 REPORT OF  
CALIBRATION INCLUDED



AEx ia IIB T4 Ga  
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ITS17ATEX201515X  
II 1 G IECEx ETL 16.0051X

### Specifications

Maximum Dimensions: 12 x 7 x 5.5 in. (30.5 x 17.8 x 14 cm)  
Probe: 304 Stainless Steel, Sealant, Aramid Fiber Reinforced, FEP or PFA Cable Jacket, Coaxial Construction  
Enclosure Material: *Stainless Steel Static-dissipative Plastic Probe Holder*  
Batteries: 2 AA Alkaline; Battery Life of approximately 200 hours  
Battery manufacturer's battery operating temperature range -4 to 130°F, -20 to 54°C Note: Battery may not provide adequate power if ambient temperature is extremely low or high.  
Temperature:  
Resolution 0.01  
Range:  
-40 to +400°F  
-40 to +204°C  
Calibrated Accuracy:  
±0.2°F from 32 to 200°F  
±0.5°F from 200 to 400°F  
±0.1°C from 0 to 100°C  
±0.3°C from 100 to 200°C  
Long-term drift not to exceed 0.05%/year Meets API requirements

### Typical Applications

Custody Transfers, Inventory, Tank, Pipeline, Barge, Ship, Railcar, Tank Truck. (Recommended Operation: API 7, Intl. Safety Guide For Oil Tankers and Terminals.)  
Other Applications: Proving Systems (API 4) Metering Systems (API 5) Metering Systems (API 6)  
Materials: All petrochemicals, caustic, acid, alkalies, powders, Molasses, syrups, distilled spirits.

### Options

Extra Weight Probe  
Asphalt Weight Probe  
Extra Length Sensor  
Railcar Sensor

The **TP7-D** is a Zone 0 intrinsically safe digital gauging thermometer re-designed to the latest standards for use in hazardous locations. With over 30 years experience manufacturing digital thermometers, ThermoProbe has designed the TP7-D with reliable RTD sensors based on our previous industry-standard thermometers such as the TP7-C and TP9.

Based on our laboratory thermometer technology, the latest TP7-D electronics are more accurate than previous models. The convenient user interface provides a large 1/2" alpha-numeric character display and buttons that can be easily used with gloves. An automatic backlight feature is included to help read the display in low light conditions. An intuitive menu allows the user to easily select Celsius or Fahrenheit units, display resolution, and access calibration. Icons on the display help the user identify temperature stability, battery condition and menu items. The TP7-D comes equipped with easily replaceable AA batteries, providing up to 200 hours of operation. The TP7-D rugged instrument body is constructed from stainless steel and static-dissipative plastic components. The TP7-D spool-reel design allows the user to quickly deploy and retrieve the sensor probe into various products. With multiple probe configurations and allowable lengths up to 50 meters (165 ft), the TP7-D is well suited to many tank gauging applications. The probe assembly is constructed of easy to clean materials such as non-stick cable and stainless steel.

### Operational Attributes:

- Easily replaceable AA Batteries, provides an estimated \*200 hours operation.
- Circuit logic automatically indicates low battery condition, automatically shuts off after twenty minutes, shows temperature trend and stabilization, displays error codes for failure determination.
- The low power backlight for night operation is photo sensor controlled for convenience and battery conservation.
- In nighttime conditions the backlight illuminates the display.
- Celsius or Fahrenheit units with C/F indication can be easily selected from the Function Button.