



TP7-D *Intrinsically Safe* Petroleum Gauging Thermometer

The TP7-D petroleum gauging thermometer is designed and tested to meet the latest international Intrinsically Safe Ex standards for continuous flammable conditions, Zone 0.

The TP7-D is a new rugged stainless steel spool-based design based on the popular TP7 models. The improved handle allows for storage of both standard and asphalt weight probes. As with previous models; the TP7-D features durable thin-film RTD sensors to provide reliable temperature measurements, an automatic backlight for low light conditions, and a new circuit for increased accuracy. The interface now has a larger display with 1/2 inch (13mm) alpha-numeric characters and rugged raised buttons that are easy to use with gloves. The center button provides simple on/off operation. An intuitive menu allows the user to log readings, select Celsius or Fahrenheit units, display resolution, and calibration. Icons on the display aid the user in seeing temperature stability, battery condition, and in performing auxiliary functions. Easily accessible AA batteries provide up to 200 hours of operation.

With multiple probe configurations and allowable cable lengths up to 165 ft (50m), the TP7-D is ideal for many tank gauging applications.

A limited one year warranty, NIST traceable 4 point calibration report and multi-language manual are included.

Temperature:

Resolution: 0.01 Degrees

Range: -40°F to 400°F (-40°C to 204°C)

-Note: Standard Calibration does not provide full range accuracy

Calibrated Accuracy:

±0.2°F from 32 to 200°F (±0.1°C from 0 to 100°C)

±0.5°F from 200 to 400°F (±0.3°C from 100 to 200°C)

Custom calibration points and ranges available.

4 Point NIST Traceable Report of Test

Long-term drift not to exceed 0.05%/year

Meets API requirements

Interface Features:

1/2" (13mm) character LCD

Switchable units °C or °F

Resolution 0.1 or 0.01

Low Battery & Fault Indication

Calibration adjustment through faceplate buttons.

Auto Off after 20 minutes.

Stores and displays up to 10 Logged readings, Average, Lowest & Highest readings.

Arrows indicating increasing/decreasing temperature.

Recommended Ambient Temperature range: 32°F to 112°F
(0°C to 44°C)

Construction:

Probe: 304 Stainless Steel, Sealant, Coaxial cable with Aramid Fiber & PFA Cable Jacket

Enclosure: Stainless Steel
Rugged panel mount buttons
Static Dissipative Plastic Handle

Nominal Body Dimensions: 12"L x 7"H x 5.5" W
(30.5 x 17.8 x 14cm)

Nominal Weight: 4.5lb (2.0kg)
– with 75' standard weight probe assembly

Battery:

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.

Typical Applications:

Custody Transfers, Hazardous Location, Intrinsically safe, Inventory, PET, Tank, Pipeline, Barge, Ship, Railcar, Tank Truck,

Materials:

Gasoline, Diesel, Asphalt, Molten Sulphur, Petrochemical, Viscous, Caustic, Acid, Chemical, Alkali, Molasses, Syrup, Distilled spirits, Aviation fuel

Recommended Operations:

API 7.2, International Safety Guide for Oil Tankers and Terminals, API 4 and other recognized procedures and standards.

CERTIFICATIONS



AEx ia IIB T4 Ga
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ITS17ATEX201515X
IECEx ETL 16.0051X



ThermoProbe Inc.
Tel: +1 601.939.1831

112-A Jetport Drive
Fax: +1 601.355.1831

Pearl, MS 39208 USA
www.thermoprobe.net