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# ThermoProbe Inc.



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 platinum 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.

#### **CERTIFICATIONS**



Ex ia IIB T4 Ga
ITS17ATEX201515X
IECEX ETL 16.0051X
0359



EAC

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

Low ballery & rault 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.

#### 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.

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