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# ThermoProbe Inc.



TP9**-A** 

Intrinsically Safe
Petroleum Gauging Thermometer

The TP9-A petroleum gauging thermometer is designed and tested to meet the latest international Intrinsically Safe Ex standards for continuous flammable conditions, Zone 0.

The TP9-A is an ergonomic design made of durable stainless steel and plastic components. The surfaces and non-stick cable are easy to clean making the TP9-A well suited for heavy liquid products such as asphalt. As with previous models; the TP9-A features durable thin-film RTD sensors to provide reliable temperature measurements, an automatic backlight for low light conditions, and a new circuit providing increased accuracy. The interface now has a larger display with 1/2 inch (13mm) alphanumeric 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 perform 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 TP9-A 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**





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

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: 10"L x 4.5"H x 6"W (24.5 x 12 x 14cm)

Nominal Weight: 3.1lb (1.4kg)

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

ThermoProbe Inc. Tel: +1 601.939.1831 112-A Jetport Drive Fax: +1 601.355.1831

Pearl, MS 39208 USA www.thermoprobe.net