



**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 platinum 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) 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 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



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Ex ia IIB T4 Ga  
ITS17ATEX20151X  
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.

### 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)

### 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.