



## TP7-C PETROLEUM GAUGING THERMOMETER

The TP7-C employs the proven RTD design that has been used in the TP 7 and TP 8 for many years. A sealed industrial quality overlay provides a user interface that is easy to use with gloves. A polypropylene blend enclosure protects the circuit board and large LCD from penetration by impact, water and reactive liquids.

The new TP 7-C circuit board is an evolutionary step up from our highly accurate, reliable and successful TL1 laboratory thermometer. The Power Button's primary function powers the instrument for intervals of about 20 minutes since the last button was accessed. The Power Button can also be used to conserve power and clear the memory, or to make adjustment while in calibration mode. A simple menu operation is displayed by holding the Function Button, and alternately functions to allow adjustments in the calibration mode. Arrows on the left side of the display show the direction of the temperature reading and whether stability has been reached. At the user's discretion stabilized temperatures can be logged at numerous liquid levels for a running average and later displayed for the user's documenting purposes. But this feature never interferes with simply getting an accurate temperature reading.

To endure the environment and be intrinsically safe, the TP 7-C is manufactured of materials, which are both immune to petrochemicals and are non-sparking. The enclosure is made of a polypropylene blend. The probe assembly is constructed with a static dissipating, non-stick cable, with stainless steel sensor components.

### SPECIFICATIONS

Maximum Dimensions:	13.5 x 7.25 x 4.5 in.; 34.3 x 18.4 x 11.4 cm
Probe:	304 Stainless Steel, Sealant, Aramid Fiber Reinforced, FEP or PFA Cable Jacket, Coaxial Construction
Enclosure Material:	Polypropylene Blend, Stainless Steel and Aluminum.
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 4 Point NIST Traceable Report of Test Long-term drift not to exceed 0.05%/year Meets API requirements

Specifications subject to change

### 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.

User Manual explains intuitive calibration procedure that can be done through the external faceplate buttons.

### 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)

Materials: All petrochemicals, caustic, acid, alkalies, powders. Molasses, syrups, distilled spirits.

### CERTIFICATIONS



II 2 (1) G Ex ib [ia] IIB T4  
DEMKO 11 ATEX 1104891X  
IECEX ULD 11.0008X