

Model 273 Precision Platinum Resistance Thermometer Digital Readout

The 273 Thermometer, with its high resolution color touch screen user interface combines superior performance with unparalleled ease of use. Designed for use with industry standard 25.5 or 100 Ohm Platinum Resistance Thermometers (PRT's); the system covers the range from -200°C to 662°C. A robust implementation of ITS-90 interpolation ranges includes the unique subrange from Mercury (-39.8344°C) to Gallium (29.7646°C), particularly useful to metrologists in Oceanographic and Pharmaceutical disciplines. Configured for operation in 2-wire, 3-wire or true 4-wire mode, the system utilizes AC excitation current to virtually eliminate DC offset errors (thermal EMFs and galvanic effects) in sense leadwires and contacts. The 100 Ohm range (for 25.5 Ohm thermometers) provides 1mA RMS PRT excitation current to ensure proper use of 1mA PRT calibration coefficients and properly compensate for thermometer internal self-heating.

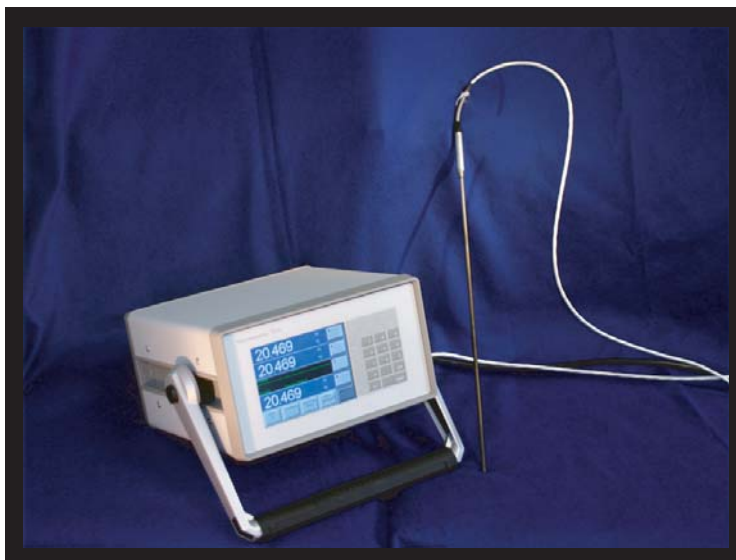
The 273 Thermometer moves the standard of performance up a notch with a revolutionary color touch screen user interface. The flexible display presents up to four digital readouts of resistance or temperature in brilliant user selectable colors, clearly visible from more than 15 feet away. With the ability to customize graph settings, select units (°C, °F, Kelvin or Ohms), and change the readout resolution using the integrated touch-screen, you can easily determine temperature stability and monitor trends over time at a glance.

Standard features include data logging of up to 10000 points of date-and-time-stamped temperature and resistance data; menu functions manage and export logged data as well as the ability to store up to 10 sets of probe characterization data in individual probe profiles.

The 273 Thermometer provides a powerful, stand-alone, user-friendly, solution for every-day calibration needs. Never before has a benchtop system made so much capability so affordable.

To Order or For More Information:

Call Pond Engineering at (303)651-1678
 or FAX (303)651-1668
 or E-mail stanpond@pondengineering.com



System Specifications

Temperature Display Range:	-200°C to 662°C	
Readout Component of Uncertainty:	-200 to 232 °C	+/- 0.003°C
	232 to 662 °C	+/- 0.003°C increasing to +/- 0.007°C
PRT Excitation:	1.0 mA RMS (100 Ohm)	0.3 mA RMS (400 Ohm)
Operator Interface:	Manual Front Panel, Color LCD touch panel	
Remote Interface:	RS-232 Serial Standard (Optional IEEE-488)	
Power Requirements:	85 - 265 Volts, 1 Amp Maximum A.C. 50 - 60 Hz. (Other Input Power Available on Special Order)	
Ambient Operating Range:	15° C to 30° C Non Condensing	
Cabinet Physical Dimensions:	9.8"(22.5cm)Wide	10.4"(26.5cm)Deep
		5.8"(15cm)High

Precision SPRT temperature measurement utilizing true four wire ohms with AC excitation current and complete ITS-90 subrange implementation.

Easily enter probe constants or variable information with touch keypad

Open the Graph Settings to view the maximum and minimum over the entire range, and adjust graph range.



Store single data points or store continuous data points at a programmed interval

Display statistical information of current reading including max, min, mean, and standard deviation

