

PLATINUM RESISTANCE THERMOMETERS (PRT) | ST-150 & ST-300

Features

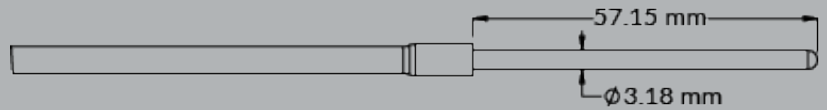
ST-150 PRT

The ST-150 is a 1/8 inch, Class A PRT with an IP67 rating. White heat shrink is used on the cable behind the PRT to minimize heat transfer to the sensor. PRT sheath dimensions are 3.18 mm diameter and 57.15 mm length, minimizing thermal mass.

ST-300 PRT

The ST-300 is a high accuracy PRT (1/10 DIN) designed to minimize solar load and thermal mass. White heat shrink is used on the cable behind the PRT to reduce solar load. PRT sheath dimensions are 3.18 mm diameter and 57.15 mm length, minimizing thermal mass.

Dimensions



Product Specifications



	ST-150	ST-300
Measurement Range	-50 to 70 C	
Measurement Uncertainty	.3 C (-40 to 60 C) Class A	0.1 C (-40 to 60 C) 1/10 DIN
Measurement Repeatability	Less than 0.01 C	
Long-term Drift	Less than 0.05 C per year	
Equilibration Time	15 s	
Self-heating	Less than 0.01 C (typical, assuming pulsed excitation of 2.1 V DC); 0.09 C at 5 C (max, assuming continuous input excitation of 2.1 V DC)	
Operating Environment	-50 to 70 C; 0 to 100 % relative humidity	
Resistance at 0 C	100 Ω	
Input Voltage Requirement	Datalogger Dependent	2.1 V DC excitation (recommended)
Output Voltage Requirement	Datalogger Dependent	16 to 27 mA DC (excitation of 2.1 V DC)
Current Draw	Datalogger Dependent	0.21 mA DC (max. with steady excitation of 2.1 V DC)
Dimensions	57.15 mm length, 3.18 mm diameter	
Mass	95 g	
Cable	2 m of shielded, twisted-pair wire; additional cable available; TPR jacket (high water resistance, high UV stability, flexibility in cold conditions); pigtail lead wires	
Warranty	4 years against defects in materials and workmanship	