

3 Specifications and Environmental Conditions

3.1 Specifications

The following table lists the specifications for this instrument. Accuracy specifications are applicable for a one-year calibration interval. In line with normal prudent metrology practices, Hart Scientific recommends a short-cycle interval of six months for new units during the first year.

Power	115 VAC ($\pm 10\%$), 50/60 Hz, 1000 Watts (optional 230 VAC [$\pm 10\%$], 50/60 Hz)
Ambient Temperature	5–50°C (40–120°F)
Operating Range	35–600°C (95–1112°F)
Resolution	0.01°C or °F resolution
Accuracy[†]	$\pm 0.1^\circ\text{C}$ at 100°C, $\pm 0.15^\circ\text{C}$ at 300°C, $\pm 0.5^\circ\text{C}$ at 600°C (7A=23 $\pm 5^\circ\text{C}$)
Uniformity	up to $\pm 0.05^\circ\text{C}$ using similar type probes
Control Stability Peak to Peak	$\pm 0.02^\circ\text{C}$ to 300°C, $\pm 0.05^\circ\text{C}$ to 600°C (typical 30 minutes)
Control Stability 2σ	0.02°C to 300°C, 0.05°C to 600°C
Test Well	1.45" dia. x 6" deep
Size	12.5" H x 8" W x 10.5" D (318 x 203 x 267 mm)
Weight	25 lb. (11.4 kg)
Safety	OVER VOLTAGE (Installation) CATEGORY II, Pollution Degree 2 per IEC1010-1
Heating Time to Max	30 minutes [†]
Cooling Time	2.5 hours from 600°C to 100°C
Controller	Hybrid analog/digital controller with data retention
Heater	1000 W, solid state relay switched
Cooling	2 speed internal fan
Fault Protection	Sensor burnout protection, over temperature thermal cut-out, electrical fuse (10 A 115 VAC [$\pm 10\%$], 5A 230 VAC [$\pm 10\%$])
Computer Interface	RS-232 interface included with Model 9930 Interface- <i>it</i> for Windows® control software
Display	LED, °C or °F, user selectable

[†]Heating and cooling times may be affected by line voltage and ambient temperatures.

[‡]Using a single 5626-12 at the bottom of the well.