

SciLog DN 3027: SciTemp Sensors-Monitor Accuracy and Precision

SciTemp Sensor ID	NIST Reference °C	SciTemp Monitor Input	
		T1 °C	T2 °C
A1-210159-0108	25.68	25.70	25.70
A1-210160-0108	25.68	25.68	25.69
A1-210161-0108	25.68	25.67	25.67
A1-210162-0108	25.68	25.68	25.69
A1-210163-0108	25.68	25.67	25.68
A1-210164-0108	25.68	25.68	25.69
A1-210165-0108	25.68	25.67	25.69
A1-210166-0108	25.68	25.67	25.68
A1-210167-0108	25.68	25.68	25.69
A1-210168-0108	25.68	25.69	25.70
Group Average:	25.68	25.679	25.688
Group SD*:	0.000	0.010	0.009

*Standard Deviation

Test Summary: For the group of 10 SciTemp sensors, the sensor to sensor accuracy level is within +/- 0.01 °C of the NIST-traceable reference thermistor. The accuracy of monitor input channels T1 and T2 for a given sensor is within +/-0.02 °C. The group averages for input channels T1 and T2 vary by 0.010 °C. **The collected data show accuracy and precision levels of sensors and monitors to be well within the established levels of +/- 0.10 °C**

NOTE: SciLog sensors have been designed for disposable, single-use applications. However, with proper care, the sensors can be re-used repeatedly while maintaining good accuracy and precision. If required, sensors can be re-calibrated.

CAUTION: Do Not Exceed Maximum Pressure of 60 psi

Test Protocol: The I/O channels "T1" and "T2" of SciTemp monitor ST0208B-1012 were previously factory calibrated. Ten pre-calibrated sensors were used to test the sensor/monitor accuracy and precision. In a temperature controlled glove box, the sensors were assembled in-line and hooked up to a re-circulating peristaltic pump. A temperature-equilibrated (25.68 °C) solution (0.100N KCl) was pumped (150ml/min) through the sensor assembly for 30 minutes. A NIST-traceable thermistor was used as a temperature reference and included in the sensor test assembly.

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