



Temperature Measurement

Revised 06/08/09

CALIBRATION CERTIFICATE

Logan Enterprises is not an accredited calibration facility. We are not recommended by any accredited facility or organization. We are therefore not compliant with ISO 17025.

I certify that all equipment used in these measurements is currently calibrated against standards which are traceable to NIST, PTB, or other recognized standards organizations. Accuracy of data is $\pm 0.05^{\circ}\text{C}$ between -40 and 125°C , $\pm 0.1^{\circ}\text{C}$ at all other temperatures. Data is on the ITS90.

Print-outs using the ITS90 (platinum) or 3rd order polynomial (thermistors) equations will add $< \pm 0.01^{\circ}\text{C}$ to stated accuracy. Callendar-van Dusen (platinum) or Steinhart & Hart (thermistor) equations can add up to $\pm 0.05^{\circ}\text{C}$ for wider ranges. Sensor current will generally add less than $+0.01^{\circ}\text{C}$ due to 'self-heating'.

Customer	Print-out: -50 to 40°C, 1° interval
NOAA	Format: ITS90
325 Broadway	
Boulder CO 80305	
PO# N/A	
Job# 4833	

Temperature	Initial		Final		
	0°C	0°C	40°C	-196°C	
Reference #	9831-11	9831-11	9831-11	9135-1	
NIST #	209126-03	209126-03	209126-03	209126-03	
Next Calibration	02/10	02/10	02/10	02/10	
Sensor Current- RTDs only					
Description	Serial#	RT1	RT1	RT2	RT3
4159-2-1-PT139P-QR-PSN	0924-1	100.011	100.007	115.863	18.741
	0924-2	100.026	100.021	115.882	18.747
	0924-3	100.012	100.004	115.856	18.739
	0924-4	99.969	99.974	115.821	18.735
	0924-5	99.997	99.997	115.851	18.740

Laurel E. McCombs *L E McCombs*

Date 06/16/09