

## Certificate of Traceable Calibration

Documented for:

Stratatek T&M  
101 Amber St. Unit 18-20  
Markham, ON  
L3R 3B2 Canada

<b>Certificate Serial Number:</b> 27971 <b>Job Name ID:</b> 7991 <b>Customer Asset Number:</b> N/A	<b>Instrument:</b> 7.5 Digit Multimeter <b>Manufacturer:</b> Keithley <b>Model/Cat. Number:</b> 2001 <b>Serial Number:</b> 1419121
<b>Condition as Received</b> Date: July 12, 2023 <input checked="" type="checkbox"/> In Good Condition <input type="checkbox"/> Defective <input type="checkbox"/> Physically Damaged	<b>Returned</b> <input type="checkbox"/> Without Adjustment <input type="checkbox"/> Repaired <input checked="" type="checkbox"/> With Adjustment <input type="checkbox"/> Other <input type="checkbox"/> With Restrictions (limited)
<b>Calibration Date:</b> July 12, 2023 <b>Calibration Due Date:</b> July 12, 2024	<b>Temperature:</b> (21 +/- 2)°C <b>Relative Humidity:</b> (35 +/- 10)%

**PASSED.**      **Adjusted to Optimal.**

This document certifies that the above instrument has been calibrated with measurement uncertainties expressed or implied estimated at a 95% level of confidence assuming a normal distribution with a coverage factor of k=2 sigma. It has been calibrated using standards whose accuracy are metrologically traceable to the International System of Units through either the National Institute of Standards and Technology (NIST) or NRC Canada (NRCC) and/or have been derived from accepted values of natural physical constants or derived by the ratio type of self-calibration techniques.

### NIST/NRCC Traceable Standards

Asset 600220 Type Multimeter, Agilent 3458A-002 (4 ppm)  
Asset 600218 Type Calibrator, Fluke 5700A-II/EP  
Asset 600010 Type Decade Resistor, ROCT P4077  
Asset 600025 Type Decade Resistor, ROCT P40105  
Asset 600027 Type Decade Resistor, Gen. Rad. 1432-N  
Asset 600151 Type Decade Resistor, Gen. Rad. 1432-T  
Asset 600213 Type AC Standard, Fluke 5790A-03  
Asset 600214 Type Calibration Amplifier, Fluke 5725A

Cert. WO-00413121 Next Cal. Mar 27, 2024  
Cert. 26231 Next Cal. Oct 03, 2023  
Cert. 28395 Next Cal. Jun. 05, 2024  
Cert. 28396 Next Cal. Jun. 05, 2024  
Cert. 28397 Next Cal. Jun. 05, 2024  
Cert. 28398 Next Cal. Jun. 05, 2024  
Cert. 26994 Next Cal. Sept 07, 2023  
Cert. 21-493821 Next Cal. Aug. 11, 2023

Calibrated by:

Date Issued: July 12, 2023

Dan Webster, Calibration Technician

QA Procedure: STR\_CAL\_21

Test Procedure: 2001

Stratatek Test & Measurement is the registered trade name of Stratatek Investing Inc.

#### Limited Liability

Stratatek Test & Measurement. Toronto, ON. 905-406-0100

The Calibration of this unit is guaranteed to be within product specifications when the unit leaves Stratatek Investing Inc.

service center. Stratatek Test & Measurement will not assume any liability incurred during use of this unit should it lose calibration for any reason.

Function	Range	Applied	Low Limit	High Limit	Measured Value
DC Volts	200mV	190.0000mV	189.9918mV	190.0082mV	190.0004
	2V	1.900000V	1.899949V	1.900052V	1.900002
	20V	19.00000V	18.99946V	19.00054V	18.99995
	200V	190.0000V	189.9922V	190.0078V	190.0009
	1000V	1000.000V	999.953V	1000.047V	1000.0003

Function	Range	Applied	Low Limit	High Limit	Measured Value
AC Volts	200mV	190mV, 20Hz	188.716mV	191.284mV	189.208
	2V	1.9V, 20Hz	1.88716V	1.91284V	1.89228
	20V	19V, 20Hz	18.8716V	19.1284V	18.9207
	200V	190V, 20Hz	188.709V	191.291V	189.258
	200mV	190mV, 50Hz	189.685mV	190.315mV	189.932
	2V	1.9V, 50Hz	1.89685V	1.90315V	1.89957
	20V	19V, 50Hz	18.9685V	19.0315V	18.9928
	200V	190V, 50Hz	189.678V	190.322V	189.959
	750V	750V, 50Hz	748.12V	751.88V	749.69
	200mV	190mV, 1kHz	189.875mV	190.125mV	190.029
	2V	1.9V, 1kHz	1.89875V	1.90125V	1.90065
	20V	19V, 1kHz	18.9856V	19.0144V	19.0021
	200V	190V, 1kHz	189.849V	190.151V	190.058
	750V	750V, 1kHz	748.72V	751.28V	750.13
	200mV	190mV, 5kHz	189.875mV	190.125mV	190.024
	2V	1.9V, 5kHz	1.89875V	1.90125V	1.90063
	20V	19V, 5kHz	18.9809V	19.0192V	18.9994
	200V	190V, 5kHz	189.802V	190.198V	189.963
	750V	750V, 5kHz	748.49V	751.51V	749.99
	200mV	190mV, 25kHz	189.875mV	190.125mV	190.027
	2V	1.9V, 25kHz	1.89875V	1.90125V	1.90094
	20V	19V, 25kHz	18.9742V	19.0258V	19.0045
	200V	190V, 25kHz	189.735V	190.265V	190.077
	200mV	190mV, 50kHz	189.856mV	190.144mV	190.142
	2V	1.9V, 50kHz	1.89856V	1.90144V	1.90141
	20V	19V, 50kHz	18.9723V	19.0277V	19.0100
	200V	190V, 50kHz	189.716V	190.284V	190.116
	200mV	190mV, 100kHz	189.647mV	190.353mV	190.235
	2V	1.9V, 100kHz	1.89647V	1.90353V	1.90238

	20V	19V, 100kHz	18.9647V	19.0353V	<b>19.0246</b>
	200V	190V, 100kHz	189.640V	190.360V	<b>190.131</b>
	200mV	190mV, 200kHz	189.000mV	191.000mV	<b>190.109</b>
	2V	1.9V, 200kHz	1.89000V	1.91000V	<b>1.90303</b>
	20V	19V, 200kHz	18.9000V	19.1000V	<b>19.0488</b>

Function	Range	Applied	Low Limit	High Limit	Measured Value
DC Current	200μA	190.0000μA	189.9000μA	190.1000μA	<b>190.0108</b>
	2mA	1.900000mA	1.899200mA	1.900800mA	<b>1.900109</b>
	20mA	19.00000mA	18.99200mA	19.00800mA	<b>19.00218</b>
	200mA	190.0000mA	189.9010mA	190.0990mA	<b>190.0139</b>
	2A	1.900000A	1.898200A	1.901800A	<b>1.899531</b>

Function	Range	Applied	Low Limit	High Limit	Measured Value
AC Current	200μA	190.000μA, 40 Hz	188.260μA	191.740μA	<b>189.886</b>
	2mA	1.90000mA, 40 Hz	1.88355mA	1.91645mA	<b>1.89896</b>
	20mA	19.0000mA, 40 Hz	18.8355mA	19.1645mA	<b>18.9897</b>
	200mA	190.000mA, 40 Hz	188.355mA	191.645mA	<b>189.876</b>
	2A	1.90000A, 40 Hz	1.88250A	1.91750A	<b>1.89885</b>
	200μA	190.000μA, 100 Hz	189.560μA	190.440μA	<b>190.007</b>
	2mA	1.90000mA, 100 Hz	1.89657mA	1.90344mA	<b>1.90016</b>
	20mA	19.0000mA, 100 Hz	18.9657mA	19.0344mA	<b>19.0019</b>
	200mA	190.000mA, 100 Hz	189.657mA	190.344mA	<b>190.021</b>
	2A	1.90000A, 100 Hz	1.89556A	1.90444A	<b>1.90001</b>
	200μA	190.000μA, 1 kHz	189.210μA	190.790μA	<b>189.896</b>
	2mA	1.90000mA, 1 kHz	1.89742mA	1.90258mA	<b>1.90025</b>
	20mA	19.0000mA, 1 kHz	18.9742mA	19.0258mA	<b>19.0040</b>
	200mA	190.000mA, 1 kHz	189.742mA	190.258mA	<b>190.027</b>
	2A	1.90000A, 1 kHz	1.89390A	1.90610A	<b>1.89979</b>

Function	Range	Applied	Low Limit	High Limit	Measured Value
4W Resistance	20Ω	19.0000Ω	18.99849Ω	19.00151Ω	<b>18.99967</b>
	200Ω	190.000Ω	189.9880Ω	190.0120Ω	<b>189.9956</b>
	2kΩ	1.90000kΩ	1.899897kΩ	1.900103kΩ	<b>1.899972</b>
	20kΩ	19.0000kΩ	18.99897kΩ	19.00103kΩ	<b>19.00021</b>
	200kΩ	190.000kΩ	189.9820kΩ	190.0180kΩ	<b>189.9908</b>
2W Resistance	2MΩ	1.90000MΩ	1.899687MΩ	1.900313MΩ	<b>1.900065</b>
	20MΩ	19.0000MΩ	18.98281MΩ	19.01719MΩ	<b>19.01431</b>
	200MΩ	100.000MΩ	97.9800MΩ	102.0200MΩ	<b>101.0413</b>

Function	Range	Applied	Low Limit	High Limit	Measured Value
Frequency	N/A	10Hz @ 1V	9.997Hz	10.003Hz	<b>10.000</b>
	N/A	100Hz @ 1V	99.97Hz	100.03Hz	<b>100.00</b>
	N/A	1kHz @ 1V	0.9997kHz	1.0003kHz	<b>1.0000</b>
	N/A	10kHz @ 1V	9.997kHz	10.003kHz	<b>10.000</b>
	N/A	100kHz @ 1V	99.97kHz	100.03kHz	<b>100.00</b>
	N/A	1MHz @ 1V	0.9997MHz	1.0003MHz	<b>1.0000</b>

Function	Range	Applied	Low Limit (°C)	High Limit (°C)	Measured Value (°C)
Thermocouple RTD PT100	N/A	64.30Ω	-90.08	-89.92	<b>-89.99</b>
	N/A	100Ω	-0.08	+0.08	<b>-0.03</b>
	N/A	109.73Ω	24.92	25.08	<b>24.99</b>
	N/A	138.51Ω	99.92	100.08	<b>100.01</b>
	N/A	313.71 Ω	599.86	600.14	<b>600.13</b>

SAMPLE