

# CERTIFICATE OF CALIBRATION

ISSUED BY AVON-DYNAMIC CALIBRATION



Date of Issue 23 February 2023

Certificate Number K742600



CALIBRATE MEASURE INNOVATE

For:

SIGNATROL LTD  
UNIT E2  
GREEN LANE BUSINESS PARK  
TEWKESBURY  
GL20 8SJ

Approved Signatory

Mr. M. Hyde

<u>Manufacturer:</u>	EUROTRON	<u>Date of Receipt:</u>	21 February 2023
<u>Model Number:</u>	MICROCAL 1 +	<u>Specification:</u>	As Found
<u>Inventory Number:</u>	CE1052	<u>Calibrated by:</u>	MLAMSDALE
<u>Serial Number:</u>	49272	<u>Next Calibration Due:</u>	23 February 2024
<u>Description:</u>	THERMOCOUPLE SIMULATOR		

Page 1 of 2

Report: This instrument has been calibrated to the stated specification, unless otherwise stated. The recorded measurements were correct when taken within the conditions stated. The calibration was carried out using standards which are subject to regular periodic verification and are traceable to National Standards.

Laboratory Conditions Temperature: 20.0 ± 3°C  
Humidity: 50%rh ± 20%rh

Comment :- **Calibrations marked ## (Not UKAS Accredited) in this Certificate have been included for completeness.**

Calibration Code U The specification of the instrument is unknown or unit does not completely meet its specification. Results are reported as found.

Compliance Statement: Conformity / Non-Conformity statements are based on simple acceptance rule (ILAC-G8:09/2019) where, Acceptance Limit (AL) equals Tolerance Limit (TL). Provided that the Tolerance Uncertainty Ratio (TUR) 1:1.

Date of Calibration: 23 February 2023

**The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor  $k = 2$ , providing a coverage probability of approximately 95%. The uncertainty evaluation has been carried out in accordance with UKAS requirements.**

This certificate is issued in accordance with the laboratory accreditation requirements of the United Kingdom Accreditation Service. It provides traceability of measurement to the SI system of units and/or to units of measurement realised at the National Physical Laboratory or other recognised national metrology institutes. This certificate may not be reproduced other than in full, except with the prior written approval of the issuing laboratory.

# CERTIFICATE OF CALIBRATION

ISSUED BY AVON-DYNAMIC CALIBRATION

**UKAS ACCREDITED CALIBRATION LABORATORY No 0199**

Certificate Number  
K742600  
Page 2 of 2

## REPORT

The unit under test was allowed to stabilise for 24 hours in the laboratory environment prior to testing. Results: As received. No adjustments were necessary.

### TC Simulate Type K Function

<u>Range</u>	<u>Set Value</u>	<u>Actual Temperature</u>	<u>Uncertainty of Measurement</u>
1372 °C	-100.0 °C	-99.87 °C	± 0.35 °C
	900.0 °C	900.22 °C	± 0.29 °C

### TC Simulate Type J Function

<u>Range</u>	<u>Set Value</u>	<u>Actual Temperature</u>	<u>Uncertainty of Measurement</u>
750 °C	-100.0 °C	-99.99 °C	± 0.24 °C
	700.0 °C	700.10 °C	± 0.24 °C

### TC Simulate Type T Function

<u>Range</u>	<u>Set Value</u>	<u>Actual Temperature</u>	<u>Uncertainty of Measurement</u>
400 °C	-100.0 °C	-100.19 °C	± 0.34 °C
	300.0 °C	299.83 °C	± 0.24 °C

### TC Simulate Type R Function

<u>Range</u>	<u>Set Value</u>	<u>Actual Temperature</u>	<u>Uncertainty of Measurement</u>
1767 °C	800.0 °C	800.01 °C	± 0.55 °C
	1400.0 °C	1399.61 °C	± 0.60 °C

### TC Simulate Type E Function

<u>Range</u>	<u>Set Value</u>	<u>Actual Temperature</u>	<u>Uncertainty of Measurement</u>
1000 °C	-100.0 °C	-100.21 °C	± 0.60 °C
	650.0 °C	649.91 °C	± 0.24 °C

### TC Simulate Type S Function

<u>Range</u>	<u>Set Value</u>	<u>Actual Temperature</u>	<u>Uncertainty of Measurement</u>
1300 °C	800.0 °C	800.11 °C	± 0.57 °C
	1400.0 °C	1399.59 °C	± 0.65 °C

### PT 100 RTD Simulate Function

<u>Range</u>	<u>Set Value</u>	<u>Actual Temperature</u>	<u>Uncertainty of Measurement</u>
850 °C	0.0 °C	-0.12 °C	± 0.57 °C
	600.0 °C	599.45 °C	± 0.65 °C

#### Standard Used

ADC3034, ADC2830, ADC2473

Laboratory Ambient Temperature: 20.0°C ± 3°C  
Laboratory Humidity: 50% ± 20% rh  
Procedure Reference : CLI090.

-End of Report-

The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor  $k = 2$ , providing a coverage probability of approximately 95%. The uncertainty evaluation has been carried out in accordance with UKAS requirements.

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