

# CERTIFICATE OF CALIBRATION

ISSUED BY The Roxspur Measurement & Control  
Calibration Laboratory



0043

Page 1 of 2

Assessed Signatory

SHAUN BOLDY



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Date of Issue: 24 May 2018

Certificate Number 135683

Customer: SIGNATROL LIMITED  
UNIT E2  
GREEN LANE BUSINESS PARK  
GLOUCESTERSHIRE  
GL20 8SJ

Date Received 21 May 2018  
RM&C Order Ref. L507369  
Customer Order No. 45577  
Calibration Date 24 May 2018

## Equipment Information

Description	LEYRO LDT-2000 PRECISION THERMOMETER & PT100 PROBE		
Manufacturer	LEYRO	Serial Number	1031401205 & 351839-1
Model Number	LDT-2000 & 935-14-116	Customer Inventory No.	CE1113 & CE1115
Calibrated Range	-70 °C to 300 °C	RM&C I.D. No.	RMC0044158
Scale / Resolution	0.001 °C		
Calibration Points	-70 °C, 0 °C, 30 °C, 150 °C & 300 °C		

## Conditions

Lab Temperature	21.0 °C ± 2 °C	Department	TEMP - BATH
Probe Type	Pt100	Engineer	SHAUN BOLDY
Probe Length	350 mm	Last Certificate Number	111382
Probe Diameter	6 mm		
Min. Immersion Depth	200 mm		

## Procedure : RM&C 023 DTI & RTD

The thermometer under test was allowed to equilibrate within a controlled, stable environment, the temperature of which was measured using traceable reference Platinum Resistance Thermometers. The following results indicate the measured test thermometer temperature against the measured temperature at the time of calibration. The measurement uncertainty was calculated in accordance with M3003 (Edition 3 – November 2012) and as such takes into account such factors as the calibration & drift of the reference standards, stability, repeatability and resolution of reference instruments and that of the unit under test.

The results are valid at the time of calibration only. The temperature scale used was ITS-90. All measurements are traceable to National Standards. Calibration has been carried out using Laboratory procedures (LAB-PROC-023) in accordance with BS EN ISO 17025. The results are valid at the time of calibration only and are "As Found" (i.e. No Adjustments Made).

## Notes :

No measured errors, in the parameters checked, exceeded the customer specified tolerance of  $\pm 0.04$  °C, not taking into account the uncertainty of measurement.

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UKAS Accredited Calibration Laboratory No. 0043

Certificate Number

135683

Page 2 of 2

## Calibration Results

Serial No: 1031401205 & 351839-1 in Ch 1

Reference Temperature °C	Thermometer Reading °C	Measured Error °C	Measurement Uncertainty ± °C
-0.001	-0.003	-0.002	0.06
-69.948	-69.961	-0.013	0.06
-0.001	-0.005	-0.004	0.06
30.059	30.068	0.009	0.06
149.976	149.971	-0.005	0.06
299.981	299.988	0.007	0.06
-0.001	-0.003	-0.002	0.06

- End of Certificate -

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

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