

CERTIFICATE OF CALIBRATION

ISSUED BY RAMCARE LIMITED

Cert. Number: C59952

Date of Issue: 15th March 2024



0505



Ramcare Limited

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Page: 1 of 3

Approved Signatory:

S.H.Bass

D.G.Patel

Customer: Signatrol Ltd.
Address: Unit E2
Green Lane Business Park
Tewkesbury
Gloucestershire
GL20 8SJ
Order Number: 47142
Our Reference: SO20746
Customer Requirement: To carry out calibration on humidity sensor
Manufacturer: Rotronic
Model: HC2A-S Humidity Probe
Serial Number: 20340055
Date of Calibration: 14th March 2024 to 15th March 2024
Location: Laboratory
General Environment: Clean & Dry
Ambient Temperature: 24.8 °C ± 2 °C
Ambient Humidity: 49.4 %rh ± 10 %rh

APPROVED BY:

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 produced other than in full, except with the written approval of the issuing laboratory.

CERTIFICATE OF CALIBRATION

Certificate Number:

C59952

UKAS Accredited Calibration Laboratory Number 0505

Page: 2 of 3

Item No.	Serial No.	Unit Type	Reference		Unit Indicated		Uncertainties		Error	
			%rh	°C	%rh	°C	%rh	°C	%rh	°C
1	20340055	Rotronic HC2A-S Humidity Probe	-	0.12	-	0.19	-	0.22	-	0.07
			12.45	21.04	11.55	21.11	0.50	0.22	-0.90	0.07
			44.32	21.03	43.44	21.05	1.25	0.22	-0.88	0.02
			76.24	21.02	75.09	21.03	2.04	0.22	-1.15	0.01
			-	39.95	-	39.91	-	0.22	-	-0.04

Results are reported as found and no adjustment was made to the unit under calibration

End of results

CERTIFICATE OF CALIBRATION

Certificate Number:

C59952

UKAS Accredited Calibration Laboratory Number 0505

Page: 3 of 3

CALIBRATION PROCEDURE

Sensor

The unit(s) under calibration was allowed to equilibrate in the laboratory environment for at least one hour prior to calibration. Each probe is calibrated at a typical working temperature (specified by the customer) by comparison against our primary standards. The work was carried out in a calibration chamber and not in the working environment. The unit under calibration was placed in the central area of the chamber alongside the primary standards. The measured values from the unit under calibration were taken from the display of a calibrated indicator. All published results for the unit(s) under calibration and the primary references are a calculated average.

General Notes

1. The temperature scale used is ITS 90 (as realised in BS EN 60584-1:2013 or BS EN 60751:2008).
2. Unless otherwise stated, no adjustment was made to the unit under calibration.
3. Calibrations marked * are not UKAS accredited in this certificate and have been included for completeness (traceable only).
4. The results reported only relate to the unit(s) under calibration, as noted on this certificate by their unique identifier.
5. Errors have been rounded to match the number of decimal places indicated by the unit under calibration.

End of certificate
