

CERTIFICATE OF CALIBRATION

Certificate Number 04021
Date of Issue 12th April 2023



0179



Approved Signatory
Elliott Cowling
Elliott

Accredited to
ISO/IEC 17025:2017

48 Lancaster Way Business Park
Ely, Cambridgeshire
CB6 3NW
United Kingdom

Tel: +44 (0)1353 658000
Fax: +44 (0)1353 658199
e-mail: uk.michell.info@processsensing.com
Website: www.ProcessSensing.com

Page 1 of 2

Customer	Glutex Solutions Pvt. Ltd.
Customer address	2 Regent Avenue, Diwalipura Vasna Road, Vadodara, Gujarat 390007, India
Customer order number	PO0178-2022-23
Received	13 th February 2023
Instrument	Michell hygrometer
Model	S8000RS
Serial number	164523
Instrument	
Sensor	N/A
Michell reference number	T500860
Measurements performed	5 th to 12 th April 2023
Laboratory temperature	21 °C ±2 °C
Laboratory humidity	32 %rh ±10 %rh

The hygrometer was calibrated by comparison using a Michell Instruments Series 4000 precision hygrometer as the reference, certified as traceable to the National Physical Laboratory, UK.

The optical surfaces of the hygrometers were cleaned using de-ionised water, prior to the calibration.

The sample air from the Michell Instruments dew point generator was divided, with one path to the reference hygrometer and the other to the hygrometer being calibrated.

The output used from the hygrometer was the digital display with a resolution to 0.01 °C.

At each dew point, time was allowed to ensure that the sampling system and the hygrometers had equilibrated with the dew point. This was confirmed while recording the 10 readings (at 2 minute intervals) that are averaged to give the figures recorded in this certificate.

CERTIFICATE OF CALIBRATION

UKAS Accredited Calibration Laboratory 0179

Certificate Number **04021**

Page 2 of 2

The hygrometer was repaired before the calibration was performed.

The indicated sample flow rate during the calibration was 0.75 l/min

Generated Dew point °C	Test hygrometer			
	Dew point °C	Sensor Temperature °C	Dew point Correction °C	Expanded Uncertainty °C
-79.96	-80.04	-60	+0.08	±0.52
-60.00	-60.05	-40	+0.05	±0.24
-30.00	-30.08	-10	+0.08	±0.21
-9.92	-9.99	10	+0.07	±0.19
9.76	9.69	21	+0.07	±0.17

Dew points below 0 °C are measured over ice, unless otherwise stated.

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.

The uncertainties quoted in the Certificate of Calibration only apply to the measured value obtained during the period of calibration and are not indicative of the long-term stability of the instrument under test.