

## CALIBRATION CERTIFICATE

SUBJECT: CALIBRATION OF THERMO HYGROMETER	CERTIFICATE NO.: ML/THE/0908/01/2022-23	
	Certificate Issue Date 20/03/2023	Page 1 of 2



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| <p>1. <b>Scope</b></p> <p>1.1 <b>Service Request Details</b></p> <p>1.1.1 <b>Service Request No.</b></p> <p>1.1.2 <b>Service Request Finalized On</b></p> <p>1.1.3 <b>Unique Lab Report Number (ULR No.)</b></p> <p>1.1.4 <b>Discipline / Group</b></p> <p>1.1.5 <b>Name &amp; Address of Organization</b></p> | <p>Calibration<br/>ML/0908/22-23<br/>18/03/2023<br/>CC266423000007269F<br/>Thermal / Specific Heat &amp; Humidity<br/><b>HEER LAB</b><br/>116-120, National Plaza, Opp. Ayurvedic College, Above Kabir<br/>Resturant, Station Road, Surat, Gujarat, India, 395003.</p> |
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1.2 **Item Details**

1.2.1 <b>Condition of the Item</b>	Working		
1.2.2 <b>Nomenclature</b>	Thermo Hygrometer		
<b>Manufacturer</b>	HTC	<b>Model No.</b>	HTC-1
<b>ID No.</b>	THM-01	<b>Sr.No.</b>	---
<b>Range</b>	-10 to 50 °C / 10 to 99%RH	<b>Type</b>	Digital
<b>Least Count</b>	0.1 °C / 1 % RH	<b>Accuracy</b>	---
<b>Department</b>	---	<b>Location</b>	---

1.3 **Item Received On**

Dt. 17/03/2023

1.4 **Details of Test Equipments Used**

Instrument Name	UID No.	Certificate No.	Make	Due Date
Temp.& Humidity Sensor With Indicator	ML/MTHI/001	30054000	Rotronic	23/05/2023
Source In Use: ML/MTHCC/001				

1.4.1 **Operating Procedures Used:**

ML/SOP/THE/008

1.5 **Date of Calibration:**

18-March-2023

1.6 **Recommended Due Date of Calibration:**

17-March-2024

1.7 **OBSERVATIONS:**

- |                                  |                             |                            |
|----------------------------------|-----------------------------|----------------------------|
| 1.7.1 <b>Laboratory Ambient:</b> | Temperature: 26.0 °C (25±4) | Humidity: 55.1 %RH (50±20) |
| 1.7.2 <b>Parameter:</b>          | Temperature / Humidity      |                            |

CALIBRATION RESULTS					
Range	Calibration Point	Measured Value on Master (A)	Measured Value on IUC (B)	Error (B - A)	(±) Expanded Uncertainty
<b>Parameter: Temperature @ 50%RH (°C)</b>					
-10 to 50 °C	15.0	15.32	14.9	-0.42	0.624 °C
	25.0	25.24	25.3	0.06	0.624 °C
	45.0	45.35	45.5	0.15	0.624 °C
<b>Parameter: Humidity @ 25°C (%RH)</b>					
10 to 99 %RH	35	34.75	35	0.25	1.869 %RH
	50	49.14	50	0.86	1.869 %RH
	85	84.65	85	0.35	1.869 %RH

**Note:** The value mentioned above is the mean of 3 readings.

Calibrated By: Prashant Patel, Senior Calibration Engineer

AUTHORISED SIGNATORY

Ranjit Rohit / Nitesh Patel  
Technical Director / Quality Manager


Doc. No. Form-21, Amend. 05 Dt. 01-01-2022

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1.8 **General Remarks:**

- The reported uncertainty is the expanded uncertainty in measurement obtained by multiplying the standard uncertainty by the coverage factor  $k=2$ , which corresponds to a coverage probability of approximately 95.45% for a normal distribution.
- Uncertainty to be calculated at Max Error / Full Range of IUC
- Any anomalies/Discrepancies in the certificate should be brought to our notice within 30 days from the date of issue Certificate.
- IUC\* (Instrument Under Calibration)
- The Measurements are metrologically traceable to applicable national /International Standards.
- Any hand written corrections (except @) or photocopies of the report invalidates this certificate.
- The results related to the item calibrated.

Calibrated By: <u>Ranjit Patel</u> , Senior Calibration Engineer	AUTHORISED SIGNATORY
 Ranjit Rohit / Hitesh Patel Technical Director / Quality Manager	

\*\*\* End of Certificate \*\*\*

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