GLOBAL TECHNICAL SERVICES
Sec. No.25, Plot No.49/3, L.I.G. Colony, Pradhikaran, Nigdi, Pune - 411044
Email : globaltechnical007@gmail.com
Mob : 9921239827 / 7276302207 / 9028888728
CC-4048

CALIBRATION CERTIFICATE

1.CUSTOMER :-

HOFFEN DIAGNOSTICS
BAVDHAN, PUNE

Page No.	:- 1 of 1
SRF No	:- GTS/241017/05
Certificate No.	:- GTS/241017/05-003
Date of Received	:- 17.10.2024
Date of Calibration	:- 17.10.2024
Next Calibration Due On	:- 16.10.2025
Issue Date	:- 21.10.2024
Calibration method No.	:- TH-WI-05
ULR No	:- CC404824000003280F
Ambient Temp. (ºC)	:- 25± 4
Relative Humidity (%RH)	:- 30 to 75
Location of calibration	:- In Lab
Condition of Item	:- Ok

2. Description of Item

Name	:- Digital Hygrometer	Range	:- -50 to 80°C/10 to 99%RH
Id No	:- HOF - 13	Least Count	:- 0.1°C/1%RH
Make	:- APTECH HTC	Location	:- LAB
Type	:- Digital		
		Dept.	:- Pathology
		Sr No	:- HTC 1

3.Details of Equipment used for calibration

Name	Certificate No.	Certified By	ID No.	Calibration Validity
Temperature and Humidity Indicator With Sensor	CAL/23-24/CC/642-5	Nashik Engineering Cluster	GTS/THIS/01	03.11.2024

***Discipline Thermal Calibration (Specific heat & Humidity)**

4.Calibration Results :-

Temperature @ 50%RH

Calibration Points °C	Standard Reading °C	UUC Reading °C	Error in °C	Expanded Unc. in ± °C
10	9.77	10.1	0.33	0.90
20	19.81	20.2	0.39	0.90
40	39.86	40.2	0.34	0.90

Humidity @25°C

%RH	%RH	%RH	%RH	in ± %RH
20	19.73	20	0.27	2.40
50	49.79	51	1.21	2.40
90	89.85	91	1.15	2.40

Note:
1)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 normal distribution
2) This certificate refers only to the particular item submitted for calibration. UUC stands for Unit Under Calibration.
3) The calibration results reported in the certificate are valid at the time of and under the stated conditions of measurement.
4) Calibration point were selected as per customer specifications.
5) This certificate shall not be reproduced, except in full unless written permission for the publication of an approved abstract has been obtained from the Technical Manager of "Global Technical Services, Pune".
6)The Instruments used for calibration are traceable to National/International standards and their Calibrations are valid.

Calibrated By
Rohit
Calibration Engineer
Rohit L

GLOBAL TECHNICAL SERVICES GTS PUNE

Approved By
Technical Manager
Swapnil Bhagwat

Nashik Engineering Cluster

(Under the aegis of Department of Industrial Policy & Promotion, (DIPP), Ministry of Commerce & Industry, Govt. of India, New Delhi)

NABL Accredited Testing & Calibration Laboratory as per ISO/IEC:17025:2017, Test House approval from Directorate General of Aeronautical Quality Assurance (DGAQA), Ministry of Defence, Govt. of India, New Delhi

CC-2248

" Sahastrarashmi", C-10, MIDC, Ambad, Nashik-422 010. Tel.: +91 253 6699231,32,91 TeleFax: + 91 253 6699222
E-mail : calibration@nec.org.in, quality.lab@nec.org.in, testinglab@nec.org.in, info@nec.org.in, website: www.nec.org.in

CALIBRATION CERTIFICATE

Certificate No. **CAL/23-24/CC/642-5**

ULR No. CC224823000004938F

Date of Issue **05.11.2023**

Dig.Temp. & Humidity Indicator with Sensor

Date of Calibration	Next Calibration Due Date	Page No.	No. of Pages
04.11.2023	03.11.2024	1	1

Calibrated For	**M/S. GLOBAL TECHNICAL SERVICES. 25, Plot No. 49/3, L.I.G. Colony, Pradhikaran, Nigdi, Pune-411044**		
Date of Receipt	04.11.2023	**Challan No.**	210
Condition of the Instrument	Functional	**Calibrated at**	In Lab
SRF No and date	CAL/23-24/CSRF/642	**SRF Date**	04.11.2023
NEC ID No.	CAL/23-24/ID/642-5	**Department**	----

Details of Test Instrument

Description	Dig.Temp. & Humidity Indicator with Sensor	**Make**	Polltech Instruments Pvt. Ltd.	**Model**	MIH-PM-RH-T1B-TT
Type	---	**ID. No.**	GTS/THIS/01	**Sr No.**	---
Range	-40 To 60 °C/ 0 To 100 % RH	**Least Count**	0.01°C / 0.01% RH	**Ratio**	
Accuracy	±1°C & ± 5% R.H		**Calibration Procedure No.**	WI/NEC/CAL/THERM/05	
Calibration Environments		**Temperature**	25 ± 4°C	**Relative Humidity**	30 to 75% RH

Reference Standard Used For Calibration (Traceable To National / International Standards)

Description	Make/Model	Sr No.	Cal.Cert No	Valid upto	Traceability
Humidity Generator	Thunder Scientific/1200	0905052	TSC/22-23/13965-2	15.12.2023	Transcal,Banglore

Calibration Results
Discipline:-Thermal

Parameter: Temperature @ 50% RH

Set Points	Standard Reading	Reading On UUC*	Deviation	(±) Expanded Uncertainty
°C	°C	°C	°C	°C
5	5.01	4.80	-0.21	0.52
30	29.99	29.60	-0.39	0.52
50	49.98	49.20	-0.78	0.52

Parameter: Humidty @ 25 °C

Set Points	Standard Reading	Reading On UUC*	Deviation	(±) Expanded Uncertainty
%	%	%	%	%
10	10.02	10.00	-0.02	1.21
20	20.01	20.00	-0.01	1.21
60	59.95	60.00	0.05	1.21
95	95.82	95.00	-0.82	1.21

UUC*:- Unit Under Calibration

Remarks:

1) Due date of calibration (1 Year) is mentioned in the certificate is as per customer request.
2) The calibration certifcate pertains to the above equipment calibration.
3) The calibration certifcate shall not be reproduced except in full,without written approval of the laboratory.
4) Uncertainty has been calculated for a coverage factor k=2 corresponding to approximately 95.45 % Confidence Level.
5) The Standard maintained are traceable to National / International Standard through accredited Laboratories.
6) The observations reported represent values at the time of the measurements, and under the stated conditions. they do not convey any long term stability information.
7) Measured O/P is average of 5 reading.

Prepared By
Kanchan Phadol
(Calibration Engineer)

NASHIK ENGINEERING CLUSTER * CALIBRATION LAB * AMBAD NASHIK *

Reviewed & Approved By
Rahul Golesar
(Quality Manager)

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

QR/NEC/CC/01