



Since 1998

# NATIONAL CENTRE FOR QUALITY CALIBRATION

4, Abhishree Corporate Park, Nr. Swagat Bungalows BRTS, Iskon-Ambli Road, Ambli, Ahmedabad-380 058

Ph. +91-79-29795322, 29795323 • Fax : +91-79-29795323, Call No. +91-9327017517, +91-9328616370

E-mail : [ncqc@calibrationlaboratory.in](mailto:ncqc@calibrationlaboratory.in), [calibrationlab.ncqc@gmail.com](mailto:calibrationlab.ncqc@gmail.com)

Visit our Web Site : [www.calibrationlaboratory.in](http://www.calibrationlaboratory.in)



CC-2128

Precision Calibration with National / International Traceability for Temperature, Dimensional, Pressure, Vacuum, Time, Mass, Electrical, Noise, Airflow, Lux & all Special Purpose Instruments in all ranges.

## Calibration Certificate

F/CR/T/O 10/03 Issue No. 02

<b>Name of Customer</b> <b>National Centre for Quality Calibration</b> 4, Abhishree Corporate Park, Nr. Swagat Bungalows BRTS, Iskon – Ambli Road, Ambli, Ahmedabad – 380 058, Gujarat	<b>Certificate No.</b> NCQC-T/170223/002	
	<b>Date of Issue</b> 18/02/2023	
	<b>Date of Calibration</b> 17/02/2023 <b>Suggested Due Date</b> 16/02/2024	
<b>Date of Receipt / Ref.No.:</b> 16/02/2023		

<b>ULR No. :</b> CC212823000000717F	<b>Discipline :</b> Thermal Calibration Specific Heat and Humidity
-------------------------------------	---

<b>Details of Observation of Unit Under Calibration</b>	<b>Identification No.</b> : NCQC/T – 164
	<b>Serial No.</b> : EF7186H00539
	<b>Name of Instrument :</b> Temperature & Humidity Data Logger

<b>Range</b>	0 to 99 % Rh	<b>Visual Inspection Accuracy</b>	OK ± 5 % Rh
<b>Resolution</b>	0.1 % Rh		
<b>Make / Model</b>	Elitech/RC-4HC		
<b>Location</b>	Laboratory		

<b>Loc. of Calibration</b>	At Laboratory	<b>Std. Ref. Used</b>	
<b>Environment Cond.</b>	25 ± 4 °C, 30 to 75 % Rh	<b>Cali.Method No.</b>	NCQC/CM/T/010

### Master Instruments Detail

NCQC SYS.NO.	Nomenclature	Make/ Model	Id / Serial No.	Traceable To	Certificate No.	Valid Upto
335	Digital thermo Hygro Palm	Rotronic / HP32	NCQC/T-161/ 5181935 / 20281776	CC 2733	30056028	05/07/2023
435	4 wire RTD with Indicator	RTD - Tempsens / TPRT-100, Indicator - Tempsens / TEMPMET-09-02	RTD-NCQC/T-235 / 23000299, Indicator - NCQC/T-236 / T0064	CC-2840	TL/022/1068.2.1	25/09/2023

### Calibration Results of Humidity @ 25 °C

Set point on Hybrid Temperature and Humidity Calibrator in % Rh	Reading observed by UUC in % Rh	Reading observed by Master instrument in % Rh	Absolute Error in % Rh	Expanded Uncertainty in % Rh (k=2) ±
20.0	20.7	20.11	0.59	3.20
40.0	41.0	40.21	0.79	3.20
50.0	51.1	50.26	0.84	3.20
70.0	71.5	70.38	1.12	3.20
95.0	94.1	95.68	1.58	3.20

NCQC  
Valid up to 16-02-2024  
Reviewed: *[Signature]*

Traceable To National / International Standards.

<b>Calibrated By</b>	<i>[Signature]</i> Vishal Chauhan Calibration Engineer	<b>Reviewed &amp; Approved By</b>	<i>[Signature]</i> Jigar Panchal Calibration Incharge
----------------------	---	-----------------------------------	--

NCQC System Certificate No. 339

Page 1 of 2



Since 1998

# NATIONAL CENTRE FOR QUALITY CALIBRATION

4, Abhishree Corporate Park, Nr. Swagat Bungalows BRTS, Iskcon-Ambli Road, Ambli, Ahmedabad-380 058

Ph. +91-79-29795322, 29795323 • Fax : +91-79-29795323, Cell No. +91-9327017517, +91-9328616370

E-mail : [ncqc@calibrationlaboratory.in](mailto:ncqc@calibrationlaboratory.in) • [calibrationlab.ncqc@gmail.com](mailto:calibrationlab.ncqc@gmail.com)

Visit our Web Site : [www.calibrationlaboratory.in](http://www.calibrationlaboratory.in)



CC-2128

Precision Calibration with National / International Traceability for Temperature, Dimension, Pressure, Vacuum, Time, Mass, Electrical, Noise, Airflow, Lux & all Special Purpose Instruments in all ranges.

## Calibration Certificate

F/CRT/10/03 Issue No. 02

### Name of Customer

National Centre for Quality Calibration

4, Abhishree Corporate Park, Nr. Swagat Bungalows BRTS, Iskcon – Ambli Road, Ambli, Ahmedabad – 380 058, Gujarat

Certificate No. NCQC-T/170223/002

Date of Issue 18/02/2023

Date of Calibration 17/02/2023

Suggested Due Date 16/02/2024

Date of Receipt / Ref.No.: 16/02/2023

ULR No. : CC212823000000717F

Discipline : Thermal Calibration  
Specific Heat and Humidity

### Details of Observation of Unit Under Calibration

Identification No. : NCQC/T – 164

Serial No. : EF7186H00539

Name of Instrument : Temperature & Humidity Data Logger

Range -30 to 60 °C

Accuracy

± 0.5 °C up to -20 to 40°C & Other ±1°C

Least Count 0.1 °C

### Calibration Results of Temperature

Set point on Hybrid Temperature and Humidity Calibrator in °C	Reading observed by UUC in °C	Reading observed by Master instrument in °C	Absolute Error in °C	Expanded Uncertainty in °C (k=2) ±
-25.0	-25.3	-25.153	0.147	0.78
-15.0	-15.2	-15.061	0.139	0.78
0.0	0.0	0.014	0.014	0.78
10.0	10.2	10.064	0.136	0.78
30.0	30.3	30.136	0.164	0.78
50.0	50.3	50.171	0.129	0.78

### Remarks:

- Averages of minimum five readings are reported.
- Suggested due date is given based on customer requirements
- Calibration Points are given based on customer requirements.
- Condition of instrument found satisfactory during receipt.
- These results are obtained at the time of calibration.
- Any hand written corrections (except @) or photocopies of the report invalidates this certificate.
- The uncertainties are for a confidence probability of not less than 95% with coverage factor k = 2
- Our masters are directly calibrated through NABL accredited calibration laboratory having direct traceability with National / international standard.
- Portable Hybrid temperature and Humidity calibrator was used as a source of generating temperature and humidity as well as controlling temperature at specified set point.

Traceable To National / International Standards.

Calibrated By

*Vishal Chauhan*  
Vishal Chauhan  
Calibration Engineer

Reviewed & Approved By

*Jigar Panchal*  
Jigar Panchal  
Calibration Incharge