



# TMSCC

TESTING MACHINE SERVICE AND CALIBRATION CENTRE  
Precision is Our Destination.....

An ISO 9001 : 2015 Certified company  
Calibration of Various Instruments & Testing Machines...



CC - 3125

Form No.: TMSCC/R/23

### CALIBRATION CERTIFICATE

CALIBRATION CERTIFICATE NO.: 2023/08/1641 Page 1 of 1

ISSUE DATE: 13-Sep-2023

ULR No.: CC312523000013648P

1.0 ISSUED TO: M/s. Barasat Government Medical College & Hospital  
ICTC,  
Barasat, Banamalipur, North 24 Pgs, Pin-700124,  
West Bengal.

1.1 Service Request Form No.: SRF/2023/08/30/03

1.2 Service Request Date: 30-08-2023

1.3 Location: At Lab

1.4 Description identification of item to be calibrated:

i	Name:	Digital Thermo Hygometer	ii	Make:	R-TEK
iii	Model / Type No.:	--	iv	S/L No.:	--
v	I.D.No.:	ICTC/DTHM-01	vi	Job Code No.:	2023/08/1641
vii	Range:	[(-)50 to 70] °C & (10 to 99)% RH	viii	Resolution:	0.1°C & 1% RH
ix	Accuracy:	As Per DKD R5 - 1 & DKD-R5-7	x	End User:	--

1.5 Full / Partial Calibration: Partial Calibration

1.6 Applicable specification of item to be calibrated: Accuracy / permissible limit: Not Specified

1.7 Date of receipt of item: 30-Aug-2023 1.8 Date of calibration: 30-Aug-2023

1.9 Calibration due on: 29-Aug-2024 2.0 Frequency of calibration once in: 12 Months

2.1 Environmental condition during calibration: Temperature: 25.2°C  
Humidity: 52% RH

2.2 Basis of calibration: SOP/10/02, SOP/10/04

2.3 Traceability: Standards used for calibration are traceable to National Standards through NABL accredited Laboratory

Name of Instrument	Sl. No. / Id no.	Certificate No.	Lab Certificate No.	Calibrated on	Due on
Temp. & Humidity Probe with Indicator	(Sl. No. No - 2022C01005/ 20571921)	ATL/T/090323001	CC-2590	06-03-2023	06-03-2024
Digital Temperature Indicator with Sensor(RTD)	(Indicator Sl. No - 18K588073) (Sensor Sl. No - 19102403)	TSC/22-23/12095-36	CC - 2231	17-11-2022	17-11-2023

### CALIBRATION RESULTS

Sl. No.	Ref. Bath set in °C	Observed Reading at DUC in °C (Avg. of five readings)	Observed Reading at Ref. Std. in °C (Avg. of five readings)	Error in °C	Uncertainty in ± °C	Acceptance Criteria
1	-35.0	-35.0	-34.912	0.088	0.18	Pass
2	-5.0	-5.0	-4.987	0.013	0.18	Pass
3	10.0	10.0	9.975	-0.025	0.18	Pass
4	30.0	30.0	29.925	-0.075	0.18	Pass
5	70.0	70.0	69.825	-0.175	0.31	Pass

Maximum Permissible Error: ± 0.3% of rdg

Sl. No.	Ref. Source set in %	Observed Reading at DUC in % (Avg. of five readings)	Observed Reading at Ref. Std. in % (Avg. of five readings)	Error in %	Measurement Uncertainty in ± %	Acceptance Criteria
1	25	25	25.4	0.4	1.3	Pass
2	50	50	50.8	0.8	1.3	Pass
3	90	90	91.2	1.2	1.3	Pass

Maximum Permissible Error: ± 3% of rdg

Measurement Uncertainty at 95% Confidence Level where Coverage Factor k = 2

REMARKS : The DUC has been calibrated over its range. The readings observed are tabulated above. The reference standard is traceable to National standard.

DUC: Device Under Calibration.

Physical Status of the DUC : OK

Calibrated By:   
R. Ghosh  
(Calibration Engineer)

Checked By:   
C. Ghosh  
(Technical Manager)

Approved By:   
P. K. Modak  
(Sr. Calibration Engineer)

END OF CERTIFICATE



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Form No.: TMSCC/R/23

### CALIBRATION CERTIFICATE

CALIBRATION CERTIFICATE NO.: 2023/08/1642 Page 1 of 1  
 ISSUE DATE: 13-Sep-2023  
 ULR No.: CC312523000013649P

**1.0** ISSUED TO: M/s.: Barasat Government Medical College & Hospital  
 ICTC,  
 Barasat, Banamalipur, North 24 Pgs, Pin-700124,  
 West Bengal.

**1.1** Service Request Form No.: SRF/2023/08/30/03  
**1.2** Service Request Date: 30-08-2023  
**1.3** Location: At Lab

**1.4** Description identification of item to be calibrated:

<b>i</b> Name:	Digital Thermo Hygometer	<b>ii</b> Make:	R-TEK
<b>iii</b> Model / Type No.:	--	<b>iv</b> S/L No.:	--
<b>v</b> I.D.No.:	ICTC/DTHM-02	<b>vi</b> Job Code No.:	2023/08/1642
<b>vii</b> Range:	[(-)50 to 70] °C & (10 to 99)% RH	<b>viii</b> Resolution:	0.1°C & 1% RH
<b>ix</b> Accuracy:	As Per DKD R5 - 1 & DKD-R5-7	<b>x</b> End User:	--

**1.5** Full / Partial Calibration: Partial Calibration  
**1.6** Applicable specification of item to be calibrated: Accuracy / permissible limit: Not Specified

**1.7** Date of receipt of item: 30-Aug-2023 **1.8** Date of calibration: 30-Aug-2023  
**1.9** Calibration due on: 29-Aug-2024 **2.0** Frequency of calibration once in: 12 Months

**2.1** Environmental condition during calibration: Temperature: 25.2°C  
 Humidity: 52% RH  
**2.2** Basis of calibration: SOP/10/02, SOP/10/04  
**2.3** Traceability: Standards used for calibration are traceable to National Standards through NABL accredited Laboratory.

Name of Instrument	Sl. No. / Id no.	Certificate No.	Lab Certificate No.	Calibrated on	Due on
Temp. & Humidity Probe with Indicator	(Sl. No. - No - 2022C01005/20571921)	ATL/T/090323/001	CC-2590	06-03-2023	06-03-2024
Digital Temperature Indicator with Sensor(RTD)	(Indicator Sl. No. - 18K588073) (Sensor Sl. No. - 19102403)	TSC/22-23/12095-36	CC - 2231	17-11-2022	17-11-2023

### CALIBRATION RESULTS

Sl. No.	Ref. Bath set in °C	Observed Reading at DUC in °C (Avg. of five readings)	Observed Reading at Ref. Std. in °C (Avg. of five readings)	Error in °C	Uncertainty in ± °C	Acceptance Criteria
1	-35.0	-35.0	-34.937	0.063	0.18	Pass
2	-5.0	-5.0	-4.991	0.009	0.18	Pass
3	10.0	10.0	9.982	-0.018	0.18	Pass
4	30.0	30.0	29.946	-0.054	0.18	Pass
5	70.0	70.0	69.874	-0.126	0.31	Pass

Maximum Permissible Error: ± 0.3% of rdg

Sl. No.	Ref. Source set in %	Observed Reading at DUC in % (Avg. of five readings)	Observed Reading at Ref. Std. in % (Avg. of five readings)	Error in %	Measurement Uncertainty in ± %	Acceptance Criteria
1	25	25	25.2	0.2	1.3	Pass
2	50	50	50.7	0.7	1.3	Pass
3	90	90	91.4	1.4	1.3	Pass

Maximum Permissible Error: ± 3% of rdg  
 Measurement Uncertainty at 95% Confidence Level where Coverage Factor k = 2

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(Calibration Engineer)

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*R. Ghosh*  
R. Ghosh  
(Technical Manager)



Approved By :  
*P. R. Modak*  
P. R. Modak  
(Sr. Calibration Engineer)

END OF CERTIFICATE