



ELECTRO METER CORPORATION
P- 5, C.I.T ROAD,
KOLKATA - 700014

FORM NO. EM/22

CALIBRATION CERTIFICATE OF:
DEEP FREEZER

Certificate No.:
CC - 2147

CALIBRATION CERTIFICATE NO.: EMC2021-KOL-00033353

ULR NO.: CC214721000026532F

Page: 1/2

1.0 ISSUED TO: **BIOCHEMISTRY DIAGNOSTIC LABORATORY**
GOVT. MEDICAL COLLEGE
SRINAGAR AND ASSOCIATED SMHS HOSPITAL,
(F- BLOCK) KARAN NAGAR,
SRINAGAR, J&K- 190010

1.1 Service Request / Order No.: -

1.2 Description identification of item to be calibrated:

i	Name:	DEEP FREEZER	ii	Code No.:	-
iii	Sl. No.:	BDI-3299	iv	Make:	REMI
v	Model / Type No.:	-	vi	Range:	As Per Calibration Result
vii	Sensor:	-	viii	Resolution:	1°C
ix	Location:	Research Lab (Room No. 310)			

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

1.4 Date of receipt of item: 20-Aug-2021 1.5 Date of calibration: 20-Aug-2021

1.6 Recommended date for next calibration: 20-Aug-2022 1.7 Frequency of calibration: 12 months

1.8 Environmental condition during calibration

Temperature:	25°C ± 10°C
Humidity:	50% RH ± 20% RH

1.9 Basis of calibration:

S.O.P Number	S.O.P/Thermal/07
Standard Followed	DKD R-5-7: 2018
Description of Method	Using Multi Point Measurement (9 channels). Using RTD, DAS by comparison method.

2.0 Traceability : Standards Used for Calibration are Traceable to National/International Standards through ISO/IEC: 17025 Accredited Laboratory.

Sl. No.	Name of the standard instrument used (Sl. No./Code Nos.)	Range	Resolution	Recommended date for next calibration	Traceable to / Certificate Nos.
1	Data Acquisition Switch, Make: Keysight, Model No. 34970A, Sl. No.: MY44016767, Code No. EMC/DASU/478	As Per Calibration Result	As Per Calibration Result	08-12-2021	EMC (Kolkata) / EMC2020-KOL-00041095
2	PT-100 Sensor, Code: EMC/PT-100/645	(-)80°C to 250°C	-	01-02-2022	EMC (Kolkata) / EMC2021-KOL-00002809
3	PT-100 Sensor, Code: EMC/PT-100/646	(-)80°C to 250°C	-	01-02-2022	EMC (Kolkata) / EMC2021-KOL-00002810
4	PT-100 Sensor, Code: EMC/PT-100/647	(-)80°C to 250°C	-	01-02-2022	EMC (Kolkata) / EMC2021-KOL-00002811
5	PT-100 Sensor, Code: EMC/PT-100/648	(-)80°C to 250°C	-	01-02-2022	EMC (Kolkata) / EMC2021-KOL-00002812
6	PT-100 Sensor, Code: EMC/PT-100/649	(-)80°C to 250°C	-	01-02-2022	EMC (Kolkata) / EMC2021-KOL-00002813
7	PT-100 Sensor, Code: EMC/PT-100/650	(-)80°C to 250°C	-	01-02-2022	EMC (Kolkata) / EMC2021-KOL-00002814
8	PT-100 Sensor, Code: EMC/PT-100/651	(-)80°C to 250°C	-	01-02-2022	EMC (Kolkata) / EMC2021-KOL-00002815
9	PT-100 Sensor, Code: EMC/PT-100/652	(-)80°C to 250°C	-	01-02-2022	EMC (Kolkata) / EMC2021-KOL-00002816
10	PT-100 Sensor, Code: EMC/PT-100/653	(-)80°C to 250°C	-	01-02-2022	EMC (Kolkata) / EMC2021-KOL-00002817



Certificate No.:
CC - 2147



ELECTRO METER CORPORATION
P- 5, C.I.T ROAD,
KOLKATA - 700014.

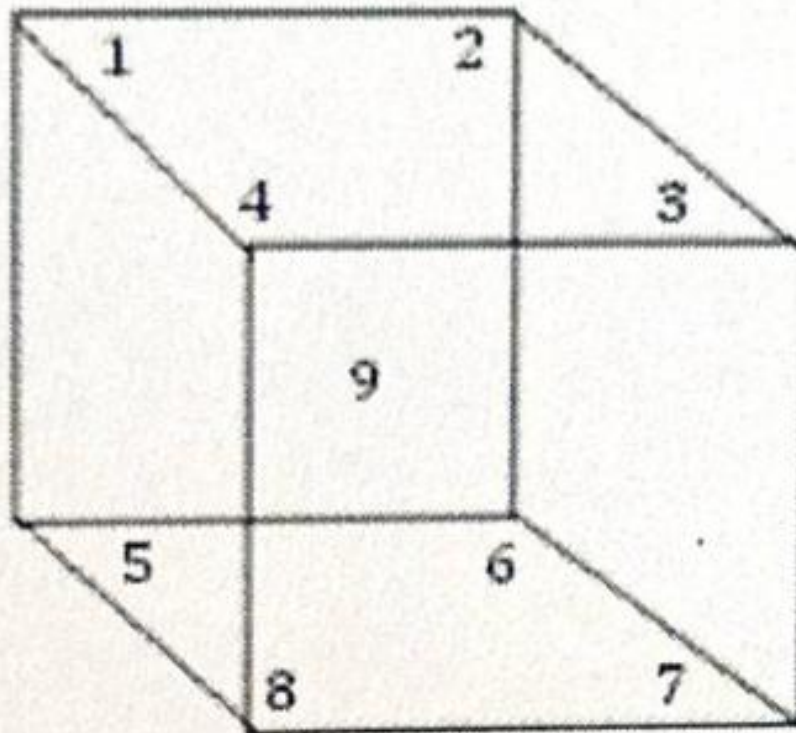
Form No.: FM/22

CALIBRATION CERTIFICATE OF:
DEEP FREEZER

CALIBRATION CERTIFICATE NO.: EMC2021-KOL-00033353

ULR NO.: CC214721000026532F

Page-2/2



Position of Sensor

CALIBRATION RESULT

Temp. Set at (°C)	Nominal Value on DUC			Corrected Value			Error (°C)	Zone	Expanded Uncertainty (±) (°C)	k factor
	Max (°C)	Min (°C)	Avg (°C)	Max (°C)	Min (°C)	Avg (°C)				
(-)20	-20	-20	-20.0	-18.42	-20.00	-19.270	-0.730	1	0.61	2.00
				-18.83	-19.83	-19.460	-0.540	2		
				-18.82	-19.54	-19.226	-0.774	3		
				-19.03	-19.99	-19.680	-0.320	4		
				-19.17	-20.07	-19.490	-0.510	5		
				-18.47	-19.71	-19.202	-0.798	6		
				-18.45	-19.84	-19.362	-0.638	7		
				-18.51	-19.93	-19.542	-0.458	8		
				-18.49	-20.22	-19.534	-0.466	9		

Note: i) Corrected Value = Std Value + Correction, ii) Error = Avg DUC Reading - Avg Corrected Reading.

iii) Average reading obtained from scan time of 5 min, iv) Average of 5 readings had been taken in DUC/Corrected Value.

v) The calibration certificate is issued by Electro Meter Corporation. This certificate refers only for the particular item submitted to calibrate.

vi) The certificate if produced for any purpose commercial or otherwise, should be reproduced in full. Partial production of the certificate or an abstract thereof has to be got specifically approved from the technical and the quality manager of this lab.

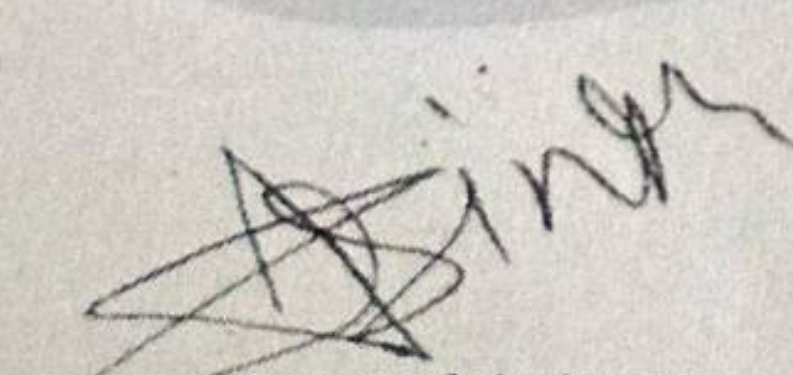
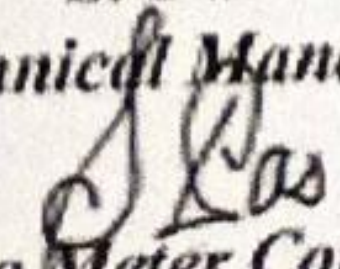
vii) The results in the calibration certificate are valid at the time of and under the stated conditions on measurement.

viii) The calibration result is only to be used for scientific & industrial purpose. This result can not be used for commercial purpose.

Stability : 1.73°C & Non Uniformity : 0.478°C

Measurement uncertainty at approx 95 % of confidence level & at a coverage factor : As Per Calibration Result

Remarks: Statement of conformity not mentioned.

DUC- Device Under Calibration	F.S.-Full Scale	Physical status of the DUC: OK
Calibrated by: Kuwar Aman Singh Date : 20-08-2021 Report Issue Date : 25-08-2021  Technical Assistant Electro Meter Corporation	Checked & Approved by: Saptarshi Das Date : 25-08-2021  S. Das Technical Manager Electro Meter Corporation	

END OF CERTIFICATE