


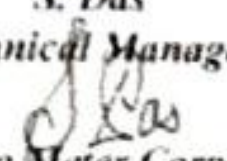



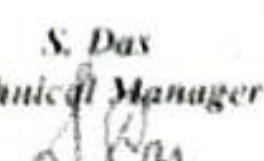


ISSUED BY ELECTRO METER CORPORATION

 CC-2147				ELECTRO METER CORPORATION P- 5, C.I.T ROAD, KOLKATA - 700014.		Form No.: FM/22  CALIBRATION CERTIFICATE OF: DIGITAL THERMOMETER WITH SENSOR	
CALIBRATION CERTIFICATE NO: EMC2022-KOL-00011155				ULR NO: CC21472200007985F		Page: 1/1	
1.0 ISSUED TO:		CPL Diagnostics Pvt. Ltd. CZ-8, Metropolitan CHS Ltd, Canal South Road, Kolkata-700 105					
1.1 Service Request / Order No.:		532-E04-02-22					
Description identification of item to be calibrated:							
i Name:		DIGITAL THERMOMETER WITH SENSOR		ii Code No.:		CPLDPL/DTS/01	
iii SI. No.:		--		iv Make:		MEXTECH	
v Model / Type No.:		ST9283B		vi Range:		(-)50°C to 300°C	
vii Sensor:		--		viii Resolution:		0.1°C	
ix Location:		-		-		-	
1.3 Applicable specification of item to be calibrated: Accuracy / permissible limit:				Not Specified			
1.4 Date of receipt of item:		11-Feb-2022		1.5 Date of calibration:		22-Feb-2022	
1.6 Recommended date for next calibration		22-Feb-2023		1.7 Frequency of calibration:		12 months	
1.8a) Environmental condition during calibration		Temperature: 22.5°C Humidity: 55.7% RH					
1.8b) Recommended Environmental condition		Temperature: 25°C ± 4°C Humidity: 50% RH ± 20% RH					
1.9 Basis of calibration:		S.O.P Number		S.O.P/Thermal/10			
		Standard Followed		IS 6274 -1971, IS 2480 (PART I) - 1983, IS 2480 (PART II) - 1982 & OIML R 133: 2002			
		Description of Method		Using Alcohol / Water / Oil / Dry Block Bath And SPRT / SSPRT / RTD / K type / R type / R type with cold junction / B type, 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: Agilent, Model No: 34970A, Sl. No.: MY44022114, Code No: EMC/DAS/291	As Per Calibration Result	As Per Calibration Result	11-08-2022	EMC (Kolkata) / EMC2021-KOL-00049717		
2	Semi Standard Platinum Resistance Thermometer, Make: Isotech, Model: 935-14-95H, Sl. No: 39649/1, Code No: EMC/SSPRT/871	(-)80°C to 650°C	-	30-12-2022	Tempsens / TL/020/1138.1.1		
3	Julabo Bath (-80°C), Make: Julabo, Model No. FP-BB, Sl. No. 100072670, Code No. EMC/JULABO (-80°C)/240	(-)80°C to 20°C	0.01°C	23-03-2022	EMC (Kolkata) / EMC2021-KOL-00011705		
4	Heating Bath Circulator, Make: Julabo, Model No. TP-12, Code No. EMC/JULABO/06	100°C to 250°C	0.01°C	23-03-2022	EMC (Kolkata) / EMC2021-KOL-00011706		
5	Salt Bath, Make: Eastern Instrument Soft Logic, Code No.: EMC/SB/294	275°C to 600°C	0.1°C	18-06-2022	EMC (Kolkata) / EMC2021-KOL-00024486		
6	Digital Temperature & Humidity Meter, Make: Metravi, Model No. HT-3005, Sl. No. 141017137, Code No. EMC/DTHM/840	19°C to 22°C (for Temperature) & 40% RH to 80% RH (for Humidity)	0.1°C (for Temperature) & 0.1% RH (for Humidity)	20-03-2022	EMC (Kolkata) / EMC2021-KOL-00017277		
CALIBRATION RESULT							
Parameter / Range	Nominal Value on DUC (°C)	Corrected Value (°C)	Error (°C)	Expanded Uncertainty (±) (°C)	k factor		
Temperature (-)50°C to 300°C	-45.2	-44.787	-0.413	0.20	1.96		
	-0.4	0.160	-0.560	0.21	1.97		
	99.4	100.124	-0.724	0.19	1.96		
	199.3	200.116	-0.816	0.21	1.97		
	296.6	298.074	-1.474	0.46	1.96		
Immersion Type = Full							
Note: i) Corrected Value = Std Value + Correction,							
ii) The calibration certificate is issued by Electro Meter Corporation. This certificate refers only for the particular item submitted to calibrate.							
iii) The certificate if produced for any purpose commercial or otherwise, should be reproduced in full. Partial production of the certificate or an abstract there of has to be got specifically approved from the technical and the quality manager of this lab.							
iv) The results in the calibration certificate are valid at the time of and under the stated conditions on measurement.							
v) The calibration result is only to be used for scientific & industrial purpose. This result can not be used for commercial purpose.							
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: Akash Singh Date: 22-Feb-2022 Report Issue Date: 17-Mar-2022				Checked & Approved by: Saptarshi Das Date: 17-Mar-2022			
 Test Engineer Electro Meter Corporation				 S. Das Technical Manager Electro Meter Corporation			
END OF CERTIFICATE							



 CC-2147		<b>ELECTRO METER CORPORATION</b> P- 5, C.I.T ROAD, KOLKATA - 700014.	Form No.: FM/22  <b>CALIBRATION CERTIFICATE OF:</b> <b>DIGITAL THERMOMETER WITH SENSOR</b>		
CALIBRATION CERTIFICATE NO: EMC2022-KOL-00011156		ULR NO: CC214722000007086F	Page: 1/1		
1.0	ISSUED TO:	CPL Diagnostics Pvt. Ltd. CZ-8, Metropolitan CHS Ltd, Canal South Road, Kolkata-700 105			
1.1	Service Request / Order No.:	532-E04-02-22			
Description identification of item to be calibrated:					
1.2	i Name:	DIGITAL THERMOMETER WITH SENSOR	ii Code No.:	CPLDPL/DTS/02	
	iii SL No.:	--	iv Make:	MEXTECH	
	v Model / Type No.:	ST9283B	vi Range:	(-)50°C to 300°C	
	vii Sensor:	--	viii Resolution:	0.1°C	
	ix Location:	--			
1.3	Applicable specification of item to be calibrated: Accuracy / permissible limit:		Not Specified		
1.4	Date of receipt of item:	11-Feb-2022	1.5 Date of calibration:	22-Feb-2022	
1.6	Recommended date for next calibration	22-Feb-2023	1.7 Frequency of calibration:	12 months	
1.8a)	Environmental condition during calibration	Temperature: 22.5°C Humidity: 55.7% RH			
1.8b)	Recommended Environmental condition	Temperature: 25°C ± 4°C Humidity: 50% RH ± 20% RH			
1.9	Basis of calibration:	S.O.P Number	S.O.P/Thermal/10		
		Standard Followed	IS 6274 -1971, IS 2480 (PART I) - 1983, IS 2480 (PART II) - 1982 & OIML R 133: 2002		
		Description of Method	Using Alcohol / Water / Oil / Dry Block Bath And SPRT / SSPRT / RTD / K type / R type / R type with cold junction / B type, 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: Agilent, Model No: 34970A, Sl. No.: MY44022114, Code No: EMC/DAS/291	As Per Calibration Result	As Per Calibration Result	11-08-2022	EMC (Kolkata) / EMC2021-KOL-00049717
2	Semi Standard Platinum Resistance Thermometer, Make: IsoTech, Model: 935-14-95H, Sl. No: 39649/1, Code No: EMC/SSPRT/871	(-)80°C to 650°C	-	30-12-2022	Tempens / TL/020/1138.1.1
3	Julabo Bath (-80°C), Make: Julabo, Model No. FP-88, Sl. No. 100072670, Code No. EMC/JULABO (-80°C)/240	(-)80°C to 20°C	0.01°C	23-03-2022	EMC (Kolkata) / EMC2021-KOL-00011705
4	Heating Bath Circulator, Make: Julabo, Model No. TP-12, Code No. EMC/JULABO/06	100°C to 250°C	0.01°C	23-03-2022	EMC (Kolkata) / EMC2021-KOL-00011706
5	Salt Bath, Make: Eastern Instrument Soft Logic, Code No.: EMC/SB/294	275°C to 600°C	0.1°C	18-06-2022	EMC (Kolkata) / EMC2021-KOL-00024486
6	Digital Temperature & Humidity Meter, Make: Metravi, Model No. HT-3005, Sl. No. 141017137, Code No. EMC/DTHM/840	19°C to 22°C (for Temperature) & 40% RH to 80% RH (for Humidity)	0.1°C (for Temperature) & 0.1% RH (for Humidity)	20-03-2022	EMC (Kolkata) / EMC2021-KOL-00017277
CALIBRATION RESULT					
Parameter / Range	Nominal Value on DUC (°C)	Corrected Value (°C)	Error (°C)	Expanded Uncertainty (±) (°C)	k factor
Temperature (-)50°C to 300°C	-45.3	-44.787	-0.513	0.20	1.96
	-0.4	0.160	-0.560	0.20	1.96
	99.4	100.124	-0.724	0.20	1.96
	199.2	200.116	-0.916	0.19	1.96
	296.6	298.074	-1.474	0.46	1.96
Immersion Type = Full					
Note 1) Corrected Value = Std Value + Correction.					
i) The calibration certificate is issued by Electro Meter Corporation. This certificate refers only for the particular item submitted to calibrate.					
ii) The certificate if produced for any purpose commercial or otherwise, should be reproduced in full. Partial production of the certificate or an abstract there of has to be got specifically approved from the technical and the quality manager of this lab.					
iii) The results in the calibration certificate are valid at the time of and under the stated conditions on measurement.					
iv) The calibration result is only to be used for scientific & industrial purpose. This result can not be used for commercial purpose.					
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		FS: Full Scale		Physical status of the DUC: OK	
Calibrated by: Akash Singh Date: 22-Feb-2022 Report Issue Date: 17-Mar-2022			Checked & Approved by: Saptarshi Das Date: 17-Mar-2022		
 Test Engineer Electro Meter Corporation			 S. Das Technical Manager Electro Meter Corporation		
END OF CERTIFICATE					