

Certificate of Calibration

Reference No R123107865
 Date of Issue 11 Jul 2023
 Customer PRO LAB ENGINEERING SERVICES SDN BHD
 ID: 039228 No.21-g
 Jalan Bidara 8 saujana utama 3
 47000 Sungai Buloh
 Selangor
 Instrument Thermohygrometer
 Model TFA 30.5002
 Serial No 20220286
 Control No CA9987J
 Equipment ID N/A
 Capacity/Range -10 °C to 60 °C / 10 %rh to 99 %rh
 Date of Calibration 10 Jul 2023
 Recalibration Date Customer to Determine
 (Specified by Customer) The User should be aware there are many factors may cause this instrument to drift out of calibration limits prior to the stated recalibration date.
 Condition of Instrument Before Calibration Good Physical Condition
 After Calibration Calibrated and Serviceable
 Location of Calibration Trescal Laboratory
 Calibration Environment (23 ± 2) °C, (55 ± 15) %rh
 Calibration Method LCP 01106

Cert. No. PSYP- 23048392

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Reference Standard Used

Reference Instrument	Equipment ID	Control No	Certificate No	Traceable to	Due Date
Thermohygrometer	PH-T-TH5	C0503B	PSYP-22083186	NMIA,NMIM,SCS-SWITZERLAND	15 Nov 2023
Platinum Resistance Thermometer	PH-T-PT20	C9988D	PSYP-23004858	NMIM,NMIA	25 Jan 2024
Temperature and Humidity Chamber	PH-T-HC2	CS6116	PSYP-23025916	NMIA,NMIM,SCS-SWITZERLAND	10 Apr 2024

Calibrated By

Muhamad Hafiz Fakhruallah Bin Hamidi

Approved Signatory

Jag Oh Joo Kiat

The reported expanded measurement uncertainty is stated as the standard measurement uncertainty multiplied by the coverage factor k such that the coverage probability corresponds to approximately 95%

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Instrument Calibrated

Resolution	0.1	°C	1	%rh
Readability	0.1		1	
Type	Thermistor		Resistive	
Specification	± 1.0	°C	± 5	%rh

°C	Accuracy Test				
	CORRECTION AFTER ADJUST	REFERENCE READ	UUT READ	CORRECTION BEFORE ADJUST	SPECIFICATION ±
TEMPERATURE	-	15.2	15.5	-0.3	1.0
	-	20.0	20.4	-0.4	
	-	25.1	25.6	-0.5	
	-	29.9	30.5	-0.6	
	-	34.8	35.4	-0.6	
Measurement Uncertainty ±			0.2 °C	k = 2	

%rh	Calibration Temperature : 25 °C		Accuracy Test		
	CORRECTION AFTER ADJUST	REFERENCE READ	UUT READ	CORRECTION BEFORE ADJUST	SPECIFICATION ±
HUMIDITY	-	30.0	30	0	5
	-	50.1	49	1	
	-	69.9	69	1	
	-	90.2	91	-1	
Measurement Uncertainty ±			2.2 %rh	k = 2	

Info 1 : True Read ~ UUT Read + Correction

Info 2 : UUT ~ Unit Under Test

Info 3 : Refer to 'Correction After Adjust' if adjusted. Otherwise refer 'Correction Before Adjust' if not adjusted. '-' mean not adjust.

Info 4 : If the correction is out of user specification, in order to meet the specification the user shall apply correction to derive true value.

Info 5 : Calibration Curve can be derive by interpolation the calibration point, the interpolation point is valid through the linearity of curve.

Info 6 : Uncertainty ~ Parameter, associated with the result of measurement, that characterises the dispersion of the value that reasonably be attributed to the measurand.

ACCEPTABLE TO USE

Izatul Azira
Lab Manager

Pro Lab Engineering Services Sdn Bhd

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www.trescal.com LQP 00115_APA / 01 June 2022