

# **CERTIFICATE OF CALIBRATION**

No: CE01374

Issued By PT. Certus Metrology Indonesia

Date of Issue: 11 November 2019

Requested By

PT. Sentral Tehnologi Managemen (Sentral Sistem Calibration) Cikarang Square Blok B No. 11 Jl. Cibarusah Cikarang Selatan

Jawa Barat 17550

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Job Order No

191374

Ambient tem.

 $(22 \pm 3)^{\circ}$ C

Relative Humidity

 $(55 \pm 10)\%$  rh

**Descriptions** 

Instrument : Thermo-Hygro Meter

Brand

: Rotronic

Model :

HF532-WB1XD1XX (Indicator); HC2A-S (Probe)

Serial No.

61635928 (Indicator) ; 20164130 (Probe) 10 °C to 40 °C / 10 % rh to 90 % rh @ 23 °C

Calibration Range/points:
Date Calibrated:

04 November 2019 to 08 November 2019

#### **Method of Calibration**

The describe instrument has been calibrated at PT. Certus Metrology Indonesia laboratory under the ambient conditions stated above according to in-house calibration procedure STCP-006. The results of calibration reported traceable to SI units of measurement through recognized National/International Metrology Institute and/or accredited calibration laboratory. The calibration was performed in terms of the International Temperature Scale of 1990 (ITS-90).

### Reference Standard(s)

1. PRT (001) Serial No: 001

 2. PRT (VP72673)
 Serial No: VP72673

 3. PRT (VP72674)
 Serial No: VP72674

 4. Digital Thermometer
 Serial No: VP72674

4. Digital Thermometer Serial No: 31733/1
 5. Humidity generator system Serial No: 2P/001

6. Precision Thermometer Serial No: 16-P3102-31721/1

### **Results of Calibration**

The results of the calibration are shown in the table next page(s). The expanded uncertainty of measurement associated with the indicated estimated at approximately 95% confidence level with a coverage factor of k=2. The measurement uncertainty represent the situation at the time and conditions of calibration. When using unit under test at different conditions and different time, the effect of the conditions and stability of the unit under test shall be evaluated separately. The measurement results and uncertainty are representing the measurement points only.

Calibrated By

Alvonsus Rudianto Approval Signatory





PT. Certus Metrology Indonesia

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No: CE01374

Thermo-Hygro Meter

Serial No.: 61635928; 20164130

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#### **Results of Calibration**

**Temperature Calibration** 

Before Adjustment		After Adjustment		
Actual Temp. °C	UUT Indicated °C	Actual Temp. °C	UUT Indicated °C	Uncertainty °C
10.1	10.1	-	-	0.1
19.9	19.9	-		
30.0	30.0	-	-	
40.1	39.8	-	_	

## **Humidity Calibration**

Before Adjustment		After Adjustment		
Actual Hum. % rh	UUT Indicated % rh	Actual Hum. % rh	UUT Indicated % rh	Uncertainty % rh
10.0	10.1	-	-	1.2
29.9	29.8	-	-	
49.9	49.9	_	_	
69.9	69.9	_		
89.9	89.9	_	_	

<sup>&</sup>quot;The results reported herein have been performed in accordance with the laboratory's terms of accreditation under the Komite Akreditasi Nasional – LK-160-IDN".

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