

# Calibration Report: Pressure/Temperature/Relative Humidity Sensor S/N: P1830043

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## Summary

Calibration date: 2018 May 9

Next Calibration date: As needed

A collection, analysis, and calibration of data from a Weather Transmitter (Pressure/Temp/RH), S/N: P1830043 has been completed. Vaisala Inc., the manufacturer of the instrument, performed the calibration. The data was collected by Vaisala on 2018 May 9.

Model: WXTPTU

Serial Number: P1830043

The test data presented in data table format display the Pressure/Temp/RH transmitter readings (referenced and observed) and any correction needed. The calibration sheet displays how the calibration was performed, including traceability to national standards.

Application: The Pressure/Temp/RH sensor is read by a Campbell Scientific data logger that collects raw voltage data. Any correction is applied during processing of raw data.

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## CALIBRATION SHEET

**Instrument** WXTPTU  
**Serial number** P1830043  
**Manufacturer** Vaisala Oyj, Finland  
**Test date** 9 May 2018

This test report certifies that the instrument was thoroughly tested and inspected, and found to meet its published test limits when it was shipped from Vaisala.

### Calibration results

Test phase of calibration process	Reference value	Observed value	Difference*	Uncertainty**
Pressure	1078.9	1078.8	-0.1	± 0.4 hPa
Pressure	899.1	899.1	0	± 0.4 hPa
Pressure	798.8	798.8	0	± 0.4 hPa
Pressure	599.9	599.9	0	± 0.4 hPa
Temperature	59.7	59.7	0	± 0.2 °C
Temperature	-5.8	-5.8	0	± 0.2 °C
Temperature	-32.8	-32.7	0.1	± 0.2 °C
Temperature	24.9	24.9	0	± 0.2 °C
Temperature	-52	-52	0	± 0.2 °C
Relative humidity	30	30	0	± 2 %RH
Relative humidity	57.1	57.1	0	± 2 %RH
Relative humidity	91.1	91.1	0	± 3 %RH

\*The test points for error values are polynomial fitting curve fitting points.

\*\*The calibration uncertainty given at 95 % confidence level, k = 2

### Traceability

The working standards for pressure and temperature are calibrated at Vaisala Measurement Standards Laboratory (MSL) by using MSL working standards traceable to National Institute of Standards and Technology (NIST, USA). The relative humidity values are calculated from measured temperature and dew-point temperature values. The dew-point working standards are traceable to the Finnish National Humidity Laboratory (MIKES).

Signature



Technician

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