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Vaisala is ISO 9001, ISO 14001 and AQAP 2110 certified company.

CALIBRATION CERTIFICATE

Certificate Number: HEL190840021

Instrument: Pressure, Humidity and Temperature Transmitter PTU307
Order Code: PTU300 71E10A0AAAA1A2A1ABD0B4A
Serial Number: R0830215
Manufacturer: Vaisala Oyj, Finland
Calibration Date: 2019-02-20

Approved by:

Digitally signed by EVL
Date: 2019.02.21 06:15:26 +02:00
Reason: Calibration responsible
Location: Vaisala Oyj, Finland

The humidity sensor of the instrument was calibrated by comparing the instrument's humidity reading to a generated reference humidity reading. The reference humidity reading was calculated based on two-pressure humidity generation principle, using the measurement results of saturator pressure and temperature and calibration chamber pressure and temperature.

The temperature sensor(s) of the instrument was calibrated by comparing the instrument's temperature readings to a reference thermometer.

The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k = 2, which for a normal distribution corresponds to a coverage probability of approximately 95 %. The measurement results are traceable to the international system of units (SI) through national metrology institutes (NIST USA, MIKES Finland, or equivalent) or via ISO/IEC 17025 accredited calibration laboratories.

Humidity calibration results

Reference Humidity [%RH]	Reference Temperature [°C]	Observed Humidity [%RH]	Observed Temperature [°C]	Humidity Error [%RH]	Acceptance Limit [%RH]	Pass/Fail
15.2	+22.94	15.0	+22.94	-0.2	±1.0	Pass
33.4	+22.94	33.1	+22.94	-0.3	±1.0	Pass
54.6	+22.94	54.4	+22.94	-0.2	±1.0	Pass
75.8	+22.94	75.8	+22.94	0.0	±1.0	Pass
95.2	+22.94	95.0	+22.94	-0.2	±1.7	Pass

Temperature calibration results

Reference Temperature [°C]	Observed Temperature [°C]	Error [°C]	Acceptance Limit [°C]	Pass/Fail
+23.12	+23.12	0.00	±0.10	Pass

Additional temperature probe calibration results

Reference Temperature [°C]	Observed Temperature [°C]	Error [°C]	Acceptance Limit [°C]	Pass/Fail
+22.94	+22.94	0.00	± 0.10	Pass

Reference equipment used in calibration

Type	Identity Number	Certificate Number	Calibration Date	Calibration Due Date
PTU307	18170	K008-C00455	2019-02-07	2020-02-29
HMP307	17591	K008-B03181	2018-11-07	2019-11-30
GE Drück DPS 823B	16735	K008-B03466	2018-11-29	2019-05-31
AM1612	17592	K008-B03182	2018-11-07	2019-11-30
PXI-4070	17589	B03179	2018-11-07	2019-11-30

Calibration uncertainty (k=2, ~95% confidence level):

Humidity ± 0.6 %RH @ 0...40 %RH, ± 1.0 %RH @ 40...95 %RH
Temperature ± 0.10 °C

Ambient conditions:

Humidity [%RH]	Temperature [°C]	Pressure [hPa]
21 ± 4	24 ± 2	987 ± 20

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VAISALA

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CALIBRATION CERTIFICATE

Certificate Number: HEL190840024

Instrument:	Pressure, Humidity and Temperature Transmitter PTU307
Pressure Range:	500-1100 hPa
Order Code:	PTU300 71E10A0AAAA1A2A1ABD0B4A
Serial Number:	R0830215
Manufacturer:	Vaisala Oyj, Finland
Calibration Date:	20th February 2019

Approved by:

Digitally signed by EVL
Date: 2019.02.21 06:15:36 +02:00
Reason: Calibration responsible
Location: Vaisala Oyj, Finland

The pressure reading of the instrument was calibrated by comparing the instrument's pressure reading to a reference pressure reading.

The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k = 2, which for a normal distribution corresponds to a coverage probability of approximately 95 %. The measurement results are traceable to the international system of units (SI) through national metrology institutes (NIST USA, MIKES Finland, or equivalent) or via ISO/IEC 17025 accredited calibration laboratories.

Pressure calibration results

Reference hPa	Observed hPa	Correction* hPa	Acceptance Limit hPa	Pass/Fail
500.03	500.02	0.01	±0.05	Pass
550.04	550.03	0.01	±0.05	Pass
650.02	650.01	0.01	±0.05	Pass
750.01	750.00	0.01	±0.05	Pass
850.02	850.02	0.00	±0.05	Pass
949.98	949.98	0.00	±0.05	Pass
1000.03	1000.02	0.01	±0.05	Pass
1049.99	1049.99	0.00	±0.05	Pass
1100.01	1100.01	0.00	±0.05	Pass

*To obtain the true pressure, add the correction to the barometer reading.
Interpolated corrections may be used at intermediate readings of the scale of the barometer.

Reference equipment used in calibration

Type	Identity Number	Certificate Number	Calibration Date	Calibration Due Date
Fluke PPC4	16677	K008-B01763	2018-07-04	2019-06-30

Calibration uncertainty (k=2, ~95% confidence level):

Pressure ± 0.07 hPa

Ambient conditions:

Humidity [%RH]	Temperature [°C]	Pressure [hPa]
31 ± 5	23 ± 1	1000 ± 1

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