

CALIBRATION CERTIFICATE

Instrument Pressure, Humidity and Temperature Transmitter PTU307
Order code PTU300 71E10B0AAAA1A4A1EBB0B4A
Serial number J1620009
Manufacturer Vaisala Oyj, Finland
Calibration date 17th April 2013

The above instrument was calibrated by comparing the readings of the instrument to working standards of the manufacturer. The reference humidity was calculated from dewpoint temperature and temperature readings with the exception of the driest condition that was measured as relative humidity. Dewpoint temperature was measured with a 373 LHX dewpoint meter. Temperature and relative humidity were measured with two factory working standards. At the time of shipment, the instrument described above met its operating specifications.

The 373 LHX dewpoint meter has been calibrated at Centre for metrology and accreditation (MIKES) by using a MIKES working standard traceable to National Institute of Standards and Technology (NIST). The temperature readings of the factory working standards have been calibrated at an ISO/IEC 17025 accredited calibration laboratory (FINAS), Vaisala Measurement Standards Laboratory (MSL) by using MSL working standards traceable to NIST. The relative humidity readings of the factory working standards have been calibrated at the Vaisala factory by using a 373 LHX dewpoint meter.

Humidity calibration results

Reference humidity %RH	Reference temperature °C	Observed humidity %RH	Observed probe temperature °C	Additional probe temperature °C	Humidity difference %RH	Permissible difference %RH
0.0	+ 21.96	+ 0.1	-	+ 22.00	+ 0.1	±1.0
+ 12.7	+ 21.96	+ 13.2	-	+ 21.99	+ 0.5	± 1.0
+ 33.5	+ 21.94	+ 34.0	-	+ 21.97	+ 0.5	± 1.0
+ 54.6	+ 21.94	+ 55.1	-	+ 21.97	+ 0.5	± 1.0
+ 75.5	+ 21.95	+ 75.8	-	+ 21.97	+ 0.3	± 1.0
+ 95.2	+ 21.97	+ 96.2	-	+ 21.98	+ 1.0	± 1.7

Temperature calibration results

Reference temperature °C	Observed probe temperature °C	Temperature difference °C	Additional probe temperature °C	Temperature difference °C	Permissible difference °C
+ 21.95	-	-	+ 21.97	+ 0.02	± 0.10

Equipment used in calibration

Type	Serial number	Calibration date	Certificate number
MBW 373LHX	10-017	2013-03-07	M-13H019
PTU307 / T	B2850023	2013-02-13	K008-W00153
HMT337 / T	E0840009	2013-01-04	K008-W00033
PTU307 / RH	B2850023	2013-02-14	H45-13071001
HMT337 / RH	E0840009	2013-02-14	H45-13071002

Uncertainties (95 % confidence level, k=2)

Humidity ± 0.6%RH @ 0...40%RH, ± 1.0%RH @ 40...97%RH
 Temperature ± 0.10 °C.

Ambient conditions / Humidity 45 ± 5%RH, Temperature + 23 ± 1 °C, Pressure 1007 ± 1 hPa.

 Technician

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CALIBRATION CERTIFICATE

Instrument PTU300(500-1100) Digital Barometer
Serial number J1620009
Manufacturer Vaisala Oyj, Finland
Calibration date 18th April 2013

The above instrument was calibrated by comparing the readings of the instrument to the factory working standard of Vaisala.

The pressure readings of the factory working standard have been calibrated at an ISO/IEC 17025 accredited calibration laboratory (FINAS), Vaisala Measurement Standards Laboratory (MSL), by using MSL working standards traceable to NIST.

Calibration results

Reference hPa	Observed hPa	Correction* hPa	Acceptance limit hPa
500.03	500.03	0.00	± 0.05
550.03	550.04	-0.01	± 0.05
650.01	650.01	0.00	± 0.05
750.01	750.00	0.01	± 0.05
850.00	850.00	0.00	± 0.05
950.00	950.00	0.00	± 0.05
1000.00	1000.00	0.00	± 0.05
1050.00	1050.00	0.00	± 0.05
1100.00	1100.00	0.00	± 0.05

*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.

Equipment used in calibration

Type	Serial number	Calibration date	Certificate number
DHI PPC3	909	2013-02-01	K008-W00174

Uncertainty (95 % confidence level, k=2)

Pressure ± 0.07 hPa

Ambient Conditions

Humidity 41 %RH ± 5 %RH
 Temperature 22 °C ± 1 °C
 Pressure 1005 hPa ± 1 hPa

 Technician

