

CALIBRATION CERTIFICATE

Instrument Humidity and Temperature Probe HMP77B
Order code
Serial number S1220325
Manufacturer Vaisala Oyj, Finland
Calibration date 17th March 2020

The above instrument was calibrated by comparing the readings of the instrument to working standards of the manufacturer. The reference humidity was calculated from dew point temperature and temperature readings with the exception of the driest condition that was measured as relative humidity. Dew point temperature was measured with a working standard dew point 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 measurement results are traceable to the international system of units (SI) through national metrology institutes (NIST USA, MIKES Finland, or equivalent) or ISO/IEC 17025 accredited calibration laboratories. 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 working standard dew point meter.

Humidity calibration results

Reference humidity %RH	Reference temperature °C	Observed humidity %RH	Observed probe temperature °C	Humidity difference %RH	Permissible difference %RH
+ 0.1	+ 22.02	0.0	+ 22.02	- 0.1	±1.0
+ 12.6	+ 22.02	+ 12.9	+ 22.02	+ 0.3	± 1.0
+ 32.9	+ 22.02	+ 33.3	+ 22.02	+ 0.4	± 1.0
+ 53.7	+ 22.02	+ 54.0	+ 22.02	+ 0.3	± 1.0
+ 74.3	+ 22.02	+ 74.2	+ 22.02	- 0.1	± 1.0
+ 93.5	+ 22.02	+ 93.5	+ 22.02	0.0	± 1.7

Temperature calibration results

Reference temperature °C	Observed probe temperature °C	Temperature difference °C	Permissible difference °C
+ 22.02	+ 22.02	0.00	± 0.10

Equipment used in calibration

Type	Serial number	Calibration date	Certificate number
373 LHX	05-0217	2019-10-01	M-19H037
PTU303	H0730006	2020-01-09	K008-D00090
HMT337	D2350020	2020-01-09	K008-D00089
PTU303 / RH	H0730006	2020-02-07	H33-20061031
HMT337 / RH	D2350020	2020-02-07	H33-20061032

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 30 ± 5%RH, Temperature 24 ± 1 °C, Pressure 1009 ± 1 hPa.


 Technician

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