

# CALIBRATION CERTIFICATE

**Instrument** HMP110  
**Order code** A15A0C3B0  
**Serial Number** J2740001  
**Manufacturer** Vaisala Oyj, Finland  
**Calibration date** 4th July 2013

The above instrument was calibrated by comparing the relative humidity readings to two HMT337 factory working standards. At the time of shipment, the instrument described above met its operating specifications.

The relative humidity readings of the two HMT337 factory working standards have been calibrated at the Vaisala factory by using MBW 373 dewpoint meter. MBW 373 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 two HMT337 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.

## Analog output channel 1 calibration results

Output forced to V	Observed output V	Difference V	Permissible difference V
1.000	1.000	0.000	±0.002

## Analog output channel 2 calibration results

Output forced to V	Observed output V	Difference V	Permissible difference V
1.000	1.000	0.000	±0.002

## Humidity calibration results

Reference humidity %RH	Observed humidity %RH	Humidity difference %RH	Reference temperature °C	Reference dewpoint °C	Observed dewpoint °C	Permissible difference %RH
87.09	87.40	0.31				±1.5
50.40	50.19	-0.21	23.17	12.31	12.27	±1.5
0.80	0.84	0.04				±1.5

## Temperature calibration results

Observed probe temperature °C	Reference temperature °C	Temperature difference °C	Permissible difference °C
23.21	23.17	0.04	±0.2

## Equipment used in calibration

Type	Serial number	Calibration date	Certificate number
HMT337 / U	G0810114	2013-6-3	H55-13230001
HMT337 / T	G0810114	2012-10-29	K008-V01675
HMT337 / U	G0810115	2013-6-3	H55-13230002
HMT337 / T	G0810115	2012-10-29	K008-V01676
HP E3632A	MY40000390	2011-08-29	K004-11S487
Agilent 34970A	US37031760	2013-03-21	K004-13S143

## Uncertainties (95 % confidence level, k=2)

Humidity ±1.5 %RH @ 0...90 %RH

Temperature ±0.20 °C

Ambient conditions / Humidity 41 ±5 %RH, Temperature 23 ±1 °C, Pressure 1017 ±1 hPa.



Technician

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