

Calibration Certificate

Certificate Number: H73-1010490 Page 1 (2)

Manufacturer: Vaisala Oyj

Instrument: MR-2000-20R Humidity and Temperature Logger

Serial Number:

The internal temperature sensor of the logger was calibrated by comparing the logger readings to a reference thermometer in Vaisala Measurement Standards Laboratory (MSL).

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 %.

Traceable to the National Institute of Standards and Technology (NIST, USA) via MSL.

Measurement results after adjustment:

Reference	Channel 1					
Temperature	Observed	Error	Uncertainty	Limit	Pass/Fail	
°C	°C	°C	°C	°C		
-24.9	-24.9	0.0	0.2	±0.5	Pass	
25.1	25.1	0.0	0.2	±0.5	Pass	
69.9	69.9	0.0	0.2	±0.5	Pass	

Serial Number Calibration Date Certificate **Next Calibration** Reference(s): Fluke 1560/2560 TP 14846/1 2014-04-14 K008-X00861 2014-10-31

Note(s):

Signature:

This is new instrument without before adjustment data

Next Calibration: Calibration Date: September 30, 2014 September 30, 2015

Date: October 01, 2014 Ambient Condition(s):

> 22.5 °C ±0.5 °C 32.6 %RH ±0.9 %RH Jaakko Hämäläinen 1023.1 hPa ±6.4 hPa



Calibration Certificate

Certificate Number: H73-1010490 Page 2 (2)

The humidity sensor of the logger was calibrated by comparing the logger readings to the generated reference humidity readings in Vaisala

Measurement Standards Laboratory (MSL).

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 %.

Traceable to the National Institute of Standards and Technology (NIST, USA) via MSL.

Measurement results after adjustment:

		Channel 2		Reference		
Pass/Fail	Limit	Uncertainty	Error	Observed	Temperature	Humidity
	%RH	%RH	%RH	%RH	°C	%RH
Pass	±2.0	1.0	0.1	11.1	25.0	11.0
Pass	±2.0	1.0	0.1	45.0	25.1	44.9
Pass	±2.0	1.0	0.1	80.0	25.0	79.9

Reference(s):	Serial Number	Calibration Date	Certificate	Next Calibration
Thunder 2500	UG 14327	2013-10-15	K008-W01910	2014-10-31
Fluke 1560/2560	TP 14846/1	2014-04-14	K008-X00861	2014-10-31
PTU303	PA 14536	2014-04-24	K008-X00938	2015-04-30

Note(s):

This is new instrument without before adjustment data

Next Calibration: Calibration Date: September 30, 2014 September 30, 2015

Ambient Condition(s):

22.5 °C ±0.5 °C 32.6 %RH ±0.9 %RH 1023.1 hPa ±6.4 hPa