

Humidity

On the next pages you will find three different hygrometers: one hygrometer with fixed humidity probe, one with humidity probe and cable and one hygrometer which also measures the surface temperature via infrared.



Hygrometers

Applications:

- Humidity and temperature measurement
 - Surface temperature measurement with special probes
 - Process monitoring
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Hygrometers

Find your perfect hygrometer:

Hygrometers	Measurement range	Probe type	Probe connection
TFH 610 Hygrometer	0% rH ... 100% rH	Capacitive	Fixed
TFH 620 Hygrometer	0% rH ... 100% rH	Capacitive	Lemo
THI 350 Hygrometer/Infrared Thermometer	0% rH ... 100% rH	Infrared (temperature and humidity)	



TFH 610 Hygrometer with fixed humidity probe



Technical Data

Measurement range: Humidity	0 % rH ... 100 % rH
Measurement range: Temperature	0 °C ... +50 °C (32 °F ... 122 °F)
Accuracy: Humidity	±2.5 % rH (from 10 % ... 90 %)
Accuracy: Temperature	±0.5 °C (±0.9 °F)
Resolution: Humidity	0.1 %
Resolution: Temperature	0.1 °C (0.2 °F)
Operating temperature	0 °C ... +50 °C (32 °F ... 122 °F)
Storage temperature	-25 °C ... +60 °C (-13 °F ... 140 °F)
Protection class	IP 40
Dimensions (L x W x H)	115 x 54 x 22 mm
Weight	Approximately 90 g
Humidity sensor	External capacitive sensor, fixed
Temperature sensor	External thermistor
Battery	Lithium battery 3.0 V / 1000 mAh
Battery lifetime	Up to 5 years
Sampling rate	1 sec to 15 sec
Certificate	Factory calibration certificate

- High precision
- Approximately 5 years battery life time

Type	Description	Part No.
TFH 610	Hygrometer for humidity and temperature measurement (including probe)	1340-5610

TFH 620 Hygrometer with MIN/MAX and hold options



Technical Data

Measurement range: Humidity	0 % rH ... 100 % rH
Measurement range: Temperature	0 °C ... +60 °C (32 °F ... 140 °F)
Accuracy: Humidity	±2 % rH (from 5 % ... 95 %)
Accuracy: Temperature	±0.3 °C (±0.5 °F)
Resolution: Humidity	0.1 %
Resolution: Temperature	0.1 °C (0.2 °F)
Operating temperature	0 °C ... +50 °C (32 °F ... 122 °F)
Storage temperature	-25 °C ... +60 °C (-13 °F ... 140 °F)
Protection class	IP 67 (device without probe)
Dimensions (L x W x H)	115 x 54 x 22 mm
Weight	Approximately 90 g
Humidity sensor	External capacitive sensor, removeable
Temperature sensor	External Pt 1000 sensor
Probe position	External, plug-in probe
Battery	Lithium battery 3.0 V / 1000 mAh
Battery lifetime	Up to 5 years
Sampling rate	1 sec to 15 sec
Certificate	Factory calibration certificate

- Cable probe available
- High precision
- Approximately 5 years battery life time

Type	Description	Part No.
TFH 620 + TPH 100	Hygrometer for humidity and temperature measurements with air probe	1340-5621

Accessories for TFH Hygrometers



AG 140 Protective cover for handheld devices, red



AH 600 Calibration set for TFH 620

Type	Description	Part No.
AG 140	Protective cover for handheld devices, red	1340-5005
AH 100	PTFE filter for TFH 610 and TFH 620	1340-5627
AH 200	Bronze sintered filter for TFH 610 and TFH 620	1340-5626
AH 300	Stainless steel sintered filter for TFH 610 and TFH 620	1340-5625
AH 500	Carrying case for TFH 620	1340-5090
AH 600	Calibration set for TFH 620	1340-5097

THI 350 Hygrometer/Infrared Thermometer with automatic dew point calculation



Technical Data

Measurement range	-60 °C ... +500 °C (-76 °F ... +932 °F)
Temperature accuracy	±1.0 °C (+15 °C ... + 35 °C), ±2 °C (-33 °C ... 500 °C), ±2 °C for the remaining measurement range
Emissivity factor	0.95 standard, adjustable from 0.1 to 1.0
Resolution (-9,9~199,9 °C)	0.1 °C / 0.1 °F
Response time	1 sec
Operating Temperature	0 °C to +50 °C (+32 °F to +122 °C)
Distance:Spot	12:1
Measurement range relative air humidity (T _{amb} = 23 ± 5degC)	1~99 %, Accuracy: ± 3 % of 20~80 %, otherwise ±5 %
Dew point	-50~50 °C, Accuracy: ±2.5 °C of 20~30 %rH; ±2 °C of 31~40 % rH; ±1,5 °C of 41~95 rH
Battery	2 x AAA Micro (Alkaline recommended)
Battery lifetime	Typically 180 h, at least 140 h of continuous use
Dimensions (L x W x H)	46 x 143 x 184.8 mm
Certificate	Factory calibration certificate

- Visible and audible alarm upon exceeding of user settable limits
- Distance:spot ratio = 12:1

Type	Description	Part No.
THI 350	Infrared thermometer with air humidity measurement	1340-1790