

Data sheet:

## Web-Thermo-Hygrometer ++



Article no.: 57729

**EUR 1368.00**

\*Net price for commercial users

### Measure, log and report...

Precision thermo-hygrometer with **drift-free** measurement even for constantly high relative humidity values. This measuring device is especially suited for monitoring climate chambers, rooms with tropical climate conditions and for use in food production.

The sensor is insensitive to dewing, since the sensor electronics is potted to protect against climatic effects. This makes the sensor with protective housing for protection against solar radiation and precipitation ideal for outdoor use.

### Properties

#### Sensor:

- **Temperature sensor:**
  - Measuring range: -20°C...80°C
- **Relative humidity sensor:**
  - Measuring range: 0...100% RH

#### Connectivity:

- **Intuitive Web interface** for simpler configuration
- **Monitor temperatures and trends from a browser**
- **Alarm and reporting function:**
  - E mail for alarm or as reporting function
  - SNMP polling / alarm traps
  - Configure up to 12 alarm messages
- **Dynamic integration into other Web sites:**
  - Direct access to current measurement values, e.g. JavaScript (AJAX).
- **Current Industry 4.0 protocols:**
  - OPC UA, REST and [MQTT](#) support
- **Additional software interfaces for incorporating into your systems/databases:**
  - SNMPv1, SNMPv2c, SNMPv3
  - Modbus-TCP
  - OPC UA, OPC DA
  - Syslog
  - Sensobase (database integration via ODBC)
  - TCP and UDP sockets, client and server
  - FTP (data logging)
- **Possible applications:**
  - Reference instrument in laboratory environments for monitoring fixed climate chambers
  - Normal for calibrations of other RH/Temp. sensors
  - Reliable measurement of constantly high humidity values in food production (cheese, mushrooms, greenhouse, etc...)
  - Energy optimization from precise climate setting
  - Exterior use / meteorology (Requires a suitable protective enclosure for the sensor against solar radiation and precipitation)

- Monitoring storage conditions for high-value goods

#### Data logger:

- **Internal data logger**
  - Memory size: min. 12 weeks, max. 20 years
  - Save frequency: 15, 30 sec, 1, 5, 15, 60 min
- **Document measurement data online in the [W&T Cloud](#) and access** from anywhere in the world
- **Internal clock**
  - Time synchronization using time server calibration
  - Battery-backed device clock

#### Standards & more

- optional: **ISO factory calibration** per DIN EN ISO/IEC 17025
  - with calibration certificate for verified documentation of the measured value deviations
  - Valid for 12 months
- optional: **DAkkS/DKD calibration** per DIN EN ISO/IEC 17025
  - with calibration certificate for verified traceability to national standards
  - Valid for 12 months
- **Supply voltage via Power-over-Ethernet (PoE)**
  - Phantom power using data pairs
  - Power over unused wire pairs
  - External power supply is an alternative
- **Conforms to standards both in office and industrial environments:**
  - High noise resistance per EN 61000-6-2
  - Low noise emission per EN 55032:2015 + A1 Cl. B, EN 61000-3-2 & EN 61000-3-3
- **5 year guarantee**



Wish for something!

[Your suggestions for improvement and additions](#)

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## Technical data

#### Connections and displays:

Combined sensor:	Temperature and relative humidity measurement M8 connector Cable length: 2m (can be extended to max. 20m)
Network:	10/100BaseT Autosensing/Auto-MDIX RJ45 IPv6 on request
Galvanic isolation:	Network connection min. 1500 V
Supply voltage:	Power-over-Ethernet (PoE) or DC 12V .. 48V (+/-10%)
Supply connection:	Plug-in screw terminal, 5.08mm spacing Labeled "L+" and "M"
Current consumption:	PoE Class 1 (0.44 - 3.84W) typ. 110mA @12V, 55mA @24VDC
Displays:	1 LED Power 2 LEDs Network Status 2 LEDs Status and Error

#### Measuring unit:

Measuring range:	-20°C...80°C, 0..100% RH
Resolution:	1/10 °C, 1/10% rH
Display variables:	°Celsius, °Fahrenheit, °Kelvin, %relative humidity, abs. humidity g/m³, dew point °C, mixing ratio g/kg, enthalpy kJ/kg

Measuring error: Temperature:  
 typ.  $\pm 0.1^{\circ}\text{K}$  @  $0..70^{\circ}\text{C}$   
 typ.  $\pm 0.2^{\circ}\text{K}$  @  $-20..80^{\circ}\text{C}$

Relative humidity:  
 typ.  $\pm 0.5\%$  RH @  $15..30^{\circ}\text{C}$   
 typ.  $\pm 0.8\%$  RH @  $0..50^{\circ}\text{C}$   
 typ.  $\pm 2.5\%$  RH @  $-20..80^{\circ}\text{C}$

Measuring frequency: 4s  
 Storage frequency: 15s, 30s, 1m, 5m, 15m, 60m  
 Memory depth (4MB): min. 12 weeks, max. 20 years




#### Housing and other data:

Housing: Plastic compact housing for top-hat rail mount  
 Dimensions: 105x22x75mm (LxWxH)  
 Enclosure rating: IP20  
 Weight: approx. 200g  
 Ambient temperature: Storage:  $-10..60^{\circ}\text{C}$   
 Device operating temp., not stacked:  $0..60^{\circ}\text{C}$   
 Stacked:  $0..50^{\circ}\text{C}$   
 Sensor operating temp.:  $-20..80^{\circ}\text{C}$   
 Permissible relative humidity: 0..100% relative humidity  
 Scope of delivery: 1x Web-Thermo-Hygrometer  
 1x sensor, 2m (temperature, humidity)  
 1x Quick Guide

## Accessories

\*Net unit price for  
commercial users




### Power supplies

Plug-in power supply, 24V / 500mA DC with Euro plug	11021	21.00€	
Plug-in Power Supply, 24V / 750mA DC with Euro, US and UK plug	11026	38.00€	
Power supply for DIN rail, 24V / 630mA DC (merchandise, 2-year manufacturer's guarantee)	11080	33.00€	

### Storage and Visualization

rule.box hub	55920	598.00€	
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### Measuring - Accessories

Replacement sensor for 57729 Initial calibration of this article only with complete unit.	57032	1048.00€	
ISO factory calibration (temp. and humidity) for complete device with calibration certificate, valid for 12 months Delivery time approx. 10-14 days (This article cannot be ordered as a sample.)	57012	218.00€	
Accredited DAkkS/DKD calibration (temp. and humidity) for complete device with calibration certificate, valid for 12 months Delivery time approx. 10-14 days (This article cannot be ordered as a sample.)	57027	328.00€	

### Mechanical Accessories

Mounting bracket for wall mounting	58812	11.20€	
19" DIN rail	58813	21.00€	
Sensor extension for 57729, M8, 2m	57033	34.00€	
Sensor extension for 57729, M8, 5m	57034	44.00€	
Sensor extension for 57729, M8, 10m	57035	54.00€	

### Supplementary network products

Ethernet Switch Gigabit Industry, 4 Ports

55614

148.00€



### Software

WuTility

00104

free



OPC Server

00103

free



Sensobase®

00107

free



Web-IO2Go (app for iOS)

57700

free



\* Our offering is intended only for commercial users. We will be happy to refer private end customers to trading partners through whom our products can be purchased.



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