

Product Datasheet - Technical Specifications



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Querx WLAN THP

WiFi Thermometer, Hygrometer, Barometer and Data Logger

Querx WLAN THP measures temperature, humidity and air pressure precisely, calculates the dew-point and makes all the data available via LAN or WLAN.

The smart sensor features an integrated data logger, alert functions and several interfaces for manual or automated data access.

The autonomous device is configured and controlled via a graphic web interface.



Features

Quick Setup

egnite Querx can be integrated into existing networks without any configuration effort and supports Zeroconf (mDNS, LLNMR) and DHCP.

WPS simplifies integration into WLAN environments, alternatively, mobile devices can be connected directly to Querx WLAN.

Simple Operation via Web Interface

Each Querx operates completely autonomously, no special gateways or software installations are required. In the integrated web interface, the recorded measured values are available as interactive graphics for web browsers on the PC, tablet or smartphone.

Reliable Data Logging

Querx WLAN THP has integrated sensors for temperature, humidity and air pressure. The measured values are securely stored in the device every minute for several years. Logging takes place even if the network connection is disrupted and the recorded data is not lost even in the event of a power failure.

The device provides the data via LAN or WLAN and can therefore also be used in locations without a cable network.

Diverse Alerts

Querx WLAN THP will notify when configurable warning and alarm limits for temperature, humidity, air pressure or dew point are breached, when values are rising or

falling unusually fast, and when values return to normal.

Notification takes place selectively via email, SNMP trap, FTP transfer, HTTP push, MQTT or Syslog.

Data Export in Various File Formats

The network sensor can export data, making further processing and archiving simple. The CSV format is suited for spreadsheet software such as Excel. JSON and XML formats support automatic further processing in custom software solutions. Freely configurable data formats also allow flexible adaptation to existing systems such as cloud servers.

The data export can be triggered manually as well as time- or event-controlled.

Suitable for Monitoring Systems

The sensor can be integrated into network management systems such as PRTG, Icinga or Zabbix via SNMP. Modbus/TCP allows the use with SCADA in the industrial sphere. All logged and current data can be accessed from Python, PHP and other programming languages via HTTP.

Long-term Security

If desired, data is transmitted encrypted via HTTPS respectively TLS. Own certificates can be installed for authentication. SNMPv3 is supported for secure network management. The Querx firmware is continuously improved and adapted to current developments. New versions are put online

from time to time. You can determine your currently loaded firmware version and start an update via the web interface.

Efficient Hardware

Even under adverse conditions, Querx functions reliably and even operates at temperatures between -40 °F and +185 °F (-40 °C and +85 °C). At the same time, Querx WLAN is highly economical. The power consumption is approximately 1 W. Either a free USB port or an external power supply unit is used for power supply.

Accredited Calibration upon Request

Calibration is a vital component of quality control. With an ISO or DAkkS (German accreditation body) certificate, the measurement characteristics of the Querx network sensor can be documented.

Specifications

Temperature Sensor

| | |
|---------------------|--|
| Measurement range | -40 to 185 °F (-40 to 85 °C) |
| Initial accuracy | ±1.8 °F over 32 to 149 °F (±1.0 °C over 0 to 65 °C) |
| Resolution | 0.1 °F (0.1 °C) |
| Long term stability | Typ. ±30 mK per year |

Humidity Sensor

| | |
|---------------------|---|
| Measurement range | 0 to 100 % RH at 32 to 140 °F (0 to 60 °C) |
| Initial accuracy | ±3 % RH at 20 to 80 % RH and 77 °F (25 °C) ±1 % RH hysteresis at 77 °F (25 °C) |
| Resolution | 1 % RH |
| Long term stability | Typ. 0.5 % per year at 10 to 90 % RH and 77 °F (25 °C) |

Air Pressure Sensor

| | |
|---------------------|---|
| Measurement range | 300 to 1100 hPa |
| Initial accuracy | ±2 hPa at 800 to 1100 hPa and 32 to 149 °F (0 to 65 °C) |
| Resolution | 0.1 hPa |
| Long term stability | Typ. ±1 hPa per year |

Hardware and Interfaces

| | |
|------------------|---|
| Ethernet | 10/100 Mbit RJ45, HP Auto-MDIX, static or dynamic IP (DHCP Client) |
| WLAN | 2.4 GHz IEEE 802.11 b/g/n |
| Security | WEP, WPA, WPA2, TLS 1.2, provision and verification of certificates, user management (3 users / 3 groups) |
| Firmware updates | Via web interface, recovery feature |
| Data memory | 2 million entries, sufficient for at least 3 years |
| M2M interfaces | HTTP/S, Modbus/TCP, MQTT, SNMPv1/v3, FTP |
| Web interface | Interactive diagram, live update, data export |
| Email | Up to 4 recipients and 2 SMTP servers |
| Signaller | RGB LED, beeper |

| | |
|-------------------|---|
| Time / Date | Real-time clock with battery backup and SNTP update |
| Supply voltage | 5 V DC via micro-USB |
| Power consumption | Typ. 200 mA, 1 W Max. 300 mA, 1.5 W |

Ambient Conditions

| | |
|-----------|---|
| Operation | -40 to 185 °F, max. 95 % RH (-40 to 85 °C, max. 95 % rF) |
| Storage | -40 to 185 °F, max. 95 % RH (-40 to 85 °C, max. 95 % rF) |

Mechanical data

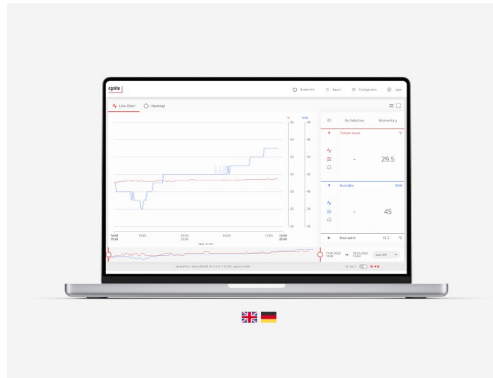
| | |
|-------------------|---------------------------------------|
| Casing material | ABS plastic, black, RAL 9011 |
| Casing dimensions | 2.6 x 2 x 0.8 in (66 x 50 x 21 mm) |
| Sensor cable | 13.4 in (340 mm) |
| Weight | 0.2 lb (63 g) |
| Connectors | RJ45 (Ethernet), micro-USB |
| Installation | Wall mounting |

Certification

| | |
|-----------------------|--|
| Calibration | DAkkS or ISO certificates for temperature and humidity optionally available |
| Interference immunity | EN 61326-1:2013 Class A EN 61000-4-2:2009 EN 61000-4-3:2011 EN 61000-4-4:2013 EN 61000-4-6:2009 EN 61000-4-8:2010 |
| Emitted interference | EN 61326-1:2013 Class B EN 55011:2011 |
| ETSI | EN 300 328, Ver. 1.8.1 EN 301.489 - 17 |
| Flammability rating | UL94V-0 |
| Protection class | IP20 |
| RoHS standard | EU Directive 2011/65/EU |



THP sensor



Web interface



Connectors

Ordering information

Querx WLAN THP

Order No: EGN602217

Scope of delivery:

- Querx WLAN THP with integrated sensors for temperature, humidity, air pressure

Querx WLAN THP Set

Order No: EGN602117

Scope of delivery:

- Querx WLAN THP with integrated sensors for temperature, humidity, air pressure
- Ethernet cable
- Micro-USB cable
- Micro-USB power adapter with plugs for EU, UK, US, AU