Web Sensor T7610 with PoE - remote thermometer hygrometer barometer with Ethernet interface

code: T7610
Ambient temperature, relative humidity, atmospheric pressure t-line Web sensor with Power over Ethernet feature. Remote alarm.

PoE Web Sensor with built-in temperature, relative humidity and atmospheric pressure sensors.
High precision capacitive polymer sensor ensures excellent long term calibration stability and ultimate accuracy. Dual line LCD is an advantage. Power over Ethernet feature according IEEE 802.3af is supported. Measured values are also converted to other humidity interpretation: dew point temperature, absolute humidity, specific humidity, mixing ratio and specific enthalpy.

WiFi **Easy wireless communication** using Web Sensor and optional **Wireless TP-LINK router**.

Included in delivery:
• T7610 PoE Web Sensor
• Quick start manual
• Traceable calibration certificate
• Technical support at discussion forum

Features

APPLICATIONS:

• **Server rooms monitoring**
Temperature/humidity and atmospheric pressure monitoring of the server rooms and rack units, SNMP monitoring, remote alarm by email and Syslog

• **Building HVAC management**
Temperature/humidity and atmospheric pressure monitoring of buildings, history data to Comet Database, remote alarm by email or SMS

• **Warehouses**
Temperature/humidity and atmospheric pressure monitoring of storage, history data to Comet Database or 3rd party SCADA system

• **Museums, archives, galleries**
Temperature/humidity is requested for rooms where old valuable documents are stored, history data to Comet Database, remote alarm by email or SMS

• **Factories and manufacturing**
Temperature/humidity and atmospheric pressure monitoring for food processing industry, pharmaceutical industry, aerospace industry, etc.

• **Air-conditioned rooms**
Temperature rising indicates cooling fault, remote alarm by email

SOFTWARE:

• **Comet Database**
Complex solution for data acquisition and analysing. Easy to use and high flexible database software for Comet Transmitters and Regulators.

• **T-Sensor software**
Free configuration utility for Comet Transmitters and Regulators.

• **SensorReader software**
Basic data acquisition utility for Comet Transmitters and Regulators. Software is free for download.

• **3rd party software**
Cacti, InTouch, ControlWeb, EasyView, LabVIEW. Support for this software is provided by the 3rd party companies.

FEATURES:

Temperature, humidity and pressure

Web Sensor is designed for measuring from internal temperature, humidity and pressure sensor. High precision capacitive polymer sensor ensures excellent calibration long term stability, inertia against water and condensation. Web Sensor is designed for use in non-aggressive environment. Degrees Celsius and Fahrenheit are user selectable. Atmospheric pressure units are also user selectable.

Dew point and computed quantities

Measured values are also converted to other humidity interpretation: dew point temperature, absolute humidity, specific humidity, mixing ratio and specific enthalpy. User can select one of these interpretation.

Dual line LCD

Large dual line LCD for simultaneous display of temperature, relative humidity or other calculated humidity interpretation is an advantage. Displayed values are user selectable. Display can be switched off.

Ethernet interface

10Base-T/100Base-TX Ethernet interface via standard RJ45 connector. IP address can be obtain automatically from DHCP server or set manually. Internet protocol version 4 is supported only.

Power over Ethernet

Power over Ethernet according IEEE 802.3af standard. Cost and time to integration can be reduced using Power over Ethernet feature. Only Ethernet infrastructure with PoE switch is needed to get device to work.

WWW server

Actual measured values are accessible via powerful embedded web server. Web pages are ready for access from mobile devices like smartphones and tablets. Device configuration via web pages is possible too. The device allows you to user customize the design of web pages.

History values memory

Measured values are stored into history memory according selected time interval. Capacity of the memory is 1000 records for each channel. Values inside history memory are not backuped. Memory is cleared after device restart.

History graphs

Graphs with history values are accessible via web pages. Modern HTML5 canvas graphic component allows to use graphs from thousands of devices. It is not problem show graphs on tablets or smartphones. All modern web browsers are supported - Firefox, Opera, Chrome or Internet Explorer 9.

Actual values via XML

XML protocol for actual measured values reading. This protocol is suitable for device integration into 3rd party SCADA systems.

Email

Warning email are sent when measured value exceed selected limits. Emails are also send when values returns back into safe range. SMTP authentication is supported, but SSL not. Domain name for SMTP server address is supported. Emails with CSV file attachment can be sent at selected intervals.

History export to CSV

History values can be exported for next processing by the CSV file. CSV file can be processed inside spreadsheet application like Microsoft Excel or OpenOffice Calc. Two formats of CSV file are supported - dot and comma decimal point separators. Timestamps inside CSV file are shown when device time is synchronised by the SNTP server. CSV file can be downloaded from web pages or periodically send as email attachment.

ModbusTCP protocol

Modbus protocol for communication with SCADA systems or third party software. Device use Modbus TCP protocol version. Two Modbus clients can be connected to device at one moment.

SNMP protocol

SNMP version 1 protocol for IT infrastructure. Using SNMP protocol you can read actual measured values, alarm status and alarm parameters. Via SNMP protocol is also possible to get last 1000 measured values from history table. MIB tables with OID description are available.

SNMP Trap

SNMP Trap for IT infrastructure. The device allows sending Traps to selected Trap receiver server. Traps are sent in case of alarm on channel or at error states like unable to send email, unable to deliver SOAP message, etc.

SOAP protocol

The device allows to send currently measured values via SOAP v1.1 protocol. The device sends values in XML format to the web server. The advantage of this protocol is that communication is initialized by the device side. Due to it is not necessary use port forwarding.

Syslog protocol

Syslog protocol for IT infrastructure monitoring systems. The device allows sending text message to selected Syslog server. Messages are sent in case of alarm on channel or at error states like unable to send email, unable to deliver SOAP message, etc.

SNTP protocol - time synchronization

Time synchronisation with SNTP server. Actual time is shown at web pages and is necessary for timestamps inside CSV files. Synchronisation interval can be set to one day or to one hour.

MIN/MAX memory

Memory for minimum and maximum values. Memory is independent on values in history memory. Minimum and maximum values can be cleared according user requirements.

Technical Data

Technical parameters	Value
Output	Ethernet
Measured Value	Temperature + Relative Humidity + Atmospheric Pressure
Construction Type	Ambient Air
Design	Industrial
Temperature Measuring Range	-20 to 60 °C
Relay Output	No

Two-State Input	No
Lcd Display	Yes
PoE	Yes
Relative humidity range	0 to 100%
Accuracy of relative humidity measurement	±2.5% relative humidity from 5 to 95% at 23°C
Accuracy of temperature output	±0.6°C
Resolution	0.1°C, 0.1%RH, 0.1hPa
Measuring interval	2s
Available temperature units	degrees Celsius, degrees Fahrenheit
Computed values	dew point, absolute humidity, specific humidity, mixing ratio, specific enthalpy
Accuracy and range of dew point temperature output - for more details see graphs in manual	±1.5°C at ambient temperature lower than 25°C and RH>30% range -60 to +80°C
Temperature compensation of the humidity sensor	all temperature range
Temperature operating range	-20 to +60°C
Maximum measuring atmospheric pressure range	600 to 1100hPa
Accuracy of atmospheric pressure	±1.3hPa at 23°C
Available atmospheric pressure units	hPa, kPa, mBar, mmHg, inHg, inH2O, PSI, oz/in2
IP protection	IP30 electronics, IP40 sensors
LAN connection	RJ-45 connector, 10Base-T or 100Base-TX
Communication protocols	WWW, ModbusTCP, SNMPv1, SOAP, XML
Alarm protocols	E-mail, SNMP Trap, Syslog
Configuration	T-Sensor, WWW configuration
Power	Power over Ethernet according to IEEE 802.3af or 5Vdc
Power connector	co-axial, diameter 5.5 x 2.1mm
Dimensions	136 x 201 x 45mm (W x H x D), stem length 75mm
Weight	approximately 320g
Warranty	2 years