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Web Sensor T3510 - remote thermometer hygrometer with Ethernet interface



code: T3510

Ambient temperature, relative humidity t-line Web sensor. Remote alarm.

Web Sensor with built-in relative humidity and temperature sensors.

High precision capacitive polymer sensor ensures excellent long term calibration stability and ultimate accuracy. Dual line LCD is an advantage. Measured values are also converted to other humidity interpretation: dew point temperature, absolute humidity, specific humidity, mixing ratio and specific enthalpy.



[Easy wireless communication](#) using Web Sensor and optional [Wireless TP-LINK router](#).

Included in delivery:

- T3510 Web Sensor
- Quick start manual
- [Traceable calibration certificate](#)
- Technical support at [discussion forum](#)

Features

APPLICATIONS:

• **Server rooms monitoring**

Temperature/humidity monitoring of the server rooms and rack units, SNMP monitoring, alert by email and Syslog

• **Building HVAC management**

Temperature/humidity monitoring of buildings, history data to [Comet Database](#), alert by email or SMS

• **Warehouses**

Temperature/humidity 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](#), alert by email or SMS

• **Factories and manufacturing**

Temperature/humidity monitoring for food processing industry, pharmaceutical industry, aerospace industry, etc.

• **Air-conditioned rooms**

Temperature rising indicates cooling fault, alert 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 and humidity



Web Sensor is designed for measuring from internal temperature and humidity 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.



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 obtained automatically from DHCP server or set manually. Internet protocol version 4 is supported only.

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 backed up. 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.

Email



Warning email are sent when measured value exceed selected limits. Emails are also sent 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.

Actual values via XML



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

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	Relative Humidity + Temperature
Construction Type	Ambient Air
Design	Industrial
Temperature Measuring Range	-30 to +80°C
Relay Output	No
Two-State Input	No
Lcd Display	Yes
PoE	No
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
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	-30 to +80°C
IP protection	IP30 electronics
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	9 to 30Vdc, maximum consumption 1W
Power connector	co-axial, diameter 5.5 x 2.1mm
Dimensions	88.5 x 147.5 x 39.5mm (W x H x D), stem length 75mm
Weight	approximately 155g
Warranty	2 years