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## Web Sensor P8511 - one channel remote thermometer hygrometer



code: P8511

One channel p-line Web Sensor. Temperature or humidity + temperature probe is supported. Remote alarm.



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

### Included in delivery:

- P8511 Web Sensor
- Quick start manual
- [Traceable calibration certificate](#)
- Technical support at [discussion forum](#)

### Supported optional probes:

- Temperature probe: [DSTGL40/C](#), [DSTG8/C](#), [DSTR162/C](#)
- Relative humidity-temperature probe: [DSRH](#)

## Features

## APPLICATIONS:

### • Server rooms monitoring

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

### • Building HVAC management

Temperature/humidity monitoring of buildings, history data to [Comet Database](#), remote alarm by email

### • 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](#), remote alarm by email

### • Factories and manufacturing

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

### • Home automation

Residential room monitoring, remote alarm by email

### • Air-conditioned rooms

Temperature rising indicates cooling fault, remote alarm by email



Online demo  
**P8541**



## SOFTWARE:

- **Comet Database**

Complex solution for data acquisition and analysing. Easy to use and high flexible Database software for Comet Web Sensors 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:

### Probes - temperature and humidity



Web Sensor is designed for measuring from one digital temperature probe or one digital humidity probe (1xT or 1xRH). Temperature and temperature+humidity probes are available as optional accessories. Temperature can be displayed in degree of Celsius or degree of Fahrenheit. Relative humidity is measured at percent of RH.

### 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.

### 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. Web Sensor 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. 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 Web Sensors. It is not problem show graphs on tablets or smartphones. All modern web browsers are supported - Firefox, Opera, Chrome or Internet Explorer 9.

### 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 Web Sensor time is synchronised by the SNTP server. CSV file can be downloaded from web pages or periodically send as email attachment.

### Eventlog



Alarm events from temperature and humidity channels are stored into eventlog. This log can be viewed on webpages or stored into CSV file. Capacity of this log file is 100 events. Values inside eventlog are not backuped. Log is cleared after device restart.

### 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.

### ModbusTCP protocol



Modbus protocol for communication with SCADA systems or third party software. Web Sensor uses 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. Web Sensor allows sending Traps to selected Trap receiver server. Traps are sent in case of alarm or at error states like unable to send email, unable to deliver SOAP message, etc.

### SOAP protocol



Web Sensor 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. Web Sensor allows sending text message to selected Syslog server. Messages are sent in case of alarm 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
Construction Type	For External Probes
Design	Industrial
Temperature Measuring Range	-55 to 100 °C
Relay Output	No
Two-State Input	No
Lcd Display	No
PoE	No
Accuracy with DSTR162/C, DSTGL40/C, DSTG8/C probe	±0.5°C from -10 to +80°C, else ±2°C
Accuracy with DSRH01, DSRH02, DSRH05 probe	±3.5% RH (10% - 90% RH) at 25°C, ±2°C
Measuring temperature range with DSTR162/C, DSTGL40/C probe	-30 to +80°C
Measuring temperature range with DSTG8/C probe	-50 to +100°C
Measuring relative humidity range with DSRH01, DSRH02, DSRH05 probe	0 to 100%RH (not condensing)
Measuring temperature range with DSRH01, DSRH02, DSRH05 probe	0 to +50°C
Resolution	0.1°C, 0.1%RH
Measuring interval	2s
Supported units	degrees Celsius, degrees Fahrenheit, percent of Relative humidity
Temperature operating range	-30 to +80°C
IP protection	IP30
LAN connection	RJ-45 connector, 10Base-T or 100Base-TX
Communication protocols	WWW, ModbusTCP, SNMPv1, SOAP, XML
Protocols for alarms	E-mail, SNMP Trap, Syslog
Configuration	T-Sensor, WWW configuration
Power	5Vdc, maximum consumption 1W
Power connector	co-axial, diameter 5.5 x 2.1 mm
Dimensions	88 x 74 x 39.5 mm (W x H x D)
Weight	approximately 125g
Warranty	3 years