PRODUCT DESCRIPTION

Web Sensor P8552 and Web Sensor P8652 with Ethernet connection are designed to measure temperature and relative humidity of the air. The devices are equipped with two connectors for connection of the temperature and humidity external probes and three binary inputs for two-states signals. The dry contact or two-state voltage signal can be connect to the binary input. The devices are powered from an external power supply adapter. Web Sensor P8652 supports also Power over Ethernet (PoE).

Measured values can be read and then processed using an Ethernet connection. The following formats of Ethernet communication are supported: www pages with user-design possibility, Modbus TCP protocol, SNMPv1 protocol, SOAP protocol and XML. The instrument may send also a warning message if the measured value exceeds adjusted limit. The messages can be sent up to 3 e-mail addresses or to Syslog server and can be sent by SNMP Trap too. The alarm states are also displayed on the websites. The device setup can be made by the *TSensor* software (see www.cometsystem.com) and using the www interface.

type *	measured value	design	mounting	PoE
P8552	temperature, humidity	2-chanel transducer for external probe using, three binary inputs	wall	no
P8652	temperature, humidity	2-chanel transducer for external probe using, three binary inputs	wall	yes

* models marked Pxxxx**Z** are custom - specified devices

INSTALLATION AND OPERATION

The devices are designed for wall mounting with two screws or bolts. Pay attention to the location of the device and probe. Incorrect choice of working position could adversely affect accuracy and long-term stability of measured values. The Web Sensor with attached DSRH/C or DST/C probe install always vertically with the sensor cover downwards. Devices don´t require any special operation and maintenance. We recommend you periodic calibration for measurement accuracy validation.
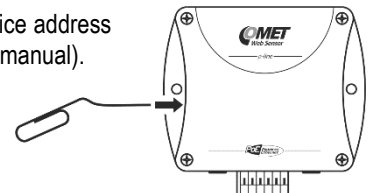
DEVICE SETUP

Contact your network administrator to obtain necessary information for the device connection into the network (IP address, default gateway, subnet mask) and check if there is no IP address conflict when you connect the device into network for the first time. IP address of each device is set by manufacturer to **192.168.1.213**. Install the latest version of TSensor to your PC, connect the Ethernet cable and connect the power supply (see "Device connection procedure" on the other side of this data sheet).

Run the configuration software *TSensor*. Set the „*Ethernet*" communication interface and press „*Find Device*" button. According to MAC address (see device label) select device for configuration and by „*Change IP Address*" button set new address according to network administrator instructions. Gateway IP address may not be entered if you want to use the device only in local network. After changing of IP address the device is restarted and new IP address is assigned. Restart of the device takes about 10 seconds.

The device setup can be made by the web interface. Main page will be shown when you insert device address into address bar of your web browser. Access to device setup is possible via tile **Settings** (see user manual).

To restore the Web Sensor to the **factory default settings** use the button inside the device. Turn of the power supply and press the button (see picture). Turn on the power supply and keep the button pressed for 10 sec.

ERROR STATES AND TROUBLESHOOTING

Device continuously checks its state during operation and if an error appears, the device sends the error message. The detailed description of the error messages is given in the user manual Chapter "Troubleshooting".

SAFETY INSTRUCTIONS

- Don't use and don't store the external relative humidity probe without a sensor cover.
- It is not recommended to use the external relative humidity probe for long time under condensation conditions.
- Don't connect or disconnect thermometers while power supply is on.
- Installation, electrical connection and commissioning should be performed by qualified personnel only.
- Use the power adapter according to technical specifications and approved according to relevant standards only.
- The external probe cable should be located as far as possible from potential interference sources.
- If it is necessary connect the device to the Internet, properly configured firewall must be used.
- The device should not be used for applications, where malfunction could cause to injury or damage to property.
- Devices contain electronic components, it needs to liquidate them according to legal requirements.
- **To supplement the information** provided in this data sheet, use the manuals and other documentations which are available at www.cometsystem.com

Technical specifications

Device type	P8552	P8652
Supply voltage - power coaxial connector, diameter 5.1 x 2.1mm, positive pole in the midle	4.9 to 6.1 Vdc	4.9 to 6.1 Vdc
Power over Ethernet according to IEEE 802.3af, PD Class 0, voltage from 36V to 57Vdc	no	yes
Power consumption	approximately 1W	approximately 1W
Temperature measuring range	according to the probe *	according to the probe *
Accuracy of temperature measurement	according to the probe *	according to the probe *
Relative humidity measuring range	according to the probe *	according to the probe *
Accuracy of relative humidity measurement	according to the probe *	according to the probe *
Temperature operating range (humidity 0 to 100%RH, no condensation)	-20 to +60°C	-20 to +60°C
Protection class	IP30	IP30
Recomended calibration interval	according to the probe *	according to the probe *
Electromagnetic compatibility according to	EN 61326-1	EN 61326-1
Mounting position	any position **	any position **
Weight	140 g	145 g
Dimensions [mm]	89. / 76,5 / 73 / 40 / 83 / Ø4,3	

Binary inputs

Number of inputs	3
Galvanic isolation of the inputs	no
Configuration *Dry contact / Voltage input*	by software *

* using web interface, tile Settings / BIN inputs

Dry contact
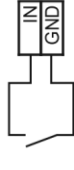
Terminal voltage with open contact	3,3 V
Current through closed contact	< 0,1 mA
Resistance of the contact	< 5 kΩ

Voltage input
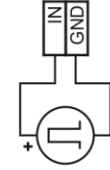
Voltage level for „LOW"	< 1,0 V
Voltage level for „HIGH"	> 2,5 V
Internal resistance of the voltage source	< 2 kΩ
Input voltage range	0 to 30 V
Reverse polarity protection	yes

Device connection procedure

P8652

PoE enabled network

P8552

External probes

Probe type	DSTG8/C	DSTGL40/C	DSTR162/C	DSRHxx	DSRH/C	DST/C
Temperature measuring range	-50 to +100°C	-30 to +80°C		0 to +50°C	0 to +50°C	-30 to +80°C
Accuracy of temperature measurement	± 0.5°C (-10 to +85°C) ± 2.0°C (-50 to -10°C) ± 2.0°C (+85 to +100°C)	± 0.5°C (-10 to +80°C) ± 2.0°C (below -10°C)		± 2°C	± 0.5°C	± 0.5°C (-10 to +80°C) ± 2.0°C (below -10°C)
Relative humidity measuring range	—	—		10 to 90 %RH * **	10 to 90 %RH *	—
Accuracy of humidity measurement	—	—		± 3.5 %RH **	± 3.5 %RH **	—
Temperature operating range	-50 to +125°C	-30 to +80°C		-30 to +80°C	-30 to +80°C	-30 to +80°C
Humidity operating range (no condensation)	0 to 100 %RH	0 to 100 %RH		0 to 100 %RH	0 to 100 %RH	0 to 100 %RH
Protection class	IP67	IP67		IP40	IP20	IP20
Recomended calibration interval	2 years	2 years		1 year	1 year	2 years
Cable length	1, 2, 5, 10 m	1, 2, 5, 10 m		1, 2, 5, 10 m	—	—
Mounting position	any position	any postion		any position	sensor cover downwards	sensor cover downwards
Dimensions of the sensor [mm]	Ø5.7 x 40	Ø5.7 x 40	Ø10 x 25	Ø18 x 90	Ø14 x 100	Ø14 x 100

* see the specification of external probes
** the device with attached DSRH/C or DST/C probe install always vertically with the sensor cover downwards

* the relative humidity measuring range is limited at temperatures below 0°C and above 50°C, see manual for probe
** from 10 to 90%RH at temperature 25°C