SENSORS WITH WiFi INTERFACE

2.4 GHz WiFi network
for wireless measuring
and monitoring

- **High quality, accurate and stable sensors of**
  - Temperature
  - Humidity
  - Dew point
  - Bar. pressure
  - CO_2
- **Alarm signalisation**
- **Wireless data transmitting via 2.4 GHz**

CALIBRATION CERTIFICATE

EXTENDED 3 YEARS WARRANTY

OMET since 1991

On-line Wireless Measurement and Monitoring

Temperature • Humidity • Humidity computed values • Atm. pressure • CO_2

Sensors with WiFi interface are designed to measure temperature, relative humidity, barometric pressure and CO_2 concentration of the air in non-aggressive environment. Communication with the sensor is done via wireless WiFi network. The instrument measures with 1sec interval and the shortest sending interval to COMET Cloud is 5min.

Indoor applications are the most suitable for sensors with Wi-Fi interface. It is extremely easy to mount them on monitored places and run them on.

The measured values are displayed on the LCD display and can be send to the **COMET cloud or COMET Database software** at a set interval.

Application examples

Monitoring of temperature in stock rooms

Due to standards and directives, or at will, it is necessary to monitor the temperature in storage areas associated with food production, drug storage, restaurants, laboratories, factories, etc. Every such business must have a warehouse.

The sensor W0741 can measure up to 4 locations at a radius of 20 meters.

The sensor W3721 allows to measure temperature and humidity from two external probes within 15 meters.

LP102 - Holder for mounting on magnetic surfaces

Very easy installation on metal construction of shelves thanks to holder with two powerful neodymium magnets.

Mapping - creating a temperature and humidity plan of an enclosure

Why map? The answer is homogeneity when you measure from two set locations within the enclosure and environmental effects to check if the operating conditions are having an effect on the performance of a room.

Why lock it down? Because it cannot be taken away.

LP100 - Wall holder with lock to protect against unauthorized removal.

WiFi sensor W4710 measures air we brief.

Schools and public interior spaces

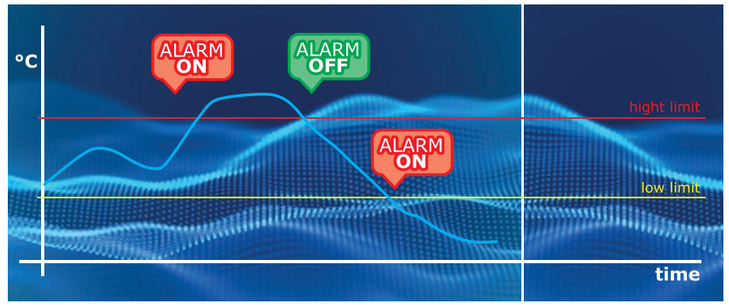
Protect your children`s health with timely controlof air quality in buildings. With COMET CO_2 sensors you always see the exact CO_2 concentration, temperature and humidity which can also inform about humidity index – humidex.

Humidex expresses a feeling of satisfaction with the environment in terms of temperature and humidity. It describes how hot the weather feels to the average person, by combining the effect of heat and humidity. The term humidex is a Canadian innovation coined in 1965. The humidex is a dimensionless quantity based on the dew point.

Alarm Indication

Exceeding of alarm limits on the channel • Device failure • External power failure

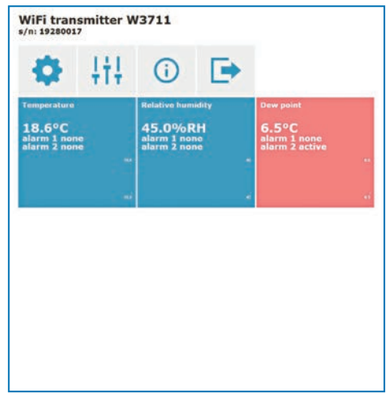
For each measurement channel can be set upper and lower limit. In case the limits are exceeded this alarm is indicated on the display, visually by LED or acoustically.
The COMET Cloud or COMET Database software can create alarm an e-mail and send it to user. SMS alarm text is also possible with database software and with proper accessories.

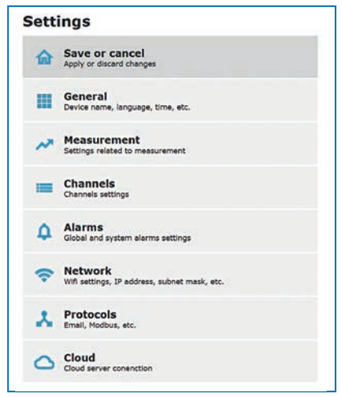


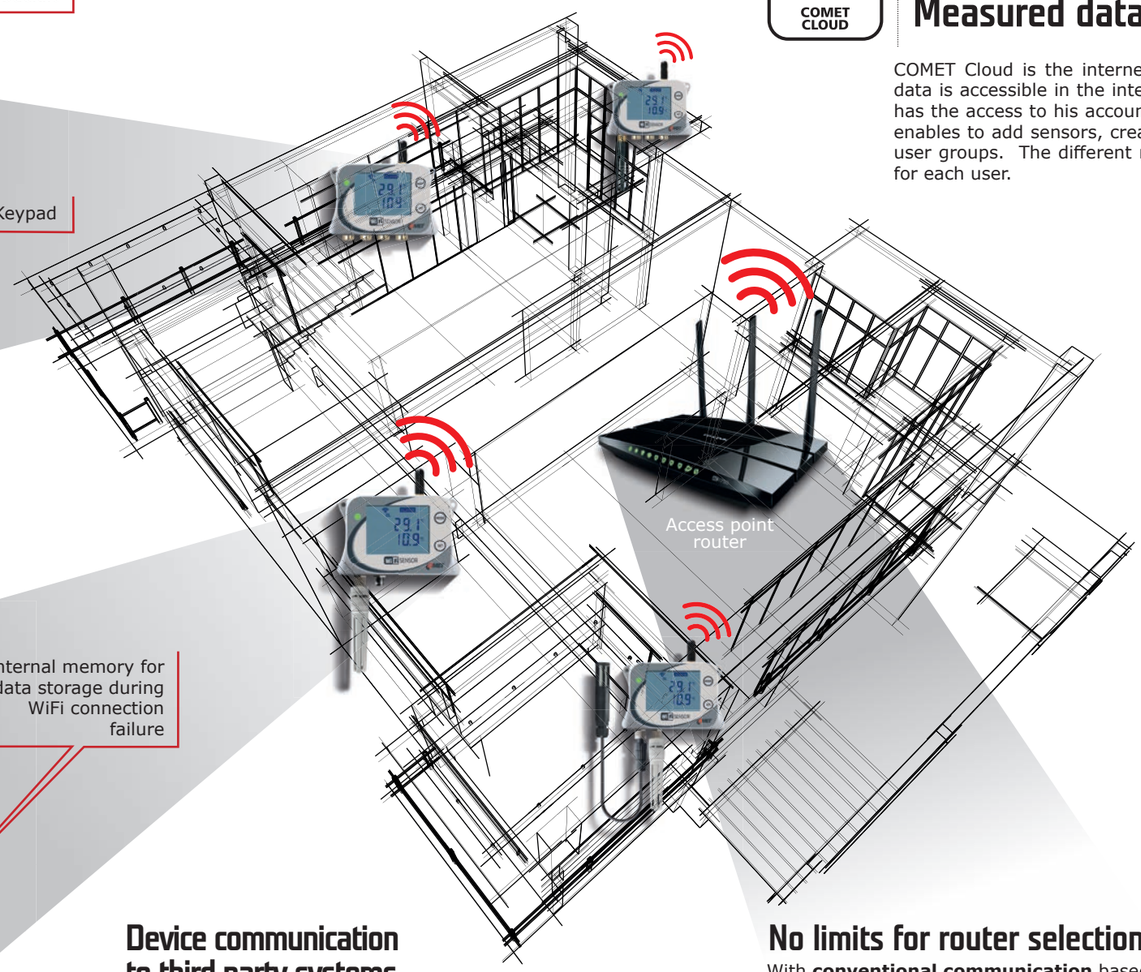
Connect the device to WiFi network for settings

Setting through sensor´s web browser interface is simple and without the need for special software. In that case the sensor must be connected to the Wi-Fi network to enable web settings and configuration. Enter the IP address of the sensor into your internet browser, load its website, click on „Settings" and make the settings.

Sensor setting can be also done via USB cable from COMET Vision software.







CLOUD
COMET CLOUD

COMET Cloud
Measured data where you need

COMET Cloud is the internet storage of data measured by COMET sensors. The data is accessible in the internet and displayed in an internet browser. Every user has the access to his account COMET Cloud protected by password. COMET Cloud enables to add sensors, creates organisational structures such sensor groups and user groups. The different rights can be set up for displaying and administration for each user.

- **unlimited space for data**
- **management and organization of**
  - equipments
  - measured points
  - users and their access rights
- **e-mail alarming when**
  - exceeding alarm limits with the option define recipients according to the level of exceedance
  - a fault occurs (connection, measurement error)
- **easy report creating**
- **device setup from COMET Cloud (only once a day)**

Device communication to third party systems

MODBUS — Devices use Modbus TCP protocol version. Two Modbus clients can be connected to the device at one moment.

https:// — Webserver to display values, it supports also https.

JSON — JSON protocol for sending data to COMET Cloud or to own server.

ALARM — Alarm e-mails with encrypted communication support (i.e. sending via G-mail SMTP server), support of text and html emails.

No limits for router selection

With **conventional communication** based on **2.4GHz** IEEE 802.11b/g/n WiFi radio

Tutorials

How to create account
How to add device
How to set role – administrator/user
How to create measured place

Try GUEST access at https://cometsystem.cloud/device/list

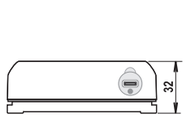
COMET DATABASE SOFTWARE

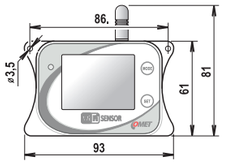
Database software
Data storage place for COMET sensors

For users of COMET products exists a solution for data collection to one central place. It is software solution based on MS SQL and installed on customer's server or personal computer.

- 24 - hour supervision
- unlimited data storage
- simple and clear access to your measured values
- single repository for all devices COMET
- alarm SMS texts and e-mails
- acoustic and visual signalization of alarms

Measured values			Temperature			Temperature, relative humidity				Temperature, relative humidity, atm. pressure	Temperature, relative humidity, CO_2, atm. Pressure	CO_2
Sensor model			**W0710**	**W0711**	**W0741**	**W3710**	**W3711**	**W3721**	**W3745**	**W7710**	**W4710**	**W5714**
temperature	internal	range	-30 to +60°C	-	-	-30 to +60°C	-	-	-	-30 to +60°C	-30 to +60°C	-
		accuracy	±0.4°C			±0.4°C				±0.4°C	±0.4°C	
	external	range	-	-90 to +260°C	-90 to +260°C	-	according the probe	according the probe	-90 to +260°C	-	-	-
		accuracy*		±0.2°C	±0.2°C				±0.2°C			
relative humidity		range	-	-	-	0 to 95 % RH			according the probe	0 to 95 % RH	0 to 95 % RH	-
		accuracy **				±1.8 %RH				±1.8 %RH	±1.8 %RH	
dew point accuracy		accuracy ***	-	-	-	±1.5 °C				±1.5 °C	±1.5 °C	-
CO_2		range****	-	-	-	-	-	-	-	-	0 to 5000 ppm	0 to 5000 ppm
		accuracy									±(50ppm+3% MV)	±(50ppm+3% MV)
atm. pressure		range	-	-	-	-	-	-	-	600 to 1100 hPa	600 to 1100 hPa	-
		accuracy								±1.3 hPa	±1.3 hPa	
power supply		connector USB - C	5.0 to 5.4 VDC; consumption 300 mA (max. 500 mA)									
radio section			frequency: 2.4 GHz; max. transmit po wer: 18 dBm; standard: 802.11 b/g/n; contain CC3220MODSF with FCC ID: Z64-CC3220MOD									
IP protection class			IP30									





* accuracy of device w/o probe in measuring range of -90 to 100 °C (in range +100 to +260 °C is accuracy ±0,2 % of measured value)
** from 0 to 90 %RH at 23 °C
*** at ambient temperature T<25°C and RH>30%


Pt1000/C probe


Pt1000/C probes

4 channels


Digi/E probe

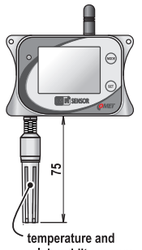

Digi/E probes

2 channels


Digi/E probes + Pt1000/C probes

1 temp./hum.

3 temp.



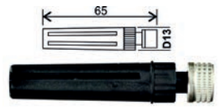
bar. pressure sensor is inside the case

bar. pressure sensor and CO_2 sensor are inside the case

External temperature probes

Temperature probes on the cable are designed to measure the temperature in specific applications. Probes are supplied in lengths of 1, 2, 5 and 10 meters. Probes are manufactured in accuracy of class A, unless stated otherwise.

Fast accurate air probe with fast response time without protection against moisture.

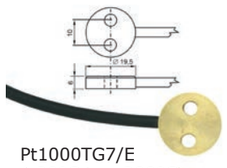


200-80/E, Pt1000
(-30°C to +80°C)

Strap-on probe for pipe mounting and flat surfaces. Class of protection - IP65.

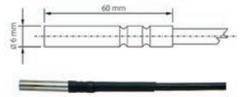
PTS350A/E
(-30°C to +130°C)

Brass probe for surface temperature measurements. Probe is not resistant to moisture.



Pt1000TG7/E
(-30°C to +200°C)

Universal temperature watertight probe with IP68 for long-term monitoring of temperature in liquids.

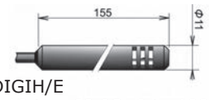


Pt1000TG68/E
(-80°C to +200°C)

External temperature /humidity probes

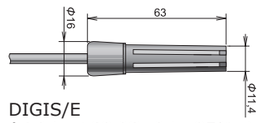
The probe is interchangeable with calibration certificate. The probe line wire must not exceed 30 m.

Ultra thin digital probe.



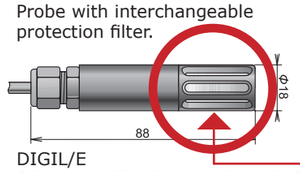
DIGIH/E
(-10 to +60 °C; 0 to 100% RH)

Low cost probe without filter mesh.



DIGIS/E
(-10 to +60 °C; 0 to 95% RH)

Probe with interchangeable protection filter.



DIGIL/E
(-30 to +105 °C; 0 to 100% RH)

Sensor covers for external probes

F5300 - Teflon (PTFE) sensor cover (white colour), with increased resistance against splashing water, nonabsorbent surface, does not rust. Porous size 25µm. Temperature range -40°C to +125°C.

F0000 - sintered bronze sensor cover for moderate aggressive environments. Filtering ability 0.025mm.

F5200B - sensor cover with filter from stainless steel mesh, suitable for moderately dusty environment. Filtering ability 0.025 mm.

Power supply

The device is equipped with a connector USB Type-C, which is used to connect the power supply and to communicate with the computer. The sensor can be powered from main power supply, power bank or solar panel.

A1879 - Switching power supply 5 V DC. Standard plug type EU, optional UK or US.

MP053 - USB-C cable, 1 meter

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