



Web Sensor with external probes and Power over Ethernet (PoE) QUICK START MANUAL

TA3611 • TA3621 • TA3645 • TA4611 • TA4621 • TA7611

PRODUCT DESCRIPTION

Web Sensors TAx6x1 with an Ethernet connection are equipped with ELKA connectors for external digital probes measuring temperature, relative humidity, or CO₂ concentration, and CINCH connectors for Pt1000 temperature probes. The devices can be powered either by a power supply adapter or via Power over Ethernet (PoE).

Sensors with relative humidity measurement can also calculate derived humidity quantities such as dew point temperature, absolute humidity, specific humidity, mixing ratio, specific enthalpy, humidex, and heat index.

Measured and calculated values are displayed on a two-line LCD or can be read and processed via the Ethernet connection. The values are available on the device's web interface and can be sent to the COMET Cloud online portal or the local COMET Database storage. The sensors also support integration with third-party data collection systems via Modbus TCP, HTTP GET (JSON and XML), HTTP POST (JSON), and SNMP protocols. An important feature of the devices are the ability to check measured values and notify via warning messages or acoustic/optical signals. Notification methods include status indication on the device's website, e-mail alerts, and the Syslog protocol. The device can be configured through its web interface or via COMET Vision software, which is available free of charge from the manufacturer's website (www.cometsystem.com).

type	measured values	version	mounting
TA3611	T + RH + CO ₂ + CV	connector ELKA 1x	wall
TA3621	T + RV + CO ₂ + CV	connector ELKA 2x	wall
TA3645	T + RV + CO ₂ + CV	connector ELKA 1x, connector CINCH 2x	wall
TA4611	T	connector CINCH 1x	wall
TA4621	T	connector CINCH 2x	wall
TA7611	T + RH + P + CO ₂ + CV	connector ELKA 1x	wall


T...temperature, RH...relative humidity, P...barometric pressure, CO₂...concentration of CO₂ in air, OV...computed values

INSTALLATION AND OPERATION

The devices should be mounted on a flat surface according to the procedure on the other side of this manual. External probes must be placed in the environment to be measured. Careful attention should be paid to the installation of the devices and probes. Incorrect positioning or placement can adversely affect the accuracy and long-term stability of the measured values.

The devices do not require any special operation or maintenance. Periodic calibration is recommended to ensure measurement accuracy.

DEVICE SETUP

To install the device and connect it to the network, you must have a free IP address. This address can be either static or obtained automatically from a DHCP server. Contact your network administrator and request permission before connecting the device. The device supports both IPv4 and IPv6 protocols. **The device is configured to use DHCP by default.** The IPv6 protocol is enabled in automatic mode (DHCPv6 or SLAAC) by default. Connect the network cable and, if necessary, plug in the power adapter. Since the device is set to DHCP by default, you need to determine its IP address after connecting it. This can be done by searching for the device using the COMET Vision program, viewing the IP address in the gateway/DHCP server configuration, or displaying the IP address on the device's display by pressing the button. Then enter the IP address into your web browser. From there, you can adjust the device settings as needed. Configuration mode is activated by pressing the button  on the home page. The changes are applied after saving the configuration.

COMMUNICATION PROTOCOLS AND ERROR STATES


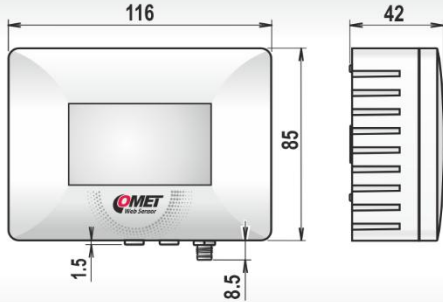
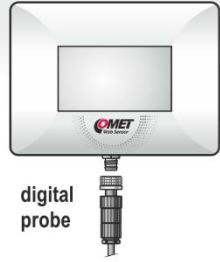

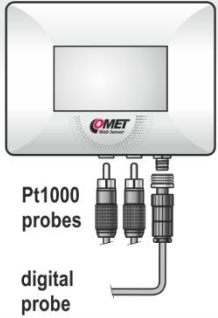
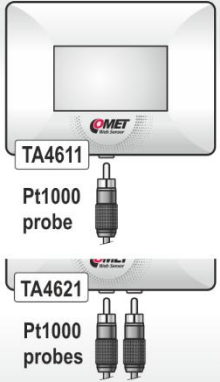
A detailed description of communication protocols and error states is available in the user manual on the manufacturer's website. A brief overview of the communication protocols can also be viewed directly on the device's web interface.

SAFETY INSTRUCTION



- Do not connect or disconnect probe cables while the device is powered.
- The external probe cable should be routed as far as possible from potential sources of interference.
- The device does not have enhanced protection against water or dust ingress. Never use it in environments with splashing or dripping water, condensation, aerosols, or excessive dust.
- The device must not be operated or stored without a sensor cover.
- Use a power adapter approved according to the relevant standards. Use only IEEE 802.3af PoE.
- The device is not intended for use in critical applications where a communication failure could endanger health or cause material damage. Ensure proper cybersecurity measures when operating the device.
- Installation should only be performed by qualified personnel in accordance with applicable regulations and standards.
- The devices contain electronic components and must be disposed of in accordance with current regulations.
- **For additional information**, refer to the manuals and other documentation available in the "Download" section for each device at www.cometsystem.com

Technical specifications

Web Sensor device type	TA3611, TA7611	TA3621	TA3645	TA4611, TA4621
Supply voltage - coaxial connector, diameter 5.1 x 2.1 mm 	5 to 24 Vdc	5 to 24 Vdc	5 to 24 Vdc	5 to 24 Vdc
Power over Ethernet	according to IEEE 802.3af, PD Class 0 (max. 12.95W), voltage from 36V to 57Vdc			
Power consumption	approx. 1W	approx. 1W	approx. 1W	approx. 1W
Digital temperature/relative humidity probe with ELKA connector	yes	yes	yes	—
CO ₂ concentration probe with ELKA connector	yes	yes	yes	—
Pt1000 temperature probe with CINCH connector	—	—	yes	yes
Range and accuracy of temperature, rel. humidity and CO ₂ measurement	according to the probe	according to the probe	according to the probe *	according to the probe *
Barometric pressure measuring range	600 to 1100 hPa (TA7611)	—	—	—
Accuracy of barometric pressure measurement at 23°C	±1.3 hPa (TA7611)	—	—	—
Recommended calibration interval of the device	according to the probe	according to the probe	according to the probe **	2 years
Device protection class	IP30	IP30	IP30	IP30
Device operating temperature range	-30 to +60°C	-30 to +60°C	-30 to +60°C	-30 to +60°C
Device operating humidity range (no condensation)	0 to 100 %RH	0 to 100 %RH	0 to 100 %RH	0 to 100 %RH
Mounting position	any position ***	any position ***	any position ***	any position ***
Storage temperature range	-30 to +60°C	-30 to +60°C	-30 to +60°C	-30 až +60°C
Storage humidity range	0 to 85 %RH	0 to 85 %RH	0 to 85 %RH	0 to 85 %RH
Weight	240 g	240 g	240 g	240 g
Dimensions [mm]				
	 <p>digital probe</p>	 <p>digital probes</p>	 <p>Pt1000 probes</p> <p>digital probe</p>	 <p>TA4611</p> <p>Pt1000 probe</p> <p>TA4621</p> <p>Pt1000 probes</p>

* temperature measurement range of the device with the Pt1000 probe is -200 to +260°C
 accuracy of the device input for connecting Pt1000 probe is ±0.2 °C in the range -200 to +100°C, in the range +100 to 260°C the accuracy is ±0.2 % of the measured value
 measurement accuracy of the device with connected Pt1000 probe is composed from accuracy of device input and accuracy of used probe.

** the recommended calibration interval for Pt1000 probe is 2 years

*** the device with a probe without a cable (e.g. DIGIS/E probe or 201-80/C probe) always install vertically with the sensor cover facing downwards

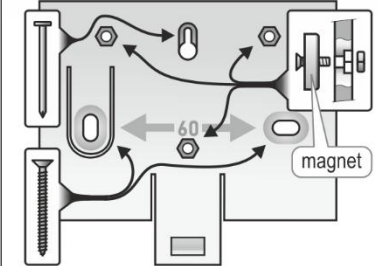
Button function



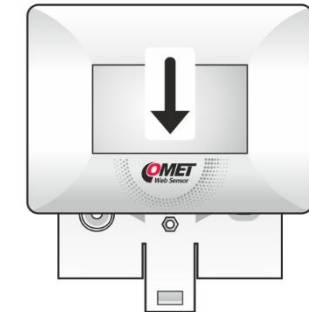
- Factory defaults procedure - turn off the device • press and hold the button • turn on the device • release the button
- Mute of active acoustic signaling - press the button briefly
- Displaying device IP address in case of the acoustic signaling is not active - press the button briefly

Device installation

1. select one of the device holder mounting methods and fasten the holder



2. slide the device onto the holder



3. connect probes

4. connect the Ethernet cable (if PoE power supply is not used, connect the adapter)

