

# Sensor for One Digital Temperature and Humidity or CO2 Probe, with Internal Barometric Pressure Sensor, Ethernet Output and PoE

code: TA7611



The TA7611 extends the capabilities of the TA3611 model with integrated atmospheric pressure measurement. The device allows for the connection of one digital probe for temperature and humidity or CO2 measurement, while pressure is measured internally.

Thanks to the combination of an external probe and an internal pressure sensor, the TA7611 is suitable for applications where multiple environmental parameters must be monitored while maintaining a compact design. Naturally, it features an LCD display, multi-level alarm signaling, and PoE support.

The device is unique for meteorological applications or laboratories where conditions in a chamber (external probe) and ambient pressure must be measured simultaneously.

With the 'option' function, the device can also read temperature and pressure measured by the CO2G-10 probe if enabled.

## Main Benefits:

- External T+RH or CO2 probe + internal atmospheric pressure sensor
- Backlit LCD display, acoustic and LED alarm signaling
- Power supply 5–24 V or PoE
- Integrated backup memory
- Modern web interface, IPv4/IPv6 support, Modbus TCP, COMET Cloud, and fully encrypted communication (HTTPS, SNMPv3, TLS)
- Integrated detachable bracket for easy installation

## Technical data

TEMPERATURE SENSOR	
Measuring range	Depending on the connected DSxx probe
Accuracy	Depending on the connected DSxx probe
Resolution	0.1 °C
HUMIDITY SENSOR	
Measuring range	Depending on the connected DSxx probe
Accuracy	Depending on the connected DSxx probe
Resolution	0.1% RH
DEW POINT	
Measuring range	Depending on the connected DSxx probe
Accuracy	Depending on the connected DSxx probe
Resolution	0.1 °C
ATMOSPHERIC PRESSURE SENSOR	
Measuring range	600 to 1100 hPa
Accuracy	$\pm(1.3 \text{ hPa} + 0.06\% \text{ of configured output range})$ at 23 °C, from 800 to 1100 hPa
Resolution	0.1 hPa

CO2 SENSOR	
Measuring range	0 to 10,000 ppm
Accuracy	±(100 ppm + 5% of reading) at 23 °C and 1,013 hPa
Resolution	1 ppm
CO2 probe cable length	1, 2 or 4 meters
GENERAL TECHNICAL DATA	
Operating temperature range	-30 to +60 °C
Measurement channels	integrated atmospheric pressure sensor, 1× combined T+RH probe (cable-mounted) or CO <sub>2</sub> probe, ELKA connector
Calculated values	dew point temperature, absolute humidity, specific humidity, mixing ratio, specific enthalpy, humidex, heat index
Supported temperature units	degrees Celsius (°C), degrees Fahrenheit (°F)
Supported atmospheric pressure units	hPa, kPa, mbar, mmHg, inHg, inH2O, PSI, oz/in2
Power supply	Power over Ethernet (IEEE 802.3af) or 5-24 V DC
Network interface	Ethernet
IP support	IPv4, IPv6
Communication protocols	HTTP(s), Web server (WWW), HTTP GET (JSON, XML), Modbus TCP, SNMPv1, SNMPv2c, SNMPv3
Alarm protocols	Email (SMTP), Syslog
Measurement interval	2 s
Ingress protection (IP rating)	IP30 (electronics)
Dimensions	116 × 85 × 42 mm (without connected probe)
Weight	240 g
Warranty	3 years