Compact CO2 Concentration and Barometric Pressure Sensor, Ethernet Output and PoE

code: TA5640

The TA5640 is a compact Ethernet sensor designed for measuring CO2 concentration and atmospheric pressure.
Compared to older models, it offers a new NDIR CO2 module with high accuracy in the range up to 5000 ppm and the possibility of extended measurement up to 10,000 ppm. Thanks to the LCD display, LED signaling, and acoustic alarms, the device is suitable for immediate local air quality indication.

The device is suitable for offices, schools, and public spaces where temperature and humidity are controlled by another system, but it is necessary to monitor air quality and ventilation according to the CO2 level. The NDIR sensor used ensures high accuracy and long-term stability without the need for frequent calibration.

The TA5640 is designed for ventilation monitoring and indirect occupancy tracking.

Main Benefits:

- Precise measurement of CO2 concentration and pressure
- Local air quality signaling
- 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

CO2 SENSOR	
Measuring range	0 to 5,000 ppm
Accuracy	±(50 ppm + 3% of reading) at 25 °C and 1013 hPa
Resolution	1 ppm
ATMOSPHERIC PRESSURE SENSOR	
Measuring range	600 to 1100 hPa
Accuracy	±(1.3 hPa + 0.06% of configured output range) at 23 °C, from 800 to 1100 hPa
Resolution	0,1 hPa
GENERAL TECHNICAL DATA	
Operating temperature range	-30 to +60 °C
Measurement channels	integrated atmospheric pressure sensor and CO₂ sensor
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	1 s
Ingress protection (IP rating)	IP30
Dimensions	116 x 85 x 42 mm
Weight	210 g
Warranty	3 years