IoT Wireless Temperature, Relative Humidity, CO2 and atmospheric pressure Datalogger with built-in 2G modem

code: U4440M



GSM datalogger is designed to record temperature, humidity, atmospheric pressure and CO2. In case of exceeded set limits, SMS and JSON messages can be sent via GPRS data connection. Measured values can be sent to the internet storage COMET Cloud, which is a complete monitoring, alarm and analysis system.

It is also possible to set the regular sending of JSON messages to COMET Database, the sending interval is adjustable. Alarms are also indicated locally by LED, LCD and acoustically by built-in beeper.
The recording is performed in a non-volatile electronic memory. The data can be transferred to a PC via included USB-C cable.

GSM recorder **includes Traceable calibration certificate** with declared metrological traceability of etalons is based on requirements of **EN ISO/IEC 17025 standard.**

Optional CO_2 measuring range extension from the standard 0 to 5,000 ppm up to 0 to 10,000 ppm (available at extra cost):

- **Extended measuring range:** 0 to 10 000 ppm
- **Accuracy in extended range:** 100 ppm + 5% of the measured value at 25 °C and 1013 hPa

Technical data

TEMPERATURE SENSOR	
Measuring range	-20 to +60 °C
Accuracy	±0.4 °C
Resolution	0.1 °C
HUMIDITY SENSOR	
Measuring range	0 to 100 % RH
Accuracy	± 1.8 % RH
Resolution	0.1% RH
DEW POINT	
Measuring range	-90 to +60 °C
Accuracy	±1.5 °C at ambient temperature T <25 °C and RH >30 %
Resolution	0.1 °C
CO2 SENSOR	
Measuring range	0 to 5000 ppm
Accuracy	±(50ppm +3% from reading) at 25°C and 1013hPa
Resolution	1 ppm
ATMOSPHERIC PRESSURE SENSOR SENSOR	
Measuring range	600 to 1100 hPa

Accuracy	±1.3 hPa at 23 °C
Resolution	0.1 hPa
GSM MODEM PARAMETERS	
Quad-band	850/900/1800/1900MHz
Compliant to GSM	Phase2/2+
GPRS	GPRS mobile station class B
Class 4	2W @ 850/900MHz
Class 1	1W @ 1800/1900MHz
GENERAL TECHNICAL DATA	
Operating temperature	-20 to +60 °C
Channels	internal sensor for temperature, humidity, CO₂ and atmospheric pressure
Memory	500,000 values in noncyclic logging mode; 350,000 values in cyclic record mode
Recording interval to the internal memory	adjustable from 1 second to 24 hours
Recording interval to the COMET Cloud	from 5 minutes
Interval for measuring and evaluating alarms	adjustable 1 s, 10 s, 1 min
Recording mode	noncyclic - data logging stops after filling the memory cyclic - after filling memory oldest data is overwritten by new
Real time clock	year, leap year, month, day, hour, minute, second
Power	rechargeable Li-Ion battery A8200, 3.6V/5200mAh
Protection class	IP20
Dimensions	61 x 93 x 53 mm, with antenna 120 x 93 x 53 mm
Weight (including batteries)	approx. 260 g
Warranty	3 years