

# IoT Wireless Temperature, Relative Humidity, CO2 and atmospheric pressure Datalogger with built-in 4G modem

code: U4440G



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 4G 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**.

**Possibility to [extend the measuring range](#) for an additional charge:**

- Measuring range: 0 to 10 000 ppm
- Accuracy: 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 +2% from reading) at 25°C and 1013hPa        |
| Resolution                  | 1 ppm                                                |
| ATMOSPHERIC PRESSURE SENSOR |                                                      |

|                                              |                                                                                                                            |
|----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| Measuring range                              | 600 to 1100 hPa                                                                                                            |
| Accuracy                                     | ±1.3 hPa at 23 °C from 800 to 1100 hPa                                                                                     |
| Resolution                                   | 0.1 hPa                                                                                                                    |
| GSM MODEM PARAMETERS                         |                                                                                                                            |
| LTE Cat 1                                    | LTE FDD/GSM/GPRS/EDGE                                                                                                      |
| Supported network types                      | GSM/GPRS/EDGE 900/1800 MHz <br>LTE FDD B1/B3/B5/B7/B8/B20                                                                  |
| GENERAL TECHNICAL DATA                       |                                                                                                                            |
| Operating temperature                        | -20 to +60 °C                                                                                                              |
| Channels                                     | internal sensor for temperature, humidity, CO <sub>2</sub> 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<br>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                                                                                                                    |