

# IoT Wireless Datalogger for Temperature and Humidity from external probe, CO<sub>2</sub> and Atmospheric Pressure from built-in sensors with built-in 4G modem

code: U4442G



4G datalogger is designed to record temperature and humidity from external Digi/E series probe, atmospheric pressure and CO<sub>2</sub> from internal sensors. 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.

4G recorder **includes Traceable calibration certificate** with declared metrological traceability of etalons is based on requirements of **EN ISO/IEC 17025 standard**.

## Technical data

|                                    |                                               |
|------------------------------------|-----------------------------------------------|
| TEMPERATURE SENSOR                 |                                               |
| Measuring range                    | according to the connected probe Digi/E       |
| Accuracy                           | according to the connected probe Digi/E       |
| Resolution                         | 0.1 °C                                        |
| Response time                      | according to the connected probe Digi/E       |
| HUMIDITY SENSOR                    |                                               |
| Measuring range                    | according to the connected probe Digi/E       |
| Accuracy                           | according to the connected probe Digi/E       |
| Resolution                         | 0.1% RH                                       |
| DEW POINT                          |                                               |
| Measuring range                    | according to the connected probe Digi/E       |
| Accuracy                           | according to the connected probe Digi/E       |
| Resolution                         | 0.1 °C                                        |
| CO <sub>2</sub> SENSOR             |                                               |
| Measuring range                    | 0 to 5000 ppm                                 |
| Accuracy                           | ±(50ppm +2% 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 from 800 to 1100 hPa        |
| Resolution                         | 0.1 hPa                                       |
| 4G MODEM PARAMETERS                |                                               |
| LTE Cat 1                          | LTE FDD/GSM/GPRS/EDGE                         |

|                                              |                                                                                                                                  |
|----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Supported network types                      | GSM/GPRS/EDGE 900/1800 MHz <br>LTE FDD<br>B1/B3/B5/B7/B8/B20                                                                     |
| GENERAL TECHNICAL DATA                       |                                                                                                                                  |
| Operating temperature                        | -20 to +60 °C                                                                                                                    |
| Channels                                     | connector for external Digi/E series probe, built-in<br>(internal) atmospheric and CO <sub>2</sub><br>concentration sensor       |
| Memory                                       | 500,000 values in noncyclic logging mode; 350,000<br>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<br>memory<br>cyclic - after filling memory oldest data is<br>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                                                                                                                          |