AirWS-100 | Ultrasonic fill-level sensor



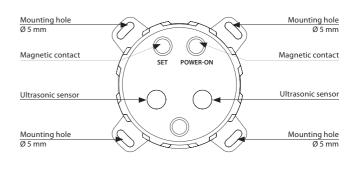


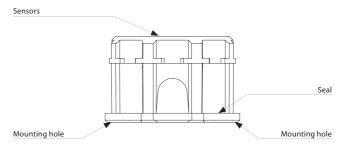
| Technical parameters | AirWS-100S | AirWS-100L | AirWS-100NB |
|----------------------------|---|-------------------|-------------------|
| Power supply | non-removable battery | | |
| Battery power: | 2 x Li-SOCI ₂ 3.6V | | |
| Battery life: | up to 8 years according to frequency of measurement and message transmission | | |
| Battery status view: | message to the server | | |
| Setting | | | |
| Setting: | With a message from the server, magnetic keys, | | |
| | RFAF/USB Service Key | | |
| Measured values: | message to the server | | |
| Fill detection | | | |
| Detection principle: | ultrasonic | | |
| Range: | 5 - 300 cm | | |
| Resolution: | 1 cm* | | |
| Input | | | |
| Temperature measuring: | built-in sensor | | |
| Range: | -30 85 ℃ | | |
| Sensitivity: | 1°C | | |
| Accuracy: | ±3°C | | |
| Position detection | | | |
| Tilt sensing: | digital sensor | | |
| Angle: | ± 180° | | |
| Accuracy: | ± 5 ° | | |
| Communication | | | |
| Protocol: | iNELS RF Control RFIO** | | |
| Transmitter frequency: | 868 MHz | | |
| Range in open space: | up to 20m | | |
| Protocol: | Sigfox | LoRa | NB-IoT |
| Transmitter frequency: | RCZ1 868 MHz | 868 MHz | LTE Cat NB1*** |
| Range in open space: | Approx. 50 km**** | Approx. 10 km**** | Approx. 30 km**** |
| Transmission power (max.): | 25 mW / 14 dBm | 25 mW / 14 dBm | 200 mW / 23 dBm |
| Other parameters | | | |
| Working temperature: | -30…+85 °C | | |
| Storage temperature: | -30…+85 °C | | |
| Operation position: | sensing contacts downwards | | |
| Mounting: | screws | | |
| Protection degree: | IP65 | | |
| Dimension: | Ø 97 x 62 mm | | |

- * Depending on type and content storage
- ** For service purposes
- *** Multiple frequency bands of B1 / B3 / B5 / B8 / B20 / B28
- **** Depending on network coverage

- The sensor informs about the fill volume condition of the container, the waste container, may trigger a requirement to empty it. It also informs you of the actual temperature in the scanning area.
- It has a built-in sensor for opening the lid or for tipping over the waste container.
- With wireless technology and its compactness, the device can be used in a variety of applications.
- Reliable measurement, regardless of material colour, transparency, gloss and interference light.
- With the wireless solution and Sigfox / LoRa / NB-IoT communication, it can communicate instantly to your chosen location and be operated immediately.
- Data is sent to the server from which it can be subsequently displayed as a smartphone, application, or Cloud notification.
- Battery status information is sent as a message to the server.
- Power: 2x Li-SOCL₂ 3.6V (integrated) battery life up to 8 years according to frequency of measurement and message transmission.
- The IP65 is suitable for installation in demanding environments.

Device description





Function

The sensor measures the temperature in the space every minute, simultaneously detects the position of the sensor (e.g. opening the lid, tipping over the waste container, etc.). At twelve hours *, ultrasonic sensors scan the distance between the sensor and the surface being scanned.

Data reports measured values sent in twelve-hour period*. In the case of detecting changes in position of the sensor (opening of the lid, etc.) in 5 minutes*. In the event of a sharp rise in temperature it is reported immediately. Settings: by using supplied magnet (included in the supply).

* Intervals can be set by message from the server.