

VEGAPULS Air 23

Autarkic radar sensor with measured value transmission via radio technology

Continuous level measurement in plastic vessels



Technical data

| | |
|--|--|
| Measuring range | up to 3 m (9.842 ft) |
| Deviation | ≤ 5 mm |
| Process temperature | -20 ... +60 °C (-4 ... +140 °F) |
| Ambient, storage and transport temperature | -20 ... +60 °C (-4 ... +140 °F) |
| Radio technology | NB-IoT (LTE-Cat-NB1), LTE-M (LTE-CAT-M1), LoRa WAN |
| Protection rating | IP66/IP68 (0.2 bar)/IP69 acc. to IEC 60529, Type 6X acc. to NEMA |

Materials

The wetted parts of the instrument are made of PVDF.

Housing version

The sensor housing with high protection class IP69 enables continuous, maintenance-free operation outdoors.

Application area

The VEGAPULS Air 23 is the ideal sensor for level measurement in IBC and plastic vessels. The device measures through the closed vessel top and is suitable for almost all liquids and bulk solids.

The VEGAPULS Air 23 is quickly installed by simple and secure adhesive, ceiling or tension belt mounting. As no additional power supply is required, the autarkic sensor offers a particularly economical solution.

The sensor housing with high protection rating IP69 enables maintenance-free continuous operation even outdoors or when cleaning the container.

Your benefit

- Easy installation thanks to autarkic power supply and radio technology
- Exact measuring results independent of product, process and ambient conditions
- Maintenance-free operation due to non-contact 80 GHz radar technology

Function

The sensor emits a radar signal through the antenna. The emitted signal is reflected by the medium and received as an echo by the antenna.

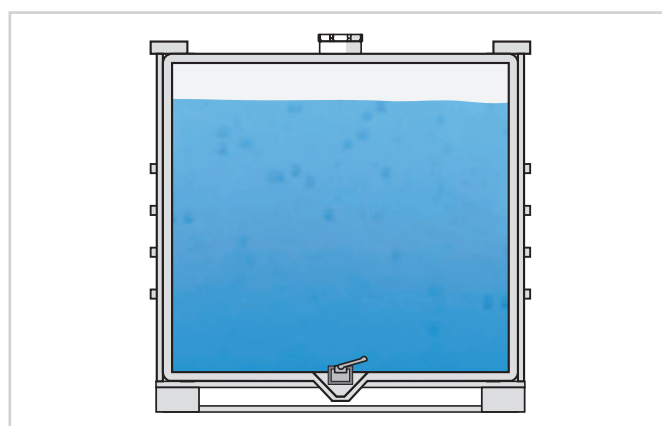
The resulting level is converted into a respective output signal and wirelessly transmitted.

Measured value transmission

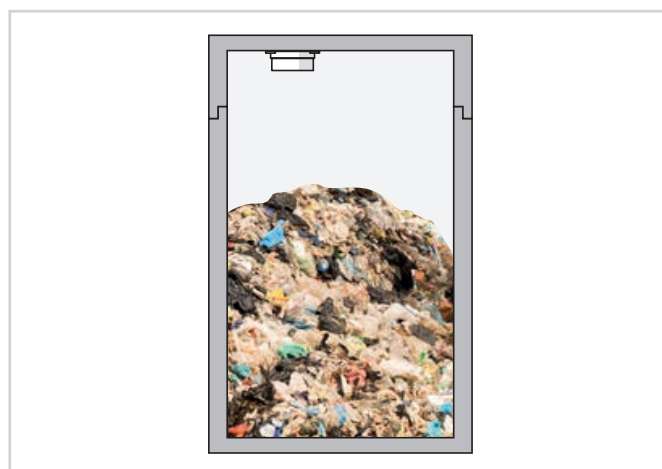
Depending on the availability of the radio networks, the device transmits its measured values wirelessly to an LTE-M (LTE-CAT-M1) or NB-IoT (LTE-CAT-NB1) mobile radio or a plant-side LoRaWAN network.

The transmission or evaluation is carried out via an Asset Management System, e.g. VEGA Inventory System.

Application examples



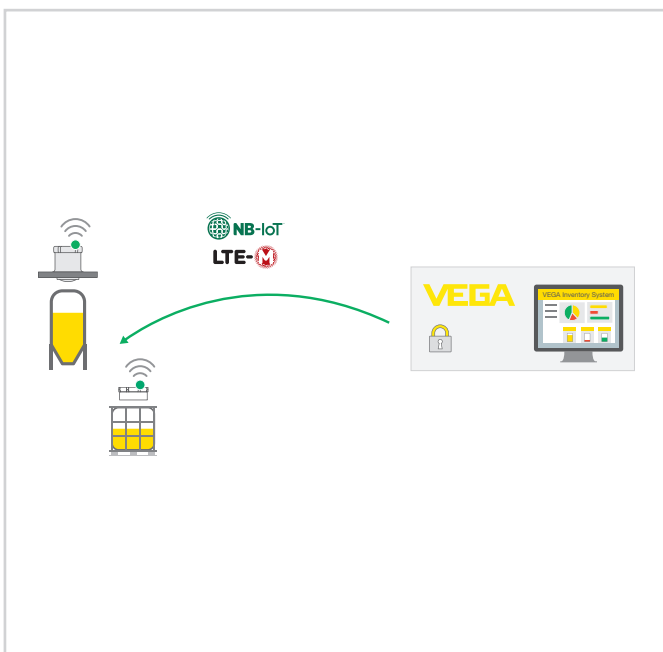
Level measurement in the IBC vessel



Level measurement in the litter bin

Adjustment

The VEGA Inventory System offers the possibility - depending on the software version - to change parameters in the sensor by remote access via mobile radio (backward channel).

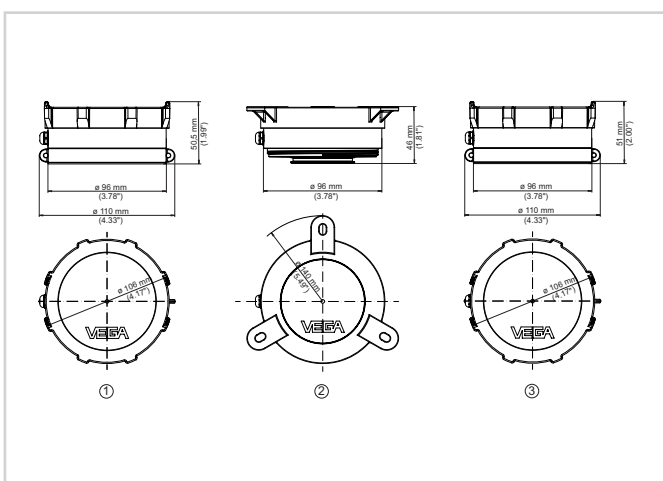


Remote access from VEGA Inventory System via NB-IoT or LTE-M to the sensor

Voltage supply

The device is supplied with energy by a permanently integrated primary cells. The lithium cell used for this purpose is a compact storage device with high cell voltage and capacity for a long service life.

Dimensions



Dimensions VEGAPULS Air 23

- 1 Adhesive mounting
- 2 Ceil mounting
- 3 Tension belt mounting

Information

You can find further information on the VEGA product line on our homepage.

In the download section of our homepage you'll find operating instructions, product information, industry brochures and approval documents as well as device and adjustment software.

Instrument selection

On our homepage under "Products" you can select the suitable measuring principle and instrument for your application.

There you will also find detailed information on the available device versions.

Contact

You can find your personal contact person at VEGA on our homepage under "Contact".