MOBILE SILO

Self-sufficient level monitoring for reservoirs, silos and tanks – with NB-IoT and mobile network connectivity

VERAUT

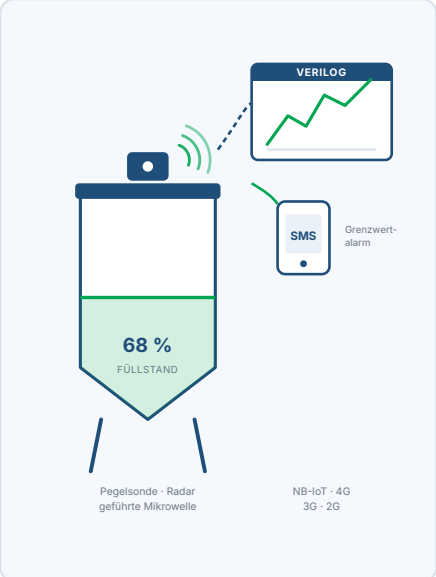
LEVEL · VOLUME · WEIGHT | ACCURACY FROM 1 MM | BATTERY 10+ YEARS | NB-IOT · 4G · 3G · 2G | IP66 OR POTTED | SMS STRAIGHT FROM THE DEVICE | NO MAINS CONNECTION | VERILOG WEB PORTAL

Levels in view – without power on site

MOBILE SILO is a self-sufficient measuring system for the level in reservoirs, silos, tanks and containers. It measures continuously, transmits the readings over the mobile network and shows them in the web portal and the app – without a mains connection at the measuring point and without a radio infrastructure of your own.

Volume and weight are calculated from the level. The sensor is chosen to suit the application: hydrostatic level probe, radar, guided wave radar, optionally ultrasonic as well as pressure and level transmitters.

Upper and lower limits are freely configurable. The alert is sent as an SMS straight from the device – independent of cloud and internet – and by e-mail through the portal. Device faults, sensor failure and loss of connection are reported as well.



from 1 mm

Measuring accuracy, depending on the sensor type and range selected.

10+ years

Battery life at hourly transmission (ECL 0). Solar or mains supply optional.

IP66

Enclosure or potting, depending on the version – for outdoor use and harsh industrial environments.

SMS

Limit and fault alarms straight from the device, with no detour through cloud or internet.

Product features

- Self-sufficient – no mains connection required at the measuring point
- Continuous level measurement; volume and weight derived from it
- Sensor freely selectable: level probe, radar, guided wave radar, optionally ultrasonic
- Freely configurable upper and lower limits
- SMS straight from the device, e-mail through the portal, several recipients by priority
- Fault alarms for device faults, sensor failure and loss of connection
- NB-IoT without a gateway, falling back to 4G, 3G and 2G
- Movable or permanently mounted, without intervening in the plant
- Several sites in one overview in the web portal and the app
- Rugged design for outdoor use and harsh environments
- Battery powered, with solar or mains supply optional
- Export to CSV, XML, XLSX and JSON as well as through the API

Typical applications

- **Water supply** – reservoirs and wells at utilities, associations and municipalities
- **Emergency supply** – monitoring of municipal water storage
- **Construction logistics** – cement, sand and gravel stocks in view
- **Bulk material and logistics** – temporary stores and supply chains
- **Agriculture** – feed, grain and slurry silos, irrigation tanks
- **Industry and energy** – oil tanks, diesel depots, pellet silos, process vessels
- **Standby power systems** – checking fuel stocks without a site visit
- **Remote sites** – measuring points without power or gateway infrastructure

WORKS WITH VERILOG web portal – analysis, alarms, export · NB IoT BOX LITE – logger for pulse and encoder meters · NB IoT BOX MINI – logger for volume converters · VUSWM – ultrasonic water meter · HES, MDM and ERP systems – data handover

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Subject to technical change. The information describes the product status at the time of preparation and does not constitute warranted characteristics in a legal sense. Sensors, measuring range and version are defined per project; binding delivery characteristics follow from the order confirmation.

01 Measurement and sensors

Measuring principles	Hydrostatic level probe; radar, free-air and as guided wave radar
Optional	Ultrasonic; pressure and level transmitters
Measured values	Level; volume and weight calculated from the level and the density of the medium
Accuracy	From 1 mm, depending on the sensor type
Sensor selection	Chosen to suit the application; further sensors on request

02 Alarms and alerting

Limits	Upper and lower limit, freely configurable
SMS	Straight from the device, independent of cloud and internet
E-mail	Through the VERILOG web portal
Recipients	Several recipients, ordered by priority
Fault alarms	Device fault, sensor failure, loss of connection

03 Communication

Technology	NB-IoT directly, without a gateway
Fallback	4G/LTE, 3G/UMTS and 2G/GSM
Infrastructure	No local gateway and no WLAN required
Backend	VERILOG web portal as well as HES, MDM and ERP systems

04 Power supply

Supply	Battery; solar or mains supply optional
Battery life	10+ years at hourly transmission (ECL 0)
Operation	No mains connection required at the measuring point

05 Mechanics and environment

Ingress protection	IP66 or potting, depending on the version
Dimensions	Depending on application and configuration
Mounting	Movable or permanently mounted, without intervening in the plant
Environment	Indoors and outdoors, harsh industrial environments, weather resistant

06 Platform, analysis and data

Operation	VERAUT GmbH servers in Linz, Austria; GDPR-compliant
Transmission	TLS encrypted
Analysis	Dashboard, trends, period comparison and benchmarking
Overview	Several sites in one view, web portal and app
Export	CSV, XML, K5, XLSX, JSON and API
Combines with	VUSWM, NB IoT BOX and VERIBOX-MINI in the same portal

07 Economic benefits

- Fewer unplanned empty tanks and emergency trips
- Lower risk of overflow
- Fewer site inspections and less staff effort
- Better refill and route planning
- Central overview of all sites
- Clear prioritisation of critical measuring points

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