munisense

Wireless Water Level Loggers

The small and energy-efficient wireless water level meters send all measurement data via the mobile LTE-M network to the powerful Munisense **INSIGHTNOW™** platform. The future-proof LTE-M technology ensures lower energy consumption as standard and facilitates even more energy savings. The data connection via the LTE-M network is more reliable due to a better network coverage through roaming.

The water level data can be accessed at any time via a smartphone, tablet or web browser. Both the management per measuring point and the entire measuring network is simple using this powerful platform.

Future-proof and autonomous

The energy-efficient loggers can work for weeks, months or even years on their internal battery, depending on the number of measurements and registrations in the INSIGHTNOW™ platform. The meters are suitable for networks that may need immediate action on measurements or where loggers are used.

Remote control

The measurement and reporting intervals per meter can be set remotely using the INSIGHTNOW™ platform. All meters can be fully managed and updated remotely.

In addition to alarms of water level changes, the INSIGHTNOW™ platform immediately reports the failure of a meter, battery or data transmission upon determination. This enables issues to be solved quickly and secures insight in reliable data of the water network.

Integrated GIS environment

Use the map-driven user interface with NL-GIS layers such as buildings, subsurface and a height map with legend. This is fully integrated with the dashboards for the measuring network, location and measuring point and with graphs including ground level and manual measurements.

Easy installation

Years of operation on single battery

Sample interval from 5 seconds to hours

Adjustable Water Level Alarms

Automatically validated data



Specifications water level loggers LV8 Type measurement specifications Water pressure Range 4, 10, 20 m H₂O (absolute) 0.01 % FS Resolution ± 0.1 % FS (typical) Precision Long term stability ± 0.02 % FS * Maximum pressure 3x range Water temperature Range -20 - 50 °C • Resolution 0.4 °C ± 0.4 °C (max.) Precision • Accuracy, calibrated 0 °C (at 20°C) Atmospheric pressure (requires optional valve) 300 - 1100 hPa • Range Resolution 0.01 hPa Precision ±0,4 hPa • Accuracy, calibrated ±0,4 hPa $< 0.5 \sec/day$ Timestamp accuracy Sampling, measurement interval 5 sec. - 24 hours 25,000 measurements Logging capacity Management information Battery voltage yes

Environmental conditions

• Radio quality (RSSI) in dBm

Temperature	-20 - 60 °C
Relative humidity	0 - 99 %
Ingress protected housing	IP67

5 m **
PU / PE-HD
RVS 316L
Stainless Steel / AL ₂ O ₃ Ceramics
IP68
unique, lasermarked on RVS
yes

yes

22 mm or 18 mm

Energy

Diameter

Battery (non rechargeable)	Li/SOCI2
Capacity	19 Ah
Replaceable	yes
Voltage	3,6 V
Operating time, depending on the quality	

of the connection, the selected measure-

ment and reporting interval, approx. 7 vears

Communication

LTE-M and NB-IoT both integrated Antenna integrated OTA (Over The Air) updates yes

Options

Pressure valve (atmospheric pressure, relative sensor) External puck antenna

Dimensions and weight

Diameter body and cap Ø 50 mm & Ø 62 mm Length body incl. cap 180 mm Weight body and sensor 500 grams

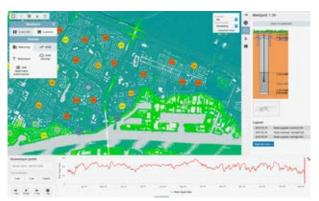
- * After 30 days, over the rest of the entire lifespan see EC EN 60770-1
- ** Other cable lengths upon request: 10, 15, 20 m or another length.

Recycling e-waste

Of course you can deliver or send us your old Munisense devices. We then ensure that they are included in our recycling process.

Everything at a glance

The portal can interpolate water levels or dewatering depth on the map. Even the values from the graph can immediately be visualized on the map in time.



Above: example of a user portal with at a glance

- metadata of the selected measurement point
- time series of dewatering detph of the measurement point
- map with color coding per measurement point and AHN2 height



About Munisense

Munisense develops, produces, supplies and manages innovative measurement solutions for businesses and governments. Solutions that give stakeholders direct online insight into noise, water quality, water levels and air quality. The information is online available at any time for visualization, analysis or periodic reports. This way managers and policymakers can measure in real time; remotely, reliable and smarter.

munisense **INSIGHTNOW**

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