munisense

Water quality meters

Long term and continuous measurements

Our QU water meters are small, quick-to-install, wireless, energy-efficient meters that store their measurement data online in the Munisense INSIGHTNOW™ platform. The water quality can be viewed and monitored 24/7 via a smartphone, tablet or web browser.

Water quality parameters

The water meters measure conductivity, oxygen, turbidity or pH value in combination with temperature with one to a maximum of 4 sensors.

Self-sufficient and wireless

The energy-efficient meters work for weeks, months or years on the enclosed battery depending on the number of measurements and communication with the INSIGHTNOW™ platform.
The meters communicate with the INSIGHTNOW™ platform via LTE-M. The water quality meters can seamlessly be combined with our water level meters and are suitable for networks where you have to react directly to measurement data or where the meters are implemented as a logger.

Remote management

Integral management of a water network is easy via the INSIGHTNOW™ platform. The meters are managed remotely. Measuring and reporting intervals can be remotely set and/or changed per meter. And in addition to alarms, any faults of the meter, battery or data transmission are reported immediately, so these can be addressed and resolved quickly. For reliable insight in water quality.

Integrated GIS information

Map-driven user interface with GIS layers such as buildings, subsurface and elevation map with legend is planned to be implemented for water quality as well. Fully integrated with dashboards for the measuring network, location and measuring point and with graphs including ground level and manual measurements.

Quick and easy installation

Operates for years on a single battery

Measurement interval from 1 second to 1 day

Alarming for change

Integrated GIS information

Specifications water quality sensors	
Conductivity sensor	
Measurement principle	sensor with 4 electrodes
• Sensor diameter	27 mm
• Range (in 4 ranges)	0,0 to 200,0 mS/cm
• Accuracy	+/- 1% of the range
• Range salinity	5 - 60 g/Kg
• Range TDS-KCl	0-133 000 ppm
Oxygen sensor	
Measurement principle	optical luminescence technology
• Sensor diameter	25 mm
• Range	0,00 to 20,00 mg/l (ppm of %)
• Accuracy	+/- 0,1 mg/l
Turbidity sensor	
Measurement principle	IR 90° technology
• Sensor diameter	27 mm
• Range	0 to 4000 NTU
• Accuracy	< 5% of the measured value
pH value sensor	
Measurement principle pH	Combined electrode: pH & ref
• Sensor diameter	27 mm
• Range pH	0-14 pH
• Accuracy	+/- 0,1 pH
Redox potential	Combined electrode: Redox & ref.
• Range	- 100 to + 1000 mV
• Accuracy	+/- 2 mV
Specifications for all sensors	
Temperature	
• Range	0 to +50°C
• Accuracy	+/- 0,5°C
Cable length sensor	3 meters (7 or 15 m optional)

Specifications water quality meter	QU8
Temperature measurements	
• Range	-20 to +60°C
• Accuracy	+/- 0,5°C
Atmospheric pressure measurements	
• Range	300 - 1100 hPa
• Accuracy at 25°C	±0,12 hPa
Humidity measurements	
• Range	0-99%
• Accuracy	+/- 3%
Technical specifications	
LTE-M	integrated
OTA (Over The Air) upgrades	yes
Battery voltage	in portal
Radio quality (RSSI) in dBm	in portal
Sampling, measurement interval	1 sec. - 24 hrs
Logging capacity	250.000 samples
Accuracy time stamp	max 0.8 sec per day
Environmental conditions	
Temperature	-20 - 60°C
Humidity	10 - 99%
Housing, Ingress protection	IP68 *
Energy	
Battery (not re-chargeable)	Li/SOCl2
Capacity	19 Ah
To be replaced/interchangeable	yes
Voltage	3,6 V
Service life, depending on the quality of the connection and the chosen measurement and reporting interval, approximately	6 years
Dimensions and weight	
Diameter body and cap	Ø 50 mm and Ø 62 mm
Length incl. cap	180 mm
Weight body and 1 sensor	600 grams

* More than 6 weeks under max. 60 cm of water, with the seal intact.

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.

v 2.1.0

Everything at a glance

Have the ability to import lab water quality results, target and intervention values into the portal, so these values can also be displayed on the map and in graphs.

Example of water level user portal with at a glance:

- metadata of the selected measuring point,
- the time series of dewatering depth of the measuring point
- map with color coding per measuring point and AHN2 height

QU water quality meter
available with 1 to max. 4 sensors

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.

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INSIGHTNOW™