



munisense

Water quality meters

Long term and continuous measurements

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

Water quality

The water meters can be equipped with one or two sensors from AquaLabo for measuring conductivity, oxygen, turbidity or pH value in combination with temperature.

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 GPRS, NB-IOT and/or ZigBee (LoRa is available upon request).

The water quality meters can be seamlessly 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 periodically used as a logger.

Remote management

Integral management of a water network is easy via the INSIGHTNOW™ platform. The meters can be managed remotely. Measuring and reporting intervals can be remotely set per meter. And in addition to alarms, any faults of the meter, battery or data transmission are also reported in the online INSIGHTNOW™ platform and are signaled and can be solved quickly.

Quick and easy installation

Operates for years on a single battery

Measurement interval from 1 second to 1 day

Alarming for change

Immediate wireless communication

Prolonged continuous measurement



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 meters QU2 GPRS and QU3 NB-IoT

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	
GPRS integrated	QU2
NB-IoT integrated	QU3
LoRa integrated	upon request
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	IP65

Energy	
Battery (not re-chargeable)	Li/SOCI2
Capacity	14 Ah
To be replaced/interchangeable	yes
Voltage	3,7 V
Service life, depending on the quality of the connection and the chosen measurement and reporting interval, approximately	3 years QU2 / 5 years QU3

Dimensions and weight	
Diameter body and cap	Ø 50 mm and Ø 62 mm



QU water quality meter with sensor

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™