# **AquaLink technical specification**

Models AQ3 IoT Meter Logger GSM 2G/3G/4G



The AquaLink Meter Logger, designed specifically for water meter reading, utilizes GSM communication for efficient data transmission. Equipped with multiple input ports (cables), it can accommodate up to 4 digital inputs, providing flexibility for various monitoring requirements. Additionally, it offers the option to connect an AQ pressure and temperature sensor, enhancing its functionality. With an IP68 waterproof rating, the logger is resistant to water ingress, ensuring reliable operation in diverse environmental conditions. The external SMA connector allows for antenna replacement, while the option to replace batteries ensures extended device lifespan. Furthermore, the built-in humidity and temperature sensor continuously monitors environmental conditions, ensuring that the device remains properly sealed and moisture-free. Featuring a modular design, the logger's upper part can be easily replaced in case of electronic failure, while all cable connections remain intact in the well. Bluetooth connectivity enables seamless communication, with configuration options available through an Android app.

- 4x Digital programmable inputs
- **Dedicated AQ Flow and Pressure input**
- Switch alarm input
- Internal humidity and temperature sensor for detection of water intrusion inside housing

### Input types (each configurable in software):

Digital (measures pulses from HRI, REED, Cyble, short circuit...) - counter mode

#### **Communication:**

- Built- in optional GSM modem (GSM/GPRS/EDGE/UMTS/HSDPA/HSPA+/LTE-TDD/LTE-FDD)
- GPRS and SMS communication (configurable) to a AquaWeb server
- Accepts normal size SIM cards
- Optional GPS
- GPRS and SMS communication (configurable) to a AquaWeb server
- Accepts normal size SIM cards
- Integrated Bluetooth for on site programming (v4.2BR/EDR)
- Integrated WiFi 802.11 b/g/n, 2.4GHz
- Local connection trough USB cable (for initial configuration and troubleshooting)



Housing: IP68, Optionally Ip65 Dimensions (mm): 160 x 80 mm

Weight: 700g (without cables)

#### Mounting:

• 3 holes in the housing for zip ties or wall mounts

## **Operating environment:**

Temperature range: Reduced battery life outside -20°C and +65°C

Humidity: 0-100% non-condensing

# Power supply:

- Up to 3x 3,6V Li-SOCI2 internal batteries
- Standard battery life up to 10 years (depending on configuration)
- Batteries easily replaceable
- Optional mains / solar power supply / rechargable batteries

#### **Uploading data:**

- Standard to AquaLink Cloud
- Optionally via ODBC API to SCADA module
- Optionally HTTP open protocol

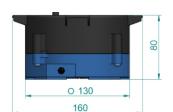
# **Firmware features Configuration:**

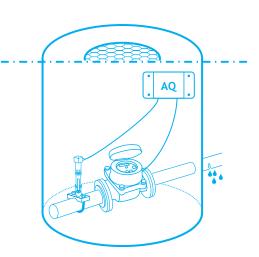
- 2 way communication with AquaWeb server
- Automatic Firmware update over internet or USB cable
- All parameters can be configured remotely via internet

## **Data sent during communication:**

DE - 83435 Bad Reichenhall

Aqualink ID





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- SIM number
- Rough location via GSM triangulation
- GPS coordinates (optional)
- Date and time
- Data logger readings
- Battery voltage
- GPRS/GSM signal
- Firmware version
- Device self power consumption
- Inter(n)al humidity and temperature

#### **Accessories:**

- Solar cells
- Additional inputs
- ☑ Installation tools
- ☑ Various sensors (Pressure, level, Ph, temperature, humidity etc.)
- ☑ AQPressure low power pressure and temperature sensor
- AQFlow insertion flow indicator

# **Configurable parameters:**

- Date and time
- Intervals of recording and transmitting of data
- Mode for each input
- Cumulative for digital mode input
- Alarm thresholds (max. number of pulses between configured data collection intervals before alarm is triggered).
- SIM provider APN settings for GPRS connection
- Android app for configuration

#### Data transmission (GPRS/SMS):

Minimal interval for sending data is every 1 minutes (DATA (GPRS)/SMS), up to once every month.

#### **Recording data:**

- Data recording from every 0.1 seconds, up to once every week.
- Internal storage room for 300 000 intervals with all inputs

#### Alarms:

- Independently configurable thresholds for each input (min. and max. number of pulses during a save interval for digital mode, min. and max. value for AQ Pressure/Temperature mode)
- When the defined conditions are exceeded, an alarm is sent with the current input value, and type of alarm (undervalue, overvalue).

# Standard package:

- AquaLink
- AquaWeb access
- External antenna
- Batteries included
- 8x3M Scotchlok cable joiners (Optionally connectors)
- 1x Wall mounts with screws

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