

The AquaLink **AQ MINI Logger** is a compact, advanced data logger designed for water meter reading, valve control, and irrigation system management. Based on the robust design of the original AquaLink Meter Logger, the AQ MINI offers a modernized feature set while maintaining exceptional reliability.

It supports **LTE or NB-IoT/Cat-M communication** modules, enabling efficient data transmission even in areas with limited network coverage.

The **AQ MINI** is equipped with:

- **2x digital/reed/switch-only inputs**, ideal for water meter pulse counting or other contact-based signals.
- **RS485 Modbus RTU** interface, allowing connection to 1x external AQ pressure and temperature sensor or other Modbus-compatible devices.
- **1x relay output** (optional) for remote control of valves, pumps, or other actuators.

The logger maintains an **IP68 waterproof** rating, ensuring reliable performance in harsh environmental conditions. It includes a replaceable external **SMA antenna connector** for flexible antenna options and supports battery replacement to extend its field life.

An integrated **humidity sensor** continuously monitors the internal enclosure environment to ensure optimal sealing and protection against moisture.

Thanks to its **modular design**, the upper electronic module can be easily replaced without disconnecting cables in the well. Bluetooth connectivity enables quick and intuitive **configuration via an Android app**.

With its compact size, versatile **I/O options**, and modern communication capabilities, the AQ MINI is an ideal solution for applications such as **water meter data logging, automated valve control, and smart irrigation systems**.

Input types (each input is configurable via software):

- Digital (measures pulses from HRI, REED, Cyble, short circuit...) - counter mode
- **RS485 Modbus RTU**
- **1x relay output** with programmable voltage output 3,3V-20V, reverse polarity support and up to 20W pulse

Communication:

- Built-in optional **GSM modem (GSM/GPRS/EDGE/UMTS/HSDPA/HSPA+/LTE-TDD/LTE-FDD)**
- Or built-in **Cat-M/Cat-NB/GPRS/EDGE**
- 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 through USB cable (for initial configuration and troubleshooting)

Mechanical:

Housing:	P68 rated enclosure (IP65 available upon request)
Dimensions (mm):	160 x 80 mm
Weight:	700g (without cables)

Mounting:

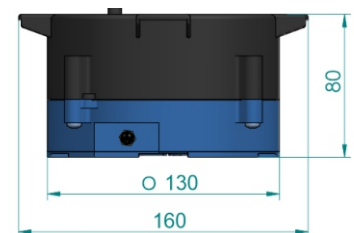
- 3 holes in the housing for zip ties or wall mounts

Operating environment:

Temperature range:	Reduced battery life when operating outside the range of -20°C to +65°C
Humidity:	0-100% non-condensing

Power supply:

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



AquaLink technical specification

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

AquaLink

Water network efficiency

Uploading data:

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

Firmware Features and Configuration:

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

Data sent during communication:

- Aqualink ID
- 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

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 minute (DATA (GPRS)/SMS), up to once every month.

Recording data:

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

Alarms:

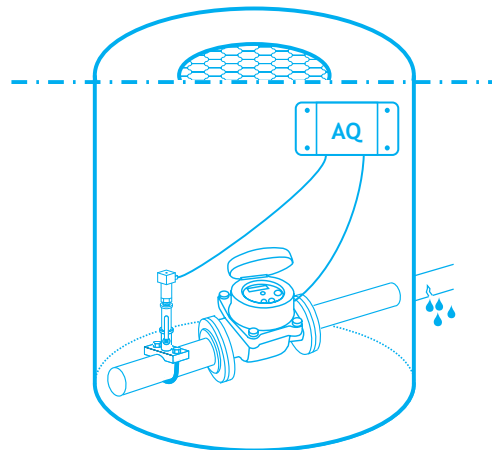
- Independently configurable thresholds for each input (min. and max. number of pulses during a save interval for digital mode, min. and max. value for AQ Pressure/Temperature mode)
- When the defined conditions are exceeded, an alarm is sent with the current input value, and type of alarm (undervalue,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

Standard package:

- AquaLink
- AquaWeb access
- External antenna

Accessories:

- Pole with additional antenna
- Solar cells
- SIM chip
- Installation tools
- AQPressure low power pressure and temperature sensor



WARRANTY: Products are covered by a 2-year warranty in the EU and 13 months outside the EU.

CERTIFICATES: CE, ROHS, Manufactured in EU

Trademarks | All other brand and product names are trademarks or registered trademarks of their respective holders.

Disclaimer | The following warranty and liability disclaimers apply to this product.

AQ Link GmbH MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WITHOUT IMITATION THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE REGARDING ITS HARDWARE AND SOFTWARE PRODUCTS. AQ Link GmbH DOES NOT WARRANT, GUARANTEE OR MAKE ANY REPRESENTATIONS REGARDING THE USE OR THE RESULTS OF THE USE OF ITS HARDWARE AND SOFTWARE PRODUCTS IN TERMS OF THEIR CORRECTNESS OR OTHERWISE. THE ENTIRE RISK AS TO THE RESULTS AND PERFORMANCE OF ITS HARDWARE AND SOFTWARE PRODUCTS IS ASSUMED BY YOU. THE EXCLUSION OF IMPLIED WARRANTIES IS NOT PERMITTED BY SOME STATES. THE EXCLUSION MAY NOT APPLY TO YOU IN NO EVENT WILL AQ Link GmbH, ITS OFFICERS, EMPLOYEES OR AGENTS BE LIABLE TO YOU FOR ANY CONSEQUENTIAL, INCIDENTAL OR SPECIAL DAMAGES (INCLUDING DAMAGES FOR LOSS OF BUSINESS PROFITS, BUSINESS INTERRUPTION, LOSS OF BUSINESS INFORMATION AND THE LIKE) ARISING OUT OF THE USE OR THE INABILITY TO USE ITS HARDWARE AND SOFTWARE PRODUCTS EVEN IF AQ Link GmbH HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. BECAUSE SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF LIABILITY FOR CONSEQUENTIAL DAMAGES, THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU.

WARNING | AQ Link GmbH products, and products described in the documents are not authorized for use as critical components in any life support system where failure of the product is likely to affect the system's safety or effectiveness.

Recycling information | At the end of this product's life it should not be put in commercial or domestic refuse but sent for recycling. Any batteries contained within the product or used during the products life should be removed from the product and also be sent to an appropriate recycling facility.

AQ Link GmbH

Ludwigstr 27

DE - 83435 Bad Reichenhall

www.aq-link.de

support@aq-link.de

+49 8651 9049924

Page | 2

