

WaterIQ Technical Specifications

Features

- Waterproof IP67 enclosure.
- Add or change a sensor probe in seconds.
- Holders and brackets ready for installation inside the reservoir.
- Internal SIM connector for 2G model.
- Low powered.
- Battery operable.
- Radios available: 868MHz, 2G/GPRS.
- Data is stored in the cloud.
- Graphical and intuitive web interface.



Radio interfaces

Technology	Frequency	Transmitter Power	Sensitivity	Range
868 MHz RF	Frequency band : 869.400 – 869.650MHz Carrier bandwidth; 200 kHz	Transmitter power: 1 W Effective radiated power: 4 W	-112dBm	2Km
2G/GPRS	Quad-band GSM 850/900/1800/1900 MHz	Output power - Class 4 (2W) @ 850/900MHz - Class 1 (1W) @ 1800/1900 MHz	≤- 108dBm (typ.) @ 850/900 MHz ≤- 107 dBm (typ.) @ 1800/1900 MHz	- Km - Typical carrier range

Hardware

Specifications

	Relay unit	Sensor unit
Dimensions	414.5 x 221.5 x 100.0 mm	214.5 x 121.5 x 51.0 mm
Temperature Range	-20°C, 85°C	-20°C, 85°C
Inputs	Two Digital input channels	Three 4 to 20mA Input channels Channel specification : None Two Digital input channels
Outputs	Three 4 to 20mA outputs channels Channel specification <ul style="list-style-type: none"> • NONLINEARITY : 0.002% • LOW OFFSET DRIFT : 1μV/°C • ACCURACY : 0.015% Two Digital output channels	Two Digital output channels

Electrical Characteristics

	Relay unit	Sensor unit
Board Power Voltages	10V to 30V DC	12V
Maximum admitted current (sleep mode)	0.1mA	0.1mA
Maximum admitted current (peak)	2.5A	2.5A

Description

The system is made up of a sensor and relay unit. The relay unit transmits readings to a backend via the GSM network. It may also receive ADMIN instructions from the same backend. MQTT protocol is used to send and receive data. The sensor units use short range two way radio to communicate with the pump unit. Sensor units have two digital inputs, two digital outputs and three analogue inputs. Relay units have two digital output, two digital input and three analogue outputs.

Features

- The system is designed for battery and solar power.
- Battery voltage monitoring and status reporting.
- Secure mode communication and broadcast is available.
- System status report.
- Web interface for device configuration and monitoring.

Applications

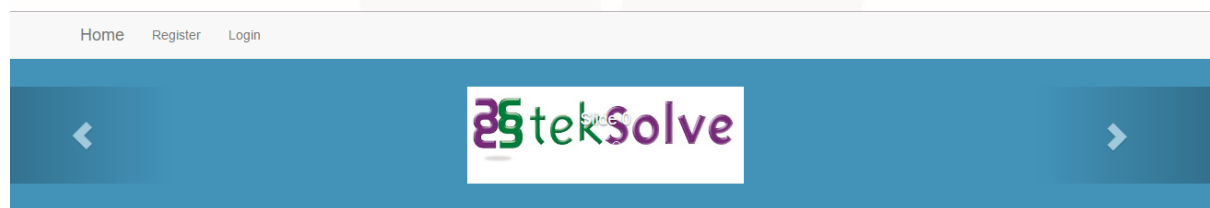
- Reservoir supply monitoring
- Water quality monitoring
- Tank level monitoring
- Pump control and monitoring
- Power failure notifications



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Web interface

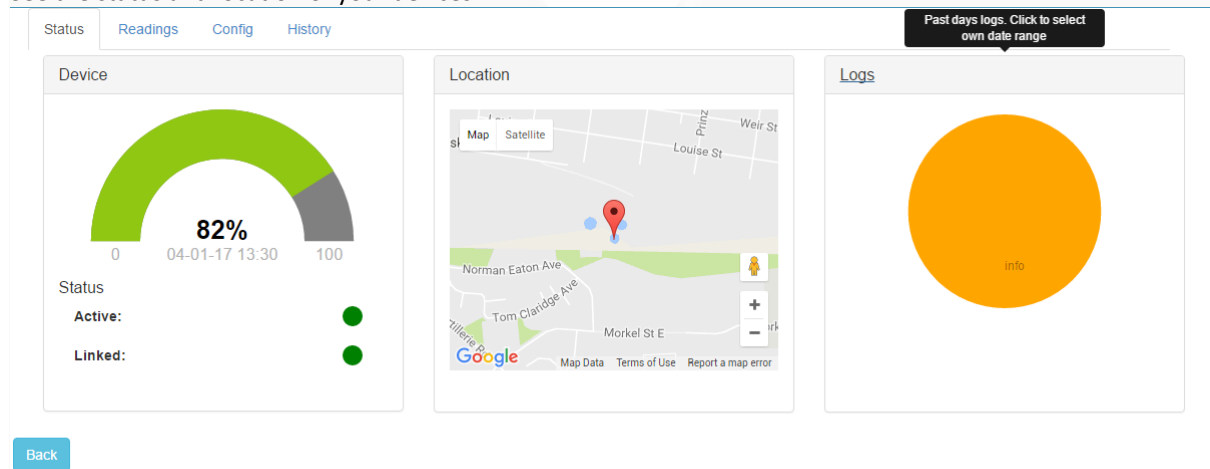
Device readings are presented via the web interface. Additionally, the interface has the ability to send proactive alerts and warnings e.g. low battery alert.



Features:

- Internet enabled
- Scaleable
- Low power
- Modular Structure
- Rugged and waterproof
- Reports and alerts

See the status and location of your devices



See readings from your device

