

Summary

The Water storage kit is the best tool to simplify and unify your Remote monitoring & Control and improving management and operation of the **water storage facility**.

Applications

The Water storage kit provides remote monitoring and control of water distribution station, enables real time reading of water level, read water flow and total water quantity on predefined periods of time, operates the valve and read back its status. The user can monitor also the quality of the water –

Cl concentration and pH.

The data is transferred via cellular network to RealiteQ cloud based SCADA. The kit can also have direct communication with water wells to manage the supply-demand situation.



Features

- Remote monitoring to practically all parameters of Water Storage tower.
- Latch Valve control (Open/Close)
- Can be used as stand-alone kit or can be connected to the RealiteQ web based complete SCADA solution,
- Integrate with 3rd Party software's (HMI, BI...)
- System status report in table and graphic forms.
- Alarming – via e-mail and SMS; Alarm history
- Real time & Historical data, trends,
- Support standard protocols
- Solar/battery powered – fully independent from main electricity supply
- Analog input for water pressure measurement, 3 analog inputs for water flow, Cl concentration and pH sensors
- Digital input for valve status, low and high level alarming, cover/door open, water totalizing (pulses).
- Digital output for valve open-close control.

Optional

- Can be set as “Monitoring only” Kit - usually for security reasons.
- Can communicated directly with water wells/ pump stations to manage supply-demand balance.
- PLC and/or smart sensors can be connected via serial or Ethernet

About Reali Technologies Ltd

An Israeli leader in Industrial IoT, Telemetry, Cloud control & SCADA for energy, water, wastewater, agricultural and industrial applications. The firm operates it's RealiteQ platform to allow global operation of remote & secured sites in real time.

RealiteQ Technology Platform

A Real Time remote Control full cloud technology; 4th generation SCADA; Single source for end-to-end remote control systems; Low CAPEX & OPEX; Simple to operate and maintain; integrative with managerial/operational/BI existing solutions; Highly secured; No software installation required; Multi-platform & mobile support; Unlimited (No. of user & remote sites), So called Real Time communication.

CUSTOMER BENEFITS

- Low CAPEX & OPEX
- No need of dedicated infrastructure.
- Maintenance is not required.
- Unlimited users & remote sites.
- One Stop Shop.

Economical Model

- One time Payment for the kit (including SIM card)
- Yearly payment for SAAS (Including cellular Data Package)

Web Security

RealiteQ provides highly secured Cloud based solution. Reliable Service – Multiple hosting (Amazon). Most advanced Security procedures are able FOC to full service).

Solar Water storage (Tower) Plug & Play Plus Kit

Digital Inputs

- 8 configurable digital inputs/outputs
- Low and high-level switches
- Water total pulse counter
- Valve open/close status
- Door/cover open

Digital Outputs

- Two digital outputs for latch valve control (pulse open/pulse close)

Analog Inputs

- 8 analog inputs 0/4 – 20 mA; 10 bits
- Water level
- Water flow
- Cl concentration , PH sensor
- 4 additional analog inputs available

LED indicators

- Modem connected to cellular network
- Modem connected to Internet
- PLC communication status
- Server communication status
- iCEX power supply

Solar Panel:

Max Power at STC: 15W
 Eff. Of cell: 16.8%
 Optimum operating voltage: 8.88V
 Optimum operating current: 1.69A

Item no.	Quantity	Description
1	1	THHLEP0296953 Battery assembly
2	1	THHLEP0296953 MSC assembly
3	1	PV-15W/PV (350*350*18)
4	80cm	PV Outdoor cable 2 wiers 1 mm ²
5	3	Polyamid cable ST-M 1.5*12 Black
6	3	Aum Polyamid GMP 1.5*12 Black
7	100mm	Black wier 24AWG UL-1007/1569 T-105°C
8	100mm	Red wier 24AWG UL-1007/1569 T-105°C
9	1	Fuse Holder
10	1	Controller
11	3	Crimp Housing, Single Row, Version G, 2 circuits
12	6	SL™ Crimp Terminal 70058, 22-24 AWG
13	1	Enclosure, PC, High base, smoked transparent cover 225*180*125
14	2	Mounting plate for enclosure 180*130*
15	2	Neoprene gasket to PG13
16	2	Um Polyamide gray color to PG13
17	2	PG13.5

Power supply:

- Solar panel type TPVM015009002
- Max. power at STC – 15W
- Operating temperature - -40 to +85 °C
- Dimensions: 350 x 350 x 18 mm
- Weight: 1.5 kg

Cellular network

- Quad band 3G (850/900/1800/1900 MHz); SIM card interface (relevant SIM card and Data plan included)

Interface to optional PLC

- Ethernet port – supports Modbus IP and Siemens protocols
- Serial port RS232/485 – supports Modbus RTU, DF1 and SNPX protocols

Physical Dimensions:

For indoor or outdoor installation

Kit Box:

- Dimensions: 250 x 180 x 130 mm
- Wall mounted – mount brackets included.
- Environment protection according to NEMA class 1, 4, 4X, 6, 12, 13; (IP66)

Junction Box:

- Dimensions 162 x 82 x 55mm
- Environment protection IP67

Cable length between Kit box and Junction box - 1.5 m.

