

Widaq- P: Wi-Fi Based Device for IOT enabling of Water Meters.

Widaq-P is an IoT enablement device for water meters to monitor water consumption of domestic flats / societies & industrial consumers. This device calculates water consumption by counting pulses from water flow sensors. The water flow sensors are to be installed in the water inlet pipes of the consumer. Device will totalize water flow and send the information to MQTT broker periodically. Normally the device will operate from a 12V power adapter. In case of power failure, device will continue to totalize the water consumption with built in battery. During power off condition, device will inform MQTT broker with power OFF event and stop Wi-Fi communication to save battery. On power restoration, device will resume Wi-Fi communication and send Power ON event. During configuration Pulses per litre, SSID of AP with username, password will be set in device.

The water consumption data sent to cloud is logged and the daily, weekly, monthly totals are displayed to the consumer in an App. From the Central server Water Bills are sent at the end of month to the consumers based on their consumption. Optionally track can be kept on the incoming water to the society, the level in the underground tanks, rain harvesting tank and the overhead tanks as required.

Hardware Specification:

- Input : Pulse Input (Upto 3 Khz) – 8 Nos
- Input Type : Reed Switch , NPN
- Power : 230 VAC to 12 VDC Power Adapter (3 pin) provided
- Battery : 11.1V 1100mAH Li-ion Battery
- Enclosure : IP65



LED Indications:

- Power On State: Blinks Every Second – Not Connected To Wi-Fi AP.
5 Sec. On & 5 Sec. On – Connected To Wi-Fi AP.
Steady – Connected to MQTT Broker.
- Power Off State : 1 Sec On, 30 Sec Off

Schematic Diagram for Connectivity:-

