

LPWAN miniUNI Water meter IP68

LPWAN miniUNI Water meter device has been designed for different tasks where flow of water should be monitored. This device supports both inductive and optical sensing heads which can be fitted to different water meter portfolio either without any adaptor or with adaptor. The device is fully customer configurable and is capable to collect history of flow, detects unauthorized handling with sensing head, registers both forward and backflow, measures ambient temperature and brings new possibilities in comparison with simple pulse units delivered as original accessory from water meter manufacturer.

MiniUNI Pressure is designed for 2 sensing heads – typically for cold/hot water flow measuring or for twin water meter configurations in industry. Beside forward and backflow sensing, the device is capable to monitor maximum flow configured by user and if exceeded, alarm message is triggered.

The device is battery operated and battery lifetime has been optimized by selection of high quality and ultra-low power components. 7+ year between battery replacement can be expected with 6 messages per day. Enclosure is made of high-quality ABS plastic and major parts are strictly designed to meet requirements for IP68 protection.

Usage

- Forward and back flow monitoring
- Invoicing for water consumption
- Critical flow monitoring
- Leakage detection monitoring



LPWAN Pressure IP65 device	Parameter
Protection	IP68 – all electronic parts are in resin by default
Operating temperature	-40 to +85°C
Power supply	3.6V lithium battery 9000mAh C size, IP68 coated replaceable
Power consumption	<50uA in deep sleep/80mA transmission (Sigfox, LoRa) / 500mA (NBIoT)
Battery lifetime	Aprox. 30 000 transmissions
Supported LPWAN standards	Sigfox, LoRaWAN, NBIoT (one of selected upon order)
Dimensions	107 x 65 x 33 + sensing head
Weight	185g + sensing head
Water meter sensing head	Adopted for Sensus 420/620, MaiStream, iTron Floodis+ and ENBRA, up to 2 heads supported per radio unit
Accuracy	+/-1 @ 1000
Cable length	Upon request
Antenna/typical range	Helical, gain 2.5dBi/45 to 110km depends on LPWAN technology







Water meter sensing heads examples



Itron Floodis adaptor solution



Sensus 420 direct connection



ENBRA optical solution for hot and cold water



Sensus MEISTREAM adaptor solution

Other water types can be adopted with more or less effort, feel free to contact Solidus Tech team to consult other options.

Android application for B2C solution coming soon (3Q/2020)...

- Quick device adding to list over QR code
- Edit/Delete device
- Up to 250 devices in list
- Important parameters quick view
- Push/email notifications
- Device battery and signal status view
- History data view





