

Water meter reading unit

PRODUCT DESCRIPTION

The LPWAN miniUNI Water Meter has been designed for a wide range of applications where water flow monitoring is required. The device supports both inductive and optical sensor heads, which can be installed on various types of water meters, either without an adapter or with an adapter according to the specific water meter design. The device is fully configurable by the customer and allows for historical flow data storage, sensor tamper detection, forward and reverse flow registration, ambient temperature measurement and offers extended functionality compared to simple pulse units supplied by the water meter manufacturer as original accessories.

MAIN FEATURES

- high compatibility with various types of water meters thanks to the possibility of adaptation to a wide portfolio of manufacturers and designs
- support for inductive and optical reading heads with the option of installation without an adapter or with an adapter depending on the type of water meter
- flow measurement in both forward and reverse directions including monitoring of maximum flow with user-adjustable limit and automatic alarm when exceeded
- temperature measurement at the water meter installation site for extended operational and diagnostic use
- battery powered with replaceable battery and optimized consumption – expected lifespan of 7+ years at 6 messages per day
- robust device construction – housing made of high-quality ABS plastic, design meeting IP68 protection requirements



FEATURES	PARAMETERS
Protection	IP68 – all electronic components are standardly encapsulated in resin
Operating temperature	-40 až +85°C
Power supply	3.6V lithium battery 9000mAh C size, replaceable, with IP68 protection
Power consumption	<50µA in deep sleep / 80mA transmission (Sigfox, LoRa) / 500mA (NB-IoT)
Battery lifetime	Approx. 30,000 transmissions
Supported LPWAN Standards	Sigfox, LoRaWAN, NB-IoT (one selected upon order)
Dimensions	107 × 65 × 33 + sensing head
Weight	185g + sensing head
Water meter sensing head	Designed for Sensus 420/620, Maistream, iTron Floodis + a ENBRA, support for up to 2 heads on each radio unit
Cable length	As required
Antenna / typical range	Helical, gain 2.5 dBi / 45 to 110 km depending on LPWAN technology

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Examples of Water Meter Sensors



Itron Flodis Adapter Solution



Direct Connection to the Sensus 420



Optické řešení ENBRA pro horkou a studenou vodu



Sensus MEISTREAM Adapter Solution



MARK	MODEL	TYPE
Itron	Woltrex M	Industrial
	aquadis	Industrial
	Flodis	Home
	Flostar M	Industrial
Honeywell/Elster	Helix H4000	Industrial
	Elster R160H	Home
	Elster V200	Home
	Elster S110	Residential
Enbra	ER-AM	Residential
Sense	420	Home
	620	Home
	Mainstream 50	Industrial
Zenner	WSD 150	Industrial
	IUWS	Home
	MTKD	Home
	ETWD M/N	Residential
	ETKD M/N	Residential
	Minomess A	Residential
GWF	Sonic Dwarf	Residential
Kamstrup	Multical 21	Residential