

# WARIDA WGA LTE



The WARIDA WGA LTE telemetry overlay is a telemetry module that communicates using Cat.M1 or NB-IoT technology. It is a communication medium for water meters used in water supply installations. The module is easy to install, which is carried out without breaking the legalization seal of the water meter.

The encoded information stored in the device's memory about measurement readings is made available on any platform such as GlobTree. It is a universal and comprehensive solution that allows for monitoring and managing data on water consumption.



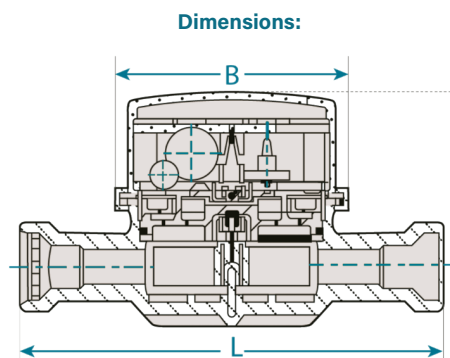
## Technical specifications

### NB-IoT/Cat.M1

Installation method	Directly on the water meter	
Water meter type	FM1*Y type (single-jet, dry-running)	
Method of counting pulses from the water meter	Inductive	
Power supply	Battery 1,6Ah	
Battery type and voltage	Type D 3.6V / 4x AA 3.3V	
Battery life	10 years	
Working temperature	-20°C - 55°C	
Air-tightness class	IP68	
Antenna	External/ internal	
Communication with water meter	Inductive	
Communication with the overlay	Wireless, using the MQTT protocol	
<b>Transmission parameters</b>	<b>Cat.M1</b>	<b>NB-IoT</b>
Transmission protocol	MQTT	
Transmission speed	max. 1Mbit/s	max. 159 kbit/s
Transmission type	Two-way (full-duplex)	Two-way (half-duplex)
Frequency	800 MHz (LTE B20) 900 MHz (LTE B8) 1800 MHz (LTE B3) 2100 MHz (LTE B1)	

## Hydraulic parameters

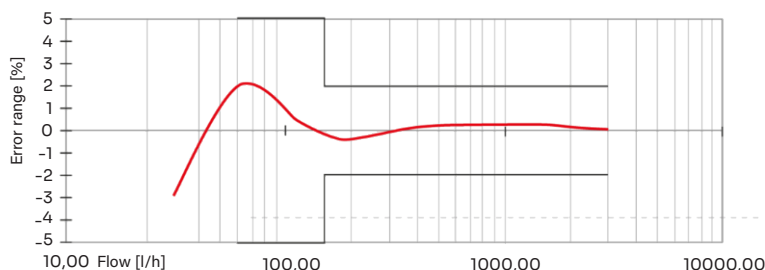
- Water meters in compliance with Directive 2014/32/EU
- Metrology class by MID: R: 100/160H, 50V
- Cold water (50°C), hot water (90°C)
- Eight-position counter for visual reading
- Hygienic certificate of PZH
- Brass body
- Working pressure 1.6MPa
- Hermetically closed counter of IP 68 class, reresistant against contamination and evaporation
- Serial number is permanently imprinted on totalising mechanism, is resistant to water hammer
- Resistant to external magnetic field
- Double-sided counter bearing on technical stones



### Technical specifications:

Nominal diameter	DN	mm	15	15	20
Nominal flow rate	$Q_3$	$m^3/h$	1,6	2,5	4,0
Measuring range	R	$Q_3/Q_1$	H100, V50		
Minimum flow	$Q_1$	l/h	16,0	25,0	25,0
Intermediate flow	$Q_2$	l/h	26,0	40,0	40,0
Maximum flow	$Q_4$	$m^3/h$	2,0	2,5	5,0
Start-up flow	-	l/h	5-7	6-8	8-11
Indication range		$m^3$	99999,999		
Elementary plot		l	0,05		
Working pressure max	$P_{max}$	bar	16		
Pressure loss max	$\Delta p$	bar	0,63		
Temperature class	T	-	30, 90		
Flow sensitivity class	-	-	U0, D0		
<b>Installation position</b>	-	-	H, V		
Spigot thread	G	cal	3/4"	3/4"	1"
Construction length	L	mm	110	80, 100	130
Height	H	mm	70	70	73
Counter diameter	B	mm	70	70	70,0
Weight	L	kg	0,45	0,45	0,6
Pulse value	K	l/imp	1,0		

### Error curve diagram:



### Pressure loss graph:

