WARIDA WGA NB-IoT/Cat.M1

The WARIDA WGA NB-IoT/Cat.M1 radio module is an advanced communication device that enables remote reading of media using Cat.M1 or NB-IoT technology. The WARIDA WGA NB-IoT/Cat.M1 device offers reliability, efficiencyand integration with any system, e.g. GlobTree.

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

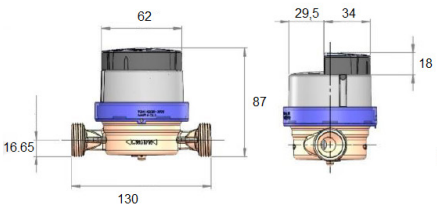
Technical specifications - radio module

NB-IoT/Cat.M1

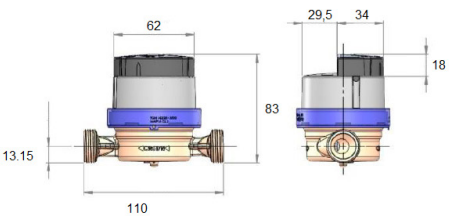
Installation method	Directly on the water meter	
Water meter type	FM1*Y type (single-jet, dry-running)	
Method of counting pulses from the water meter	Inductive	
Power supply	Battery 1,6Ah	
Battery type and voltage	Battery	
Battery life	10 years	
Working temperature	-20°C - 55°C	
Air-tightness class	IP68	
Antenna	10 years	
Communication with water meter	Inductive	
Communication with the overlay	Wireless, using the MQTT protocol	
Transmission parameters	Cat.M1	NB-IoT
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)	

Direct installation, no need for use of cables, automatic activation of radio data transmission. Comfortable, compact size of the device and solid construction provide stable operation in different conditions.

DN20



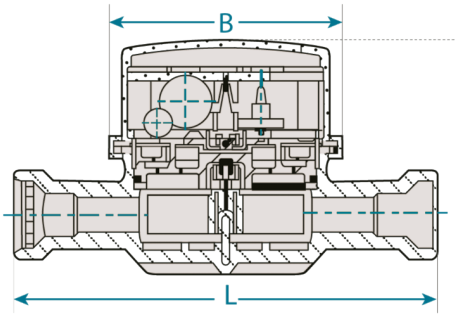
DN15



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

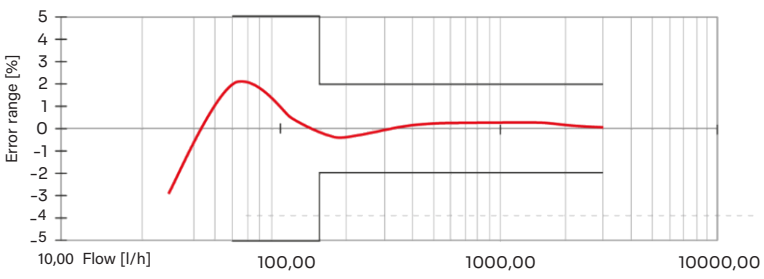
Dimensions:



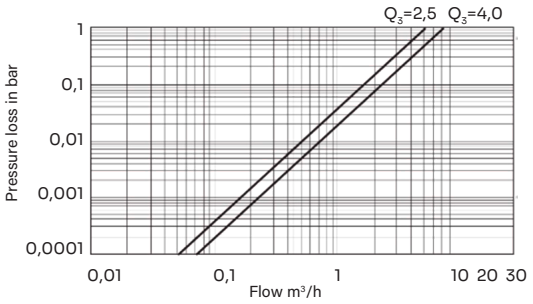
Technical specifications:

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	Δp	bar	0,63		
Temperature class	T	-	30, 90		
Flow sensitivity class	-	-	U0, D0		
Installation position	-	-	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:



NB-IoT

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