

# WARIDA WGA LoRa



The WARIDA WGA LoRa radio module is an advanced communication device that allows remote utility reading using the LoRaWAN protocol. The WARIDA WGA LoRa device offers reliability, performance and integration with any system e.g. GlobTree.

Measurements sent by the radio module to the gateways are shared on any platform such as GlobTree. It is a universal and versatile solution that allows monitoring and management of water consumption data.



## Technical specifications - radio module

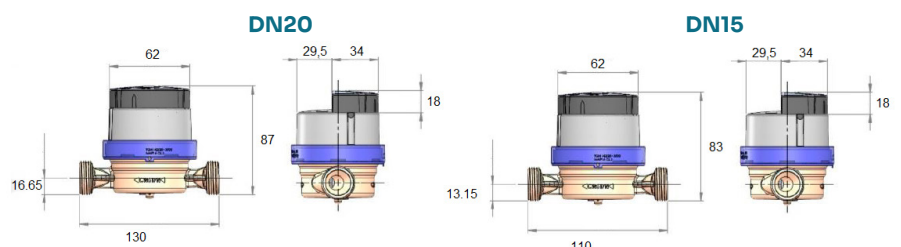
### WARIDA WGA LoRa

Installation method	Directly on the water meter
Water meter type	FM1*Y type (single-jet, dry-running)
Power supply	Battery 1,6Ah
Battery type and voltage	2/3AA 3.6V
Battery life	10 years
Working temperature	-20°C ÷ 55°C
Air-tightness class	IP51 IP68
Antenna	Built-in
Communication with water meter	Inductive
Security / data encryption	AES-128-CBC
Communication with overlay	Infrared + Radio

### Radio parameters

Transmission protocol	LoRaWAN
Transmission speed	0.25 - 5.5 kbps
Transmission type	Two-way
Frequency	863 - 870 MHz

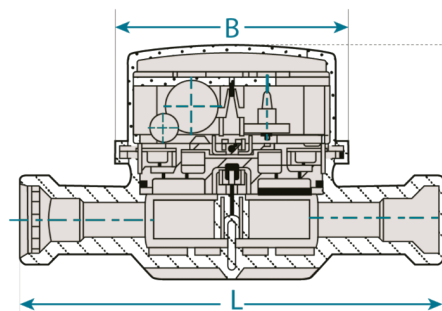
Direct installation, no need for use of cables, automatic activation of radio data transmission. Comfortable, compact size of the device and solid construction provide stable operation in different conditions.



## 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, resistent against contamination and evaporation
- Serial number is permanently imprinted on totalising mechanism, is resistent to water hammer.
- Resistant to external magnetic field
- Double-sided counter bearing on technical Stones

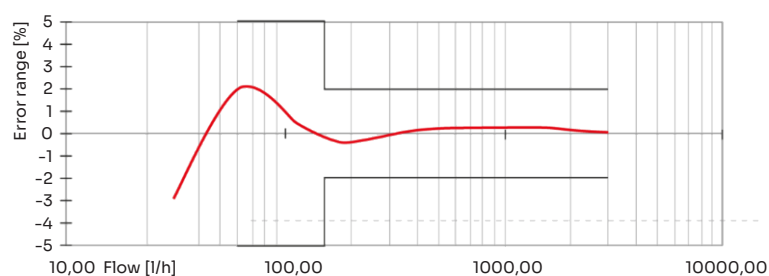
Dimensions:



### 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	$\Delta p$	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:

