

<u>IntelliSônic</u>

Ultrasonic Smart Water Meter

Genus offers Static Ultrasonic Smart Water Meter for accurate measurement and recording of volume of water used in domestic applications. It has multiple advantages over traditional mechanical type of meters.

Combined with various options of communication, the same meter functions as smart water meter for remote reading purpose (AMR/AMI).



Features & Benefits

- Ultrasonic Smart Water Meter
- LoRa / Bluetooth / M-Bus / NB-IoT for communication
- Enabled with water leakage detection.
- · Reverse detection
- No measurement of air
- Mounting in any installation position
- Battery life upto 15 years (1 read a day)
- Suitable for outdoor installation
- FOTA Compatible (NBIoT Only)

- User friendly display of parameters
- Alarm notification
- No magnetic influence
- Data recording for consumption values
- IP protection as IP68
- Optical port for local reading
- Notification for abnormality and tampers
- Brass Body
- Dual Check Valve (Optional)
- Interval configuration for 15,30 & 60 mins









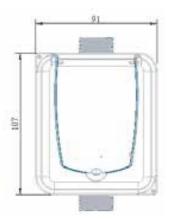
Communication Technology

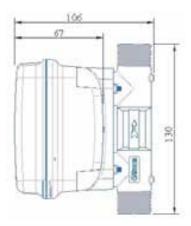
Smart water meter is able to communicate with remote communication devices on various technologies as mentioned below

- · LoRaWAN
- **Bluetooth Communication**
- M-Bus wired and wireless
- NB-IoT
- Support for LWM2M protocol (NBIoT Only)

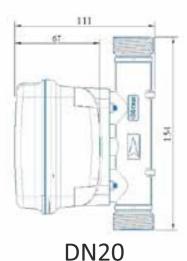
STANDARDS	ISO 4064	
MID	OMIL R49	
AS3565	AS4020 WATERMARK	
RCM		

Dimension





DN15



Data Monitoring & Logging Facility via HES (Head End System)

The meter has memory storage for keeping records intended for analysis of various types of data analysis and monitoring purpose. This data can be downloaded to local/remote application using its communication capability and can have further analysis/reporting on HES.

- · Billing history
- · Load survey
- · Tamper logging
- · Low battery indication

This HES application can further be integrated with billing system of utility using the international interfacing standards like web service /API's

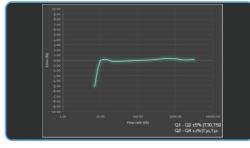
Technical Data	a			
Model	GWU001	GWU002	Environmental	
Size	DN15 & DN20		Livironmental	
Metrology	ISO 4064		Pressure	16 Bar
Class	Class 2		Pressure Loss	0.40 Bar
Communication	LoRa / Bluetooth /Genus RF /		Operating Temperature	upto 50° C
	NB-IoT based communication M-Bus		Transport & Storage Temperature Range	upto 70° C
Flow Rate			Temperature Class	T50
	DN 15	DN 20	Humidity	0 to 85%
Permanent Flow Rate Q3	2500 I/h (2.5 m3/h)	4000 I/h (4 m3/h)	Ratio	R160 / R250 / R400
Maximum Flow Rate Q4	3125 I/h (3.15 m3/h)	5000 I/h (5 m3/h)	Battery Capacity	8000 mAh
Minimum Flow Rate Q1	6.25 I/h	10 l/h	Battery Life	15 Years*
Transitional Flow Rate Q2	10 l/h	16 l/h	Protection Class	IP68
Length (mm)	130,165	130,154,165,190		

*Depends upon Communication Requirement

RoadMap

- Incorporation of Pressure and Acoustic Sensors
- External Antenna for Enhanced Connectivity
- Larger Battery for Extended Usage
- Transition to Wi-Sun Technology over NB-IoT for improved communication
- Android App for User Interaction and Control
- Smart Water Meter as a Prepaid Mode

Performance Curve





Error Curve

Pressure Loss Curve

¶ under process

Gënus energizing lives

Genus Power Infrastructures Ltd. (A Kailash Group Company)

SPL-3, RIICO Industrial Area, Sitapura, Tonk Road, Jaipur-302022, (Raj.), INDIA T. +91-141-7102400/500

Email: metering@genus.in, metering_exports@genus.in | www.genus.in