

SBEM

Partner For Level•Flow•Pressure



Ultrasonic Residential Water Meter AQUASONIC 153 – RWM

INTRODUCTION ::::

SBEM's AQUASONIC series of Residential Water Meters use advanced Ultrasonic Flow Measurement Technique. They act as data end points in Smart Residential Water Metering Systems (AMR/AMI). Its Technology, with no moving parts, ensures reliable, long lasting precision and measurement of lowest flow rates with high accuracies.

HOW IT OPERATES ::::

AQUASONIC uses difference in the propagation time of the ultrasonic wave when transmitted into and against the direction of the flow to measure flow velocity and then calculate flow rate as per the meter size. Totalized flow is made accessible on RF network for collection by Smart Metering Systems. The Meter operates on long life internal battery.

R 400

Every Drop of Water is Precious. With Turn Down ratio(R) of 400, Aquasonic 153 - RWM accounts for both high usage or wastage of water accurately.



FEATURES ::::

- Robust design, more durability.
- No moving parts – means very low maintenance and repairs.
- Installation in any position.
- No air measuring, indifferent to sand and particles in the flow.
- 100 m radio signal range.

CERTIFICATIONS ::::

- ISO 4064:2014
- W&M (OIML R49:2013)
- Drinking Water Approval
- IP68 (submersible) as per IS/IEC 60529:2001

15 Years of Battery Life



Low Power Electronics & Intelligent Software Algorithms utilize Battery efficiently to get 15 Years of Battery Life.

Maintenance Free Operation

High Reliability

Consistent & Accurate Performance of AquaSonic 153-RWM even at the end of Battery Life.

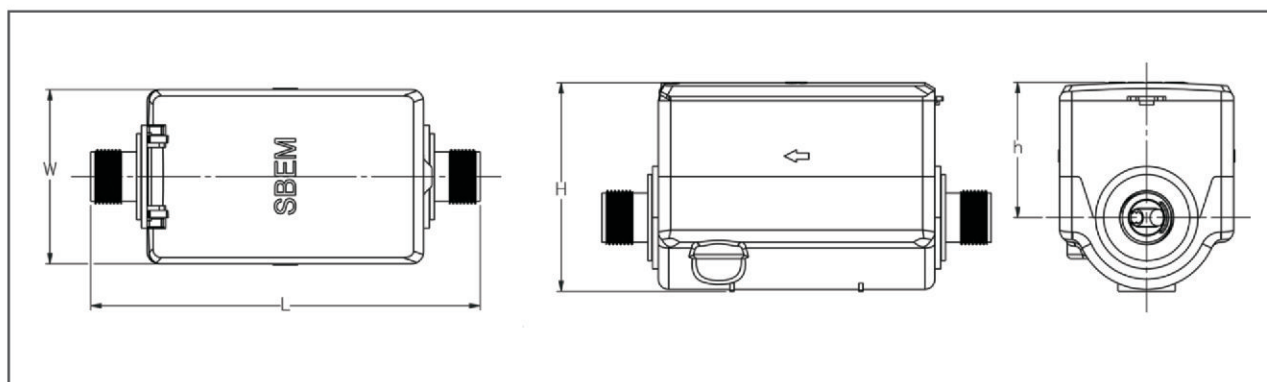
SPECIFICATIONS ::::

Accuracy Class*	Class2	$\pm 2\%$ ($T \leq 30^{\circ}\text{C}$) or $\pm 3\%$ ($T > 30^{\circ}\text{C}$) for ($Q2 \leq Q \leq Q4$), $\pm 5\%$ for ($Q1 \leq Q < Q2$)
Temperature Class*	T50	Water Temperature : 0.1°C to 50°C
Environmental Class*	0	Fixed Meters Installed Outdoors
Electromagnetic Environment*	E1	Residential, Commercial and Light Industrial
Maximum Working Pressure		16 Bar
Head Loss		0.16 Bar at Q3
Body		PPS, Highly Reinforced Composite Material

* - As per OIMLR49 / ISO4064

DIMENTIONS ::::

MODEL	AquaSonic 15	AquaSonic 20	AquaSonic 25
Size	DN 15	DN 20	DN 25
L-Length-(mm)	190	190	260
H-Overall Height-(mm)	106	106	106
h-Height above axis	66	66	66
W-Width (mm)	85	85	85
Thread	BSP	BSP	BSP
Weight in Kg (Approx)	0.8	0.85	0.9



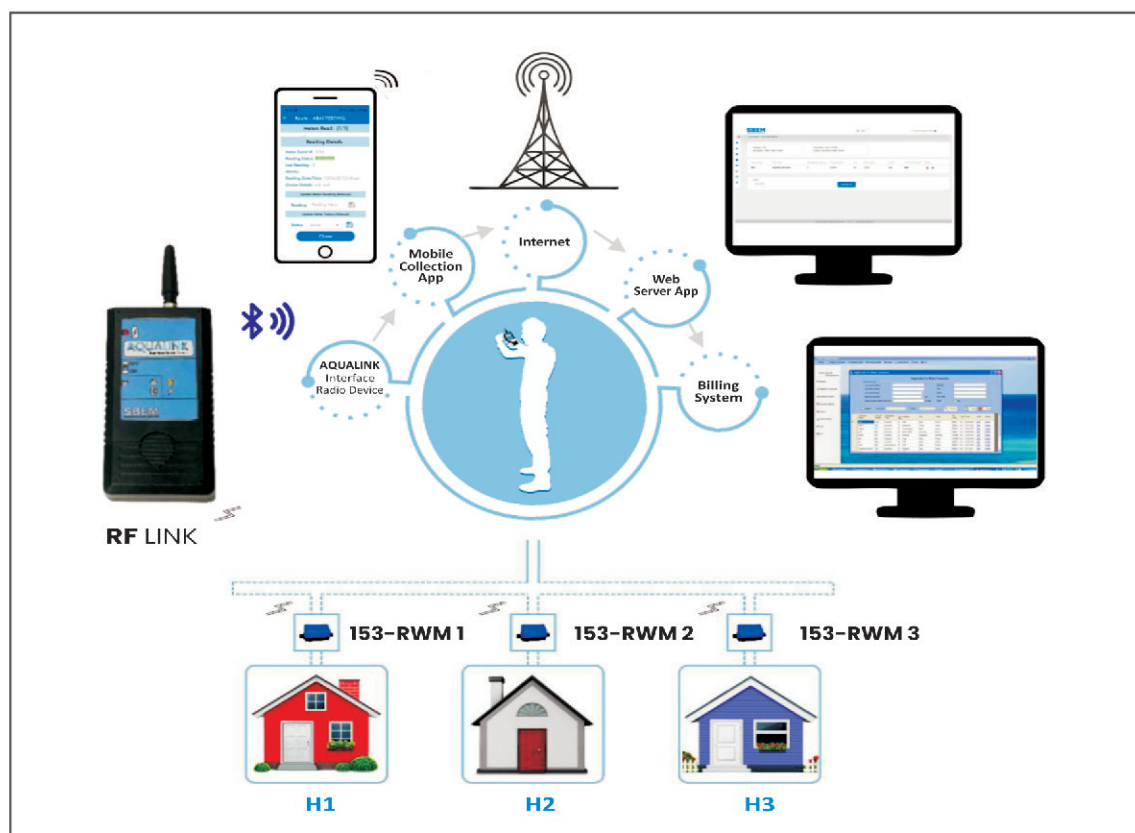
FLOW RATE PERFORMANCE

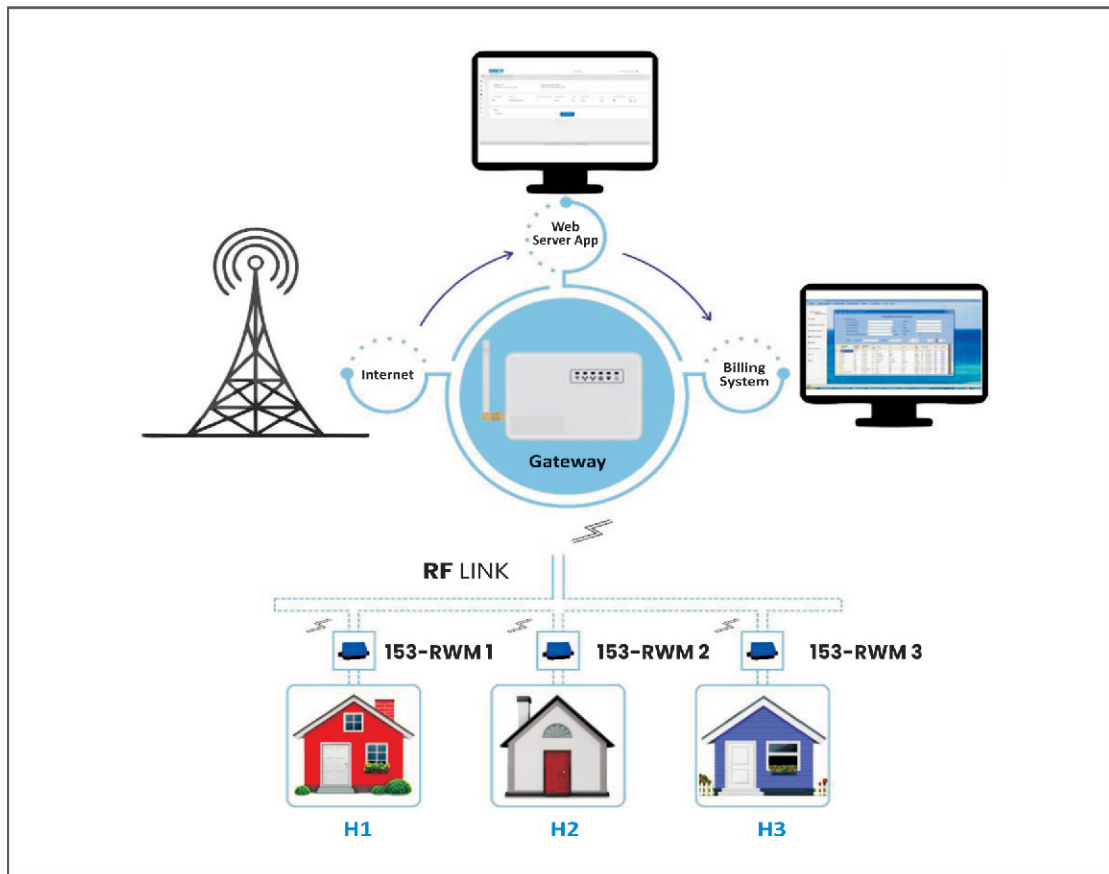
MODEL	AquaSonic 15	AquaSonic 20	AquaSonic 25
Q1(l/h)	6.25	10	15.27
Q2(l/h)	10	16	25.2
Q3(m ³ /h)	2.5	4	6.3
Q4(m ³ /h)	3.125	5	7.875
R	400	400	400
Starting Flow(l/h)	2	2	3
ΔP (bar)	0.16	0.16	0.16

INSTALLATION REQUIREMENTS ::::

- ❑ The meter can be installed in any position (Horizontal, Vertical or Inclined).
- ❑ Prior to the Installation of a new Meter, the Pipeline must be flushed.

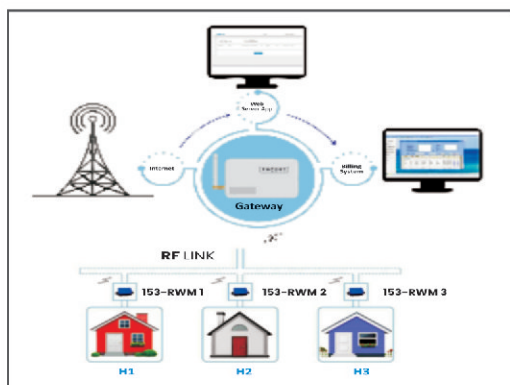
AQUA VIEW - AUTOMATIC METER READING SYSTEM ::::



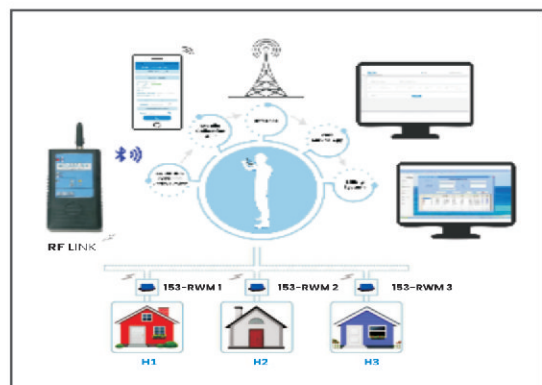


IOT READY ::::

AQUAVIEW



AQUANET



AquaSonic 153-RWM is IOT enabled end node and with the help of AQUANET/AQUAVIEW/AMI Systems the water consumption data can reach upto the utility billing system.