

INTRODUCTION

The IoT-enabled AquaWave 80G battery-operated radar series offers an advanced solution for accurate liquid level measurement across a wide range of applications. Utilizing 80 GHz wireless radar technology, the device delivers high measurement precision with an accuracy of ± 5 mm, a narrow 8° beam angle, and a 200 mm dead band. It operates effectively within a temperature range of 0°C to 60°C and supports a maximum measuring distance of up to 35 meters.

The AquaWave 80G features 4G telemetry with 2G fallback, ensuring robust connectivity within existing systems. The 138 WB radar model is specifically optimized for water and wastewater level measurement applications.



SPECIFICATIONS

Parameter Name	Parameter Description
Measuring Range (m)	5 m, 10 m, 20 m, 30 m, 35 m
Dead Band (mm)	200 mm
Beam Angle	8°
Power Supply	Integrated Lithium Cells Battery (Replaceable)
Battery Life	Up to 5 Years for (1 Transmission Per Day)**
Accuracy	± 5 mm*
Signal Output	<ul style="list-style-type: none"> • GPRS - TCP/IP • GPRS - UDP • GPRS - MQTT
Configuration Interface	Parameter Configuration through SBEM Mobile App via Bluetooth
Enclosure Material	Aluminium with PVC Cap
Process Connection	Threaded / Flange
Protection Class	IP67 Standard; IP68 (On Request)
Process Temperature	0°C to 60°C
Process Pressure	-1 to 2 Bar

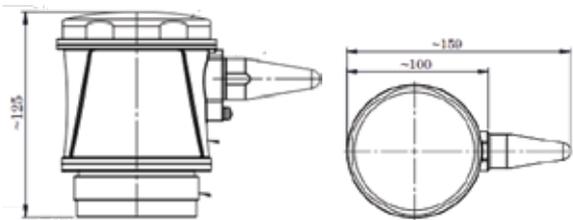
FEATURES & BENEFITS

- Telemetry / IoT communication-enabled
- Long-life battery up to 5 years, replaceable battery
- Configurable sending interval
- Event-based transmission is available
- Logging data record is available
- End-to-end data encryption supported

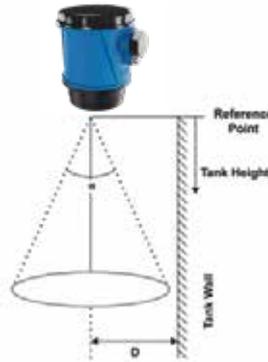
APPLICATIONS

- Water reservoirs - Dam / River / Pond
- Water Treatment Plants (WTP)
- Effluent Treatment Plant (ETP)
- Sewage Treatment Plant (STP)
- Overhead Tank
- Sea Water measurement
- Remote Pumping Station
- Agricultural and Irrigation Water Systems
- Flood Monitoring

MECHANICAL DIMENSIONS



BEAM ANGLE



Tank Height (m)	Tank wall 'D' (mm) $\alpha=8^\circ$
1	85
2	200
5	400
10	760
15	1060
20	1300
25	1800
30	2100
35	2500

ORDERING CODE

138 WB

MR

PC

OP2

AT

SF

MF

MR

Measuring Range

1 : 10 m
2 : 20 m
3 : 30 m
7 : 35 m
9 : 05 m

PC

Process Connection

7 : 2 1/2" BSP Threaded
1 : Slip On Flange

OP2

Output 2 (Communication Output)

5 : GPRS - TCP/IP
6 : GPRS - UDP
7 : GPRS - MQTT

MF

MOC - Slip On Flange

X : Not Applicable
0 : Polypropylene (PP)

SF

Slip on Flange Type

XX : Not Applicable
AC : 3" ANSI
AD : 4" ANSI
AE : 5" ANSI
AE : 6" ANSI

AT

Antenna Type

S : Stub
P : Patch
W : Wired

Note:

*Under the Factory Set Condition.

**Battery life is based on usages.

#Continuous development may necessitate changes without notice.

Scan & Visit Website



About SBEM Pvt. Ltd.

For over 50 years of expertise, SBEM has built a strong reputation in Level measurement, Flow measurement, and Pressure measurement, integrating with the cloud-based IoT platform by gradually adopting and mastering new technologies to meet the changing needs of industries across India and the globe.

HO: Gat No. 326, Shriramnagar, Gaud Dara Road, Khedshivapur, Pune - 412205, Maharashtra, India

Branches: New Delhi, Kolkata, Mumbai, Chennai, Hyderabad, Chattisgarh.