

INTRODUCTION

The ProWave 80G 138 W85 is a high performance, non-contact level transmitter designed for precise measurements in various solid type process industry applications. It uses advanced 80 GHz FMCW radar technology, ensuring accuracy with respect to the surrounding environmental conditions. The device offers a high measurement accuracy of ± 2 mm with a measuring range up to 120 meters and supports 2-wire systems, including 4-20 mA and 4-20 mA + HART communication protocols. This device is designed for demanding industrial environments, the ProWave 80G 138 W85 can withstand temperatures of up to 200°C. Its design and reliable performance for a wide range of Water Treatment, Food and Beverages, and Bulk Solid Measurement.



SPECIFICATIONS

Parameter Name	Parameter Description
Measuring Range (m)	Liquid 120 m, Solid 60 m Liquid 60 m, Solid 30 m
Dead Band (mm)	For Liquid, 300 mm & Solid 800 mm
Beam Angle	3°
Power Supply	2-Wire 24 VDC
Accuracy	± 2 mm*
Updating Interval	2 sec
Display	128 x 64 Dot Matrix Display
Analog Output	2-Wire, 4-20 mA @600 Ω load
Digital Output	HART 7 Communication (Optional)
Installation Method	Threaded and Flanged
Housing Enclosure	Aluminium
Antenna Material	SS + PTFE
Flange Material	Polypropylene (PP), Carbon Steel (CS), Stainless Steel (SS316 / SS304)
Process Connection	Universal Flanged with Aiming Device Universal Flanged without Aiming Device
Enclosure Protection Class	IP67
Process Temperature	0°C to 85°C 0°C to 200°C
Cable Entry	PG11, 1/2" NPT

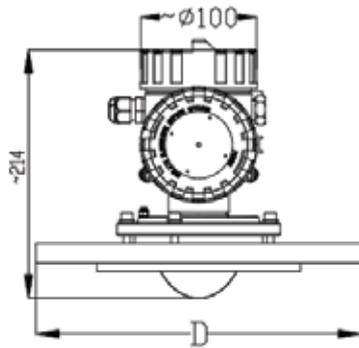
FEATURES & BENEFITS

- Precise level measurement
- HART-enabled
- Narrow beam angle
- IP67 ingress protection
- Support for all solid measurements
- Aiming device to direct the radar beam to angle of repose

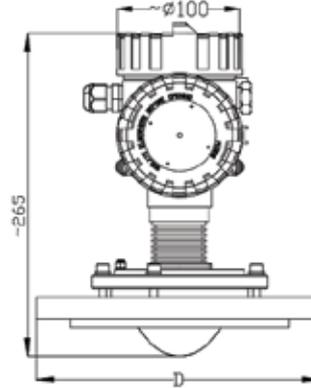
APPLICATIONS

- Sludge Tank, Water Treatment Facility, and Grit Chamber at Water Management System
- Silos and Bins
- Cooling Towers and Treatment Plants
- Coal & Coke Storage
- Cement Silo & Coke Silo
- Coal Bunker & Fly Ash
- Mining and Quarrying
- Bulk Solid at Food and Beverage

MECHANICAL DIMENSIONS



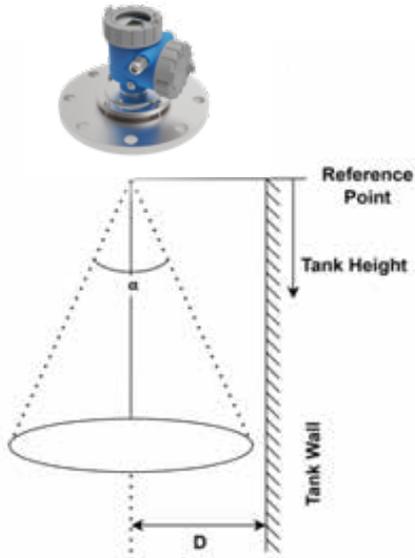
Temperature T: 85°C



Temperature T: 200°C

Standard	Size of Flange	Flange ID	Flange OD	No. of Holes
ANSI	4"	116	229	4
	5"	144	254	8
	6"	170.6	279.5	8
PN 6	DN 100	116	210	4
	DN 125	141.5	240	8
	DN 150	170.5	265	8

BEAM ANGLE



Tank Height (m)	Tank Wall 'D' (mm)
	$\alpha=3^\circ$
1	50
2	100
5	150
10	300
15	430
20	560
25	700
30	720
40	1100
50	1350
60	1600
70	1850
80	2150
90	2400
100	2650
110	2950
120	3200

ORDERING CODE

138 W85

MR

OPI

CE

AT

PC

SF

MF

AP

ST

MR

Measuring Range

5 : Liquid: 60 m,
Solid: 30 m
6 : Liquid: 120 m,
Solid: 60 m

OPI

Output 1 (Signal Output)

0 : 2-Wire 4-20 mA
1 : 2-Wire 4-20 mA + HART

CE

Cable Entry

T : ½" NPT
P : PG11

AT

Antenna Type

01 : SS + PTFE

PC

Process Connection

4 : Universal Flange without Aiming Device
5 : Universal Flange with Aiming Device

SF

Slip on Flange Type

XX : Not Applicable
AD : 4" ANSI 150#
AE : 5" ANSI 150#
AF : 6" ANSI 150#
BD : PN 6, DN 100
BE : PN 6, DN 125
BF : PN 6, DN 150
99 : Other Flange Sizes, Contact HO

MF

MOC - Slip On Flange

X : Not Applicable
0 : Polypropylene (PP)
1 : Carbon Steel (CS)
2 : Stainless Steel (SS316)
3 : Stainless Steel (SS304)

AP

Air Purge

A : Yes
X : No

ST

Service Temperature

0 : Without Stand Off (0°C to 85°C)
1 : With Stand Off (0°C to 200°C)

Notes:

*Under the factory set condition.

#Continuous development may necessitate changes without notice.

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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.

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