

# REINMEER

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## RM-R800NS FMCW SERIES RADAR LEVEL TRANSMITTER

[Data sheet](#)

4-20mA/RS485(Mod-bus - RTU)/Hart

# Radar Level Transmitter

## RM-R800NS

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Data sheet Model RM-R800NS

### Application Areas

Water and Wastewater Management  
Environmental Monitoring & Hydrology  
Civil Infrastructure & Municipal Services  
Agriculture  
Open Channels  
Rainwater Basins  
Dams and Reservoirs  
Simple Industrial Liquid Storage

### Features

- Measured Product: Liquids
- Measurement Range Options: 15 m
- Process Connection: G Threaded or Flange
- Cable Entry: M12 x 1.5 (F)
- Electronics / Output: Two-wire 4...20mA<sub>i</sub>/ MODBUS, or Wireless Bluetooth  
Four wire 4-20mA or RS485 (select one of)

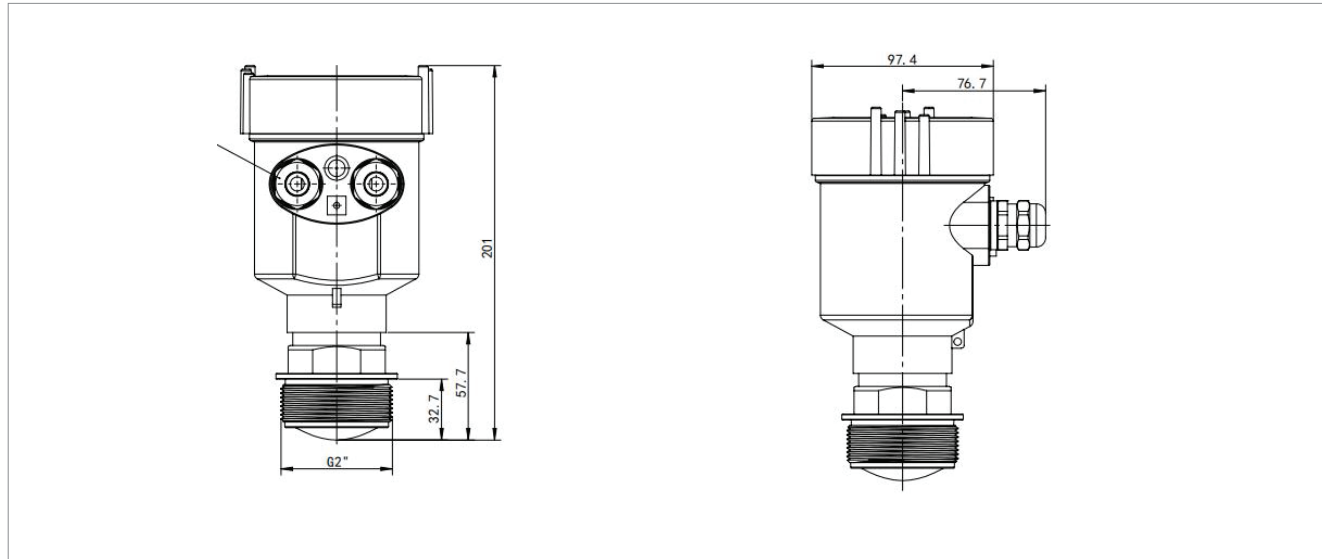
### Description

The RM-R800E (PVDF) is a high-performance FMCW radar level transmitter designed for precise, non-contact level measurement in a variety of industrial and municipal environments. Operating at a frequency range of 77GHz to 81GHz, this sensor offers an impressive accuracy of 2mm for liquids and covers a measurement range of up to 15 meters. Its robust PVDF housing and IP68 protection rating make it exceptionally durable for challenging conditions, such as those found in sewage systems, rain basins, and water treatment plants.

This versatile device is particularly well-suited for open-channel applications, including flume monitoring, dam levels, and pumping stations. It supports flexible installation through a G 1 1/2" male thread or flange connection and operates reliably in temperatures ranging from -40°C to 60°C. Furthermore, the RM-R800E provides modern connectivity options, including 4-20mA signal outputs, RS485 Modbus, and Bluetooth wireless capabilities for easy monitoring via the RadarMe mobile app.



### Structure



### TECHNICAL FEATURES

<b>Operating Frequency</b>	77GHz - 81GHz
<b>Measurement Range</b>	30M-60M
<b>Measurement Accuracy</b>	±2 mm
<b>Beam Angle</b>	±3.5°
<b>Material</b>	SS 304/Sealed PTFE
<b>Process Connection</b>	Standard G2" Male Thread; Other threads and flanges are customized
<b>Process Temperature</b>	-30°C to 80°C
<b>Process Pressure</b>	Normal atmospheric pressure
<b>Signal output</b>	4-20mA / RS485(MODBUS - RTU) / HART
<b>Protection Class</b>	Two-wire DC 24V (22V~30V)
<b>Power supply</b>	IP67
<b>Dimensions</b>	96 mm x 200 mm
<b>Weight</b>	2 kgs.
<b>Explosion-proof</b>	Exd II CT6Gb

# Radar Level Transmitter

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RM-R800NS /  -  -  -  -  -  -  -  -

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⑤
⑥
⑦
⑧

### ① Medium Type

Solid*Liquid	<input checked="" type="checkbox"/>	N/S
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### ② Measurement Range

30 m	<input checked="" type="checkbox"/>	30
60 m	<input type="checkbox"/>	60

### ③ Process Connection

G " Thread	<input checked="" type="checkbox"/>	G
Flange	<input type="checkbox"/>	F

### ④ Process temperature

-30...+80°C	<input checked="" type="checkbox"/>	N
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### ⑤ Cable Entry

M12 x1.5 (F)	<input checked="" type="checkbox"/>	M
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### ⑥ Electronic

Two-wire 4...20mA	<input checked="" type="checkbox"/>	T
MODBUS	<input type="checkbox"/>	M
Wireless Bluetooth	<input type="checkbox"/>	B

### ⑦ Protection

IP 67	<input checked="" type="checkbox"/>	P
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### ⑧ Explosion Proof

Ex db ia IIC T6 Gb	<input checked="" type="checkbox"/>	Ex
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# Contact us

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