

# RADAR LEVEL TRANSMITTER

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## ETRANS – R800E (PVDF) Datasheet

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Precise Measurement,  
Ultimate Control

[www.enelean.com](http://www.enelean.com)



# Radar Level Transmitter

## MODEL R800E (PVDF)



### 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, / MODBUS, or Wireless Bluetooth  
Four wire 4-20mA or RS485 (select one of)

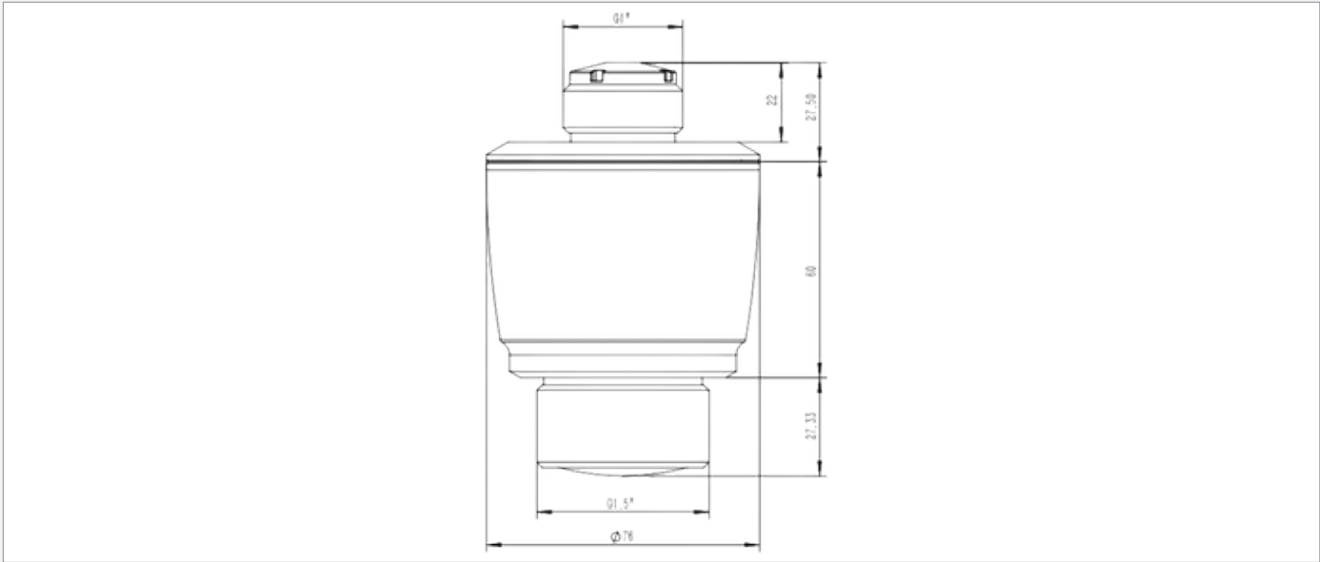


### Description

The RM-R800E is a high-performance radar level transmitter designed for precision liquid measurement, operating within a frequency range of 77GHz to 81GHz. This advanced sensor offers a maximum measuring range of 30 meters with a high degree of accuracy of  $\pm 2\text{mm}$ , ensuring reliable data even in complex industrial environments. Built with a durable Polypropylene (PP) or PVDF housing, it supports various process connections and is capable of operating in temperatures ranging from  $-40^{\circ}\text{C}$  to  $80^{\circ}\text{C}$  under normal atmospheric pressure.

To ensure optimal performance, proper installation is critical to avoid signal interference from internal tank structures like staircases or grilles. The device should be mounted vertically to direct its narrow  $\pm 3.5^{\circ}$  beam angle straight toward the liquid surface, as angling the sensor or placing it near obstructions can result in false echoes or signal loss. With versatile signal outputs including 4-20mA, RS485, and Bluetooth, this radar transmitter provides a seamless integration solution for modern monitoring systems.

Structure



TECHNICAL FEATURES

|                      |                                                               |
|----------------------|---------------------------------------------------------------|
| Operating Frequency  | 77GHz - 81GHz                                                 |
| Measurement Range    | 15 M                                                          |
| Measurement Accuracy | ±2 mm (for liquids)                                           |
| Beam Angle           | ±3.5°                                                         |
| Material             | PVDF                                                          |
| Process Connection   | G 1 1/2" Male thread                                          |
| Process Temperature  | -40°C to 60°C                                                 |
| Process Pressure     | Normal atmospheric pressure                                   |
| Signal output        | Two wire 4-20 mA<br>Four wire 4-20mA or RS485 (select one of) |
| Protection Class     | Two wire DC 24V / Four-wire DC 12V                            |
| Power supply         | IP68                                                          |
| Dimensions           | 76mm x 114mm                                                  |
| Weight               | 0,5 Kg                                                        |
| Blind zone           | 300 mm                                                        |

# Contact us

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Radar Level Transmitter  
MODEL R800E (PVDF)



Etrans-R800E (PVDF) / 

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1 Medium Type

|         |                                     |   |
|---------|-------------------------------------|---|
| Liquids | <input checked="" type="checkbox"/> | E |
|---------|-------------------------------------|---|

2 Measurement Range

|      |                                     |    |
|------|-------------------------------------|----|
| 15 m | <input checked="" type="checkbox"/> | 15 |
|------|-------------------------------------|----|

3 Process Connection

|             |                                     |   |
|-------------|-------------------------------------|---|
| G 1" Thread | <input checked="" type="checkbox"/> | G |
| Flange      | <input type="checkbox"/>            | F |

4 Process temperature

|             |                                     |   |
|-------------|-------------------------------------|---|
| -40...+60°C | <input checked="" type="checkbox"/> | N |
|-------------|-------------------------------------|---|

5 Cable Entry

|              |                                     |   |
|--------------|-------------------------------------|---|
| M12 x1.5 (F) | <input checked="" type="checkbox"/> | M |
|--------------|-------------------------------------|---|

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 68 | <input checked="" type="checkbox"/> | P |
|-------|-------------------------------------|---|