

## Radar measurement

### Micropilot FMR67

The standard sensor for highest demands in bulk solids level measurement with 80GHz technology



#### Benefits:

- Hardware and software developed according to IEC 61508 up to SIL3 in homogeneous redundancy
- Heartbeat Technology for a cost-effective and safe plant operation during the entire life cycle
- HistoROM data management concept for fast and easy commissioning, maintenance and diagnostics
- Highest reliability even with obstructions in vessels due to small beam angle and Multi-Echo Tracking evaluation
- Innovative drip-off antenna of PTFE for maximum system availability
- Reduction of engineering effort due to an easier integration of the 80GHz radar instrument into the process
- The world's easiest proof test concept for SIL saves time and costs

More information and current pricing:

[www.endress.com/FMR67](http://www.endress.com/FMR67)

#### Specs at a glance

- **Accuracy** +/- 3 mm (0.12 in)
- **Process temperature** -40...+200 °C (-40...+392 °F)
- **Max. measurement distance** 125 m (410 ft)
- **Main wetted parts** PTFE, 316L Alignment device: Alu

**Field of application:** Micropilot FMR67 is the first 80GHz radar developed according to the international functional safety directive IEC 61508. It offers maximum reliability due to the drip-off antenna, improved focusing and very small emitting angles which is perfect for the measuring in slim silos. FMR67 is used for continuous, non-contact level measurement in powdery to granular bulk solids. FMR67 also possesses the smart sensor functionality Heartbeat Technology.

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## Features and specifications

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### Continuous / Solids

**Measuring principle**

Level radar solid

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**Characteristic / Application**

Reliable, non-contact level measurement for high silos, bunkers or stockpiles, especially with many obstacles, long measuring range and build-up forming media.

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**Specialities**

Heartbeat Technology,  
SIL 2/3 according to IEC 61508,  
Bluetooth® commissioning,  
Operation and maintenance SmartBlue App,  
Very small beam angle,  
Safety and reliability with Multi- Echo Tracking,  
HistoROM,  
RFID TAG for easy identification,  
Air purge connection,  
Alignment device

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**Supply / Communication**

2-wire (HART),  
Bluetooth® wireless technology and App (optional)

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**Frequency**

W-band (~80 GHz)

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**Accuracy**

+/- 3 mm (0.12 in)

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**Ambient temperature**

-40...+80 °C  
(-40...+176 °F)

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## Continuous / Solids

**Process temperature**

-40...+200 °C  
(-40...+392 °F)

**Main wetted parts**

PTFE, 316L  
Alignment device: Alu

**Process connection**

Thread:  
G1-1/2", MNPT1-1/2";  
Flanges:  
DN80...DN100  
ASME 3"...4"  
UNI DN80...DN250 (3"...10")

**Max. measurement distance**

125 m (410 ft)

**Communication**

4...20 mA HART  
Additional switch,  
Bluetooth® wireless technology

**Certificates / Approvals**

ATEX, FM, CSA C/US, IEC Ex, INMETRO, NEPSI, EAC, JPN Ex, UK Ex

**Safety approvals**

SIL2, SIL3

**Options**

Remote operation via SmartBlue App using Bluetooth®

More information [www.endress.com/FMR67](http://www.endress.com/FMR67)