

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.at.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.

Features and specifications

Continuous / Solids

Measuring principle

Level radar solid

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.

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

Supply / Communication

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

Frequency

W-band (~80 GHz)

Accuracy

+/- 3 mm (0.12 in)

Ambient temperature

-40...+80 °C
(-40...+176 °F)

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

Safety approvals

SIL2, SIL3

Options

Remote operation via SmartBlue App using Bluetooth®

More information www.at.endress.com/FMR67