

Micropilot FMR60B – 80 GHz radar sensor

More simplicity for your application



More information and current pricing:

www.endress.com/FMR60B

Benefits:

- Easy handling through intuitive operation and wizards, for commissioning and verification
- Easier troubleshooting through recommended actions shown on the display
- Reduction of systematic errors through guided SIL-locking, verification and proof testing
- Safety by design: Device development according to IEC 61508
- Increased productivity thanks to process monitoring, verification and diagnostics in the running process with Heartbeat Technology

Specs at a glance

- **Accuracy** +/-1 mm (0.04 in)
- **Process temperature** -40 ... +200 °C (-40 ... +392 °F)
- **Process pressure / max. overpressure limit** Vacuum...20 bar (290 psi)
- **Max. measurement distance** 50 m (164 ft)
- **Main wetted parts** PVDF, PTFE or PEEK

Field of application: Micropilot FMR60B is part of the new generation of 80 GHz radar sensors. It is used for continuous non-contact level measurement in simple liquid applications with small process connections. Wizards guide users through commissioning, proof tests and verification of the devices and thus guarantee a simple operation. Heartbeat Technology offers verification and monitoring functions to identify anomalies for more safety and increased productivity.

Features and specifications

Continuous / Liquids

Measuring principle

Level radar

Characteristic / Application

For simple continuous non-contact level measurements in liquids, pastes, and slurries; Not influenced by changing media,
temperature differences, gas phases or steam;
For vessels with many internals

Specialities

Heartbeat Technology;
SIL 2 according to IEC 61508;
Bluetooth® commissioning;
Operation and maintenance with SmartBlue App;
HistoROM;
RFID TAG for easy identification

Supply / Communication

2-wire (HART/ PROFIBUS PA)
PROFINET with Ethernet-APL
Bluetooth® wireless technology

Frequency

W-Band (~80 GHz)

Accuracy

+/- 1 mm (0.04 in)

Ambient temperature

-40 ... +85 °C (-40 ... +185 °F)

Process temperature

-40 ... +200 °C (-40 ... +392 °F)

Process pressure / max. overpressure limit

Vacuum...20 bar (290 psi)

Continuous / Liquids

Main wetted parts

PVDF, PTFE or PEEK

Process connection

Thread: G3/4" and 1-1/2", MNPT 3/4" and 1-1/2";

Flange: UNI DN80...DN150;

Mounting bracket

Max. measurement distance

50 m (164 ft)

Communication

4...20 mA HART

Additional analog or switch output

PROFIBUS PA

PROFINET with Ethernet-APL

Bluetooth® wireless

technology and app (optional)

Certificates / Approvals

IEC Ex, ATEX, CSA C/US, EAC Ex, JPN Ex, KC Ex,

INMETRO Ex, NEPSI Ex, UK Ex

Safety approvals

Overfill protection WHG;

SIL 2

Design approvals

Acceptance test certificate 3.1, EN10204;

Declaration of Conformity ASME B31.3;

AD2000;

PMI test;

CRN approval

Hygienic approvals

EU Food Contact Material (EC) 1935/2004;

US Food Contact Material FDA CFR 21

Continuous / Liquids

Marine approval

ABS, LR, BV, RINA, DNV

Options

Display,
Customized settings,
App 'SmartBlue' for commissioning
and operation via Bluetooth
Gas-tight implementation;
Overvoltage protection;
PWIS free

Application limits

Process temp. <-40°C (-40°F) or > 200°C (392°F) -> FMR62B
Very aggressive media -> FMR62B
Turbulences, stilling well and bypass -> FMR62B
Strong foam and interfaces --> FMP5x

More information www.endress.com/FMR60B