

# Guided radar measurement Time-of-Flight Levelflex FMP55

The Multiparameter device is the innovation in interface measurement



## Benefits:

- Reliable measurement even for changing product and process conditions
- HistoROM data management concept for fast and easy commissioning, maintenance and diagnostics
- Highest reliability due to new Multi-Echo Tracking evaluation
- Hardware and software developed according to IEC 61508 up to SIL3
- Heartbeat Technology for a cost-effective and safe plant operation during the entire life cycle
- Seamless integration into control or asset management systems and intuitive, menu-guided operation concept (on-site or via the control system)
- Worlds easiest proof test for SIL and WHG saves time and costs

More information and current pricing:

[www.us.endress.com/FMP55](http://www.us.endress.com/FMP55)

## Specs at a glance

- **Accuracy** Rod probe : +/- 2 mm (0.08 in) Rope probe: +/- 2 mm (0.08 in) Coaxial probe: +/- 2 mm (0.08 in)
- **Process temperature** -40...+200 °C (-40...+392 °F)
- **Process pressure absolute / max. overpressure limit**  
Vacuum...40 bar (Vacuum...580 psi)
- **Max. measurement distance** Rod: 4 m (13 ft) Min DK >1.4 Rope: 10 m (33 ft) Min DK >1.4 Coaxial: 6 m (20 ft) Min DK >1.4
- **Main wetted parts** Rod probe: 316L, PTFE, PFA Rope probe: 316, 316L, PTFE, PFA Coaxial probe: 316L, PTFE, PFA

**Field of application:** Levelflex FMP55 guided radar with SensorFusion offers the worldwide first combination of the capacitance and guided radar measuring principle in one device. The instrument guarantees safe

measured value acquisition even in emulsion layers and issues level and interface layer signals simultaneously. This makes the FMP55 Multiparameter the new standard in interface measurement especially in the oil & gas, chemical and petrochemical industry.

## Features and specifications

### Continuous / Liquids

#### Measuring principle

Guided radar

#### Characteristic / Application

Premium device Multiparameter (capacitance and guided radar)

Rod probe, Rope probe, Coaxial probe

Integrated data memory, Factory precalibrated, Reliable measuring: for interface with emulsion, in case of moved surface + foam, for changing medias.

#### Interface measurement

Interfaces liquid / liquid also with emulsion layers;

Simultaneous measurement of interface and overall level

#### Specialities

Heartbeat Technology,

Bluetooth® commissioning,

Operation and maintenance SmartBlue App,

HistoROM,

RFID TAG for easy identification

#### Supply / Communication

2-wire (HART / PROFIBUS PA/ FOUNDATION Fieldbus)

4-wire (HART)

Bluetooth® wireless technology and App (optional)

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**Continuous / Liquids****Accuracy**

Rod probe :  
+/- 2 mm (0.08 in)  
Rope probe:  
+/- 2 mm (0.08 in)  
Coaxial probe:  
+/- 2 mm (0.08 in)

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**Ambient temperature**

-40...+80 °C  
(-40...+176 °F)

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**Process temperature**

-40...+200 °C  
(-40...+392 °F)

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**Process pressure absolute / max. overpressure limit**

Vacuum...40 bar  
(Vacuum...580 psi)

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**Main wetted parts**

Rod probe:  
316L, PTFE, PFA  
Rope probe:  
316, 316L, PTFE, PFA  
Coaxial probe:  
316L, PTFE, PFA

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**Process connection**

Flange:  
ASME 1 1/2"...6",  
DN50...DN150,  
JIS 10K

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**Sensor length**

Rod probe: 4 m (13 ft)  
Rope probe: 10 m (33 ft)  
Coaxial probe: 6 m (20 ft)

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## Continuous / Liquids

### Max. measurement distance

Rod: 4 m (13 ft)

Min DK >1.4

Rope: 10 m (33 ft)

Min DK >1.4

Coaxial: 6 m (20 ft)

Min DK >1.4

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### Communication

4...20 mA HART

PROFIBUS PA

FOUNDATION Fieldbus

Bluetooth® wireless technology

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### Certificates / Approvals

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

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### Safety approvals

SIL

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### Design approvals

EN 10204-3.1

NACE MR0175, MR0103

ASME B31.1, B31.3

AD2000

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### Marine approval

GL/ ABS/ LR/ BV/ DNV/ KR

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### Options

Sensor remote with 3 m/ 9 ft cable,

Remote operation via SmartBlue App using Bluetooth®

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More information [www.us.endress.com/FMP55](http://www.us.endress.com/FMP55)