



LFR SicWave

Simply brilliant - level measurement in liquids with 80 GHz radar

SICK
Sensor Intelligence.



Technical data overview

Measurement principle	Free-space radar
Detection principle	Non contact
Medium	Fluids
Measurement	Continuous
Process temperature	-196 °C ... +200 °C (depending on type)
Process pressure	In combination with process temperature -196 °C ... +200 °C, -1 bar ... 25 bar (-100 kPa ... 2,500 kPa / -14.5 psig ... 362.6 psig) are possible -1 bar ... 20 bar, (-100 kPa ... 200 kPa / -14.5 psig ... 29.1 psig), (-100 kPa ... 2,000 kPa / -14.5 psig ... 290.1 psig), (-100 kPa ... 1,600 kPa / -14.5 psig ... 232 psig), (-100 kPa ... 600 kPa / -14.5 psig ... 87 psig) (depending on type)
Output signal	4 mA ... 20 mA / HART
Accuracy of sensor element	≤ 1 mm

Product description

The LFR SicWave free-space radar makes continuous level measurements and works with all liquids. It is highly resistant to external interference, foam or deposits. Thanks to its non-contact 80 GHz radar technology, the LFR SicWave can be put into operation easily and is maintenance-free. A wide range of options for antenna design, process connections and housing ensure ideal connection to any application. HART communication and WPAN connection simplify service and diagnostics on the device and prepare it optimally for Industry 4.0 applications.

At a glance

- 80 GHz free-space radar with various antennas
- Measuring range: up to 30 m
- Process temperature: -196 °C ... +200 °C
- Process pressure: -1 bar ... 25 bar
- Process connection: thread, flange, clamp
- Housing: plastic (IP66 / IP67), aluminum (IP66 / IP68) or stainless steel (IP69)
- With or without display and WPAN
- Certificates: Ex d and Ex ia, WHG

Your benefits

- One device for all continuous level measurements in liquids, simplifies spare part logistics
- Increased plant availability due to non-contact, continuous level measurement
- Quick to commission, saving time and costs
- Low costs and time expenditure as it is maintenance-free
- Withstands external interference for high plant availability
- Insensitive to foam and deposits, preventing unexpected plant downtime
- Ex-certificates available
- Simplified service and diagnostics via HART or WPAN

Fields of application

- Chemical industry: large tank storage, storage and buffer tanks, reaction and transport containers
- Oil and gas industry: mud pits, trip tanks, shakers and waste water containers
- Food and beverage industry: large, stirring and preparation tanks, thickener and filling tanks
- Water industry: storage tanks for flocculants, coarse and fine screens

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com