

LXRC

Radar sensor with IO-Link – user-friendly, precise and reliable



Advantages



Precise measurement data and easy handling

The LXRC measures the fill level using non-contact 80 GHz radar technology. This enables measurement without a dead zone directly at the sensor. With a precision of +-2 mm across the entire measuring range of up to 15 m, the LXRC radar sensor delivers accurate data. The highly focused signal ensures reliability. The measurement quality is not affected by difficult installation conditions or harsh process conditions such as condensation and deposit-forming media.



Quick installation

Thanks to a scanning range of up to 15 m, the LXRC is suitable for numerous applications. Commissioning is particularly easy via IO-Link and WPAN. Thanks to media-independent radar technology, no calibration at the measuring location is required either.



Maintenance-free

As the LXRC works without contact, the device does not wear out due to aggressive and abrasive media. This results in a low maintenance requirement.



Level indicator

The 360-degree status LED uses different color and signal modes to display individually configured information thereby reporting the current operational status of the sensor.



Whether in large tanks, during filling or in a vacuum: the LXRC radar sensor (or level sensor) is quickly installed and ensures trouble-free, continuous level measurement in mechanical engineering applications.



The right solution for many areas of application

From silo tanks to filling systems – the LXRC radar sensor (or level sensor) is designed for universal use and is therefore suitable for numerous applications and industries. Levels of both bulk materials and liquids can be reliably measured under different ambient conditions. The LXRC is equipped with the standard 4–20 mA and IO-Link interfaces to enable trouble-free on-site installation in the system.



For demanding media

Thanks to non-contact radar technology, the fill level of aggressive, abrasive, highly viscous and highly deposit-forming media can be reliably detected.



For numerous environments

Whether in vacuum tanks or in containers with up to 16 bar pressure as well as in cold stores down to -40 °C or at high temperatures up to 130 °C - the LXRC is a reliable solution for many demanding environments.



For minimal storage requirements

The LXRC can be used universally. The number of different level sensors in the system is significantly reduced thanks to the scanning range of up to 15 m. This eliminates the need to keep a variety of level sensors in stock.



The LXRC offers high flexibility and is suitable as a universal solution for continuous level measurement and inventory monitoring in industrial applications.



Technical data overview

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Medium	Fluids, bulk solids
Measurement	Continuous, switch
Process temperature	-40 °C +130 °C
Process pressure	-1 bar 16 bar
Output signal	2 x PNP/NPN/PNP/NPN + 4 mA 20 mA
Accuracy of sensor element	± 2 mm

Product description

The LXRC free-space level sensor enables continuous level measurement of liquids and bulk materials in hygiene applications. The 80 GHz signal is especially focused and measures up to a distance of 15 m with no dead zone and with a consistently high performance – for a safe process supply. The LXRC requires no calibration before use. Thanks to its compact design and non-contact measurement technology, it can be installed with little effort even in applications where the installation space is limited. Custom parameterization is possible via app or SOPAS ET. Thanks to IO-Link and optional WPAN, the level sensor is ideal for modern production environments. The operational status is visible even at a large distance via a color indication on a 360-degree status indicator.

At a glance

- Free-space radar sensor with 80 GHz and ± 2 mm accuracy
- Measuring range: 0 to 15 m
- Process pressure: -1 to 16 bar
- Temperature range: -40 to +130°C
- Enclosure ratings: IP66, IP67, IP69
- IO-Link
- Optionally with WPAN and 360° status LED

Your benefits

- Continuous fill level values for smooth processes
- · Easy installation even in tight spaces thanks to compact design
- Flexible use in a variety of tank sizes and designs with no dead zones over the entire measuring distance
- Plug and play: Commissioning without calibration
- Uncomplicated parameterization via PC, tablet or smartphone via IO-Link or Bluetooth
- · Universal solution for almost all liquids and bulk materials, impervious to dust, vapor and vacuum
- Simple diagnostics: Status information via a 4-20 mA IO-Link output and via Bluetooth on mobile devices
- · Maintenance-free operation thanks to non-contact measuring method

Fields of application

- · Level monitoring in silos and tanks
- · Buffer tanks for adhesive dosing
- Buffer tanks for pulp mixtures
- · Mixing systems and agitators for slurry production
- · Filling systems for fertilizers
- · Filling systems for oils

Type code

Other models and accessories → www.sick.com/LXRC

Electrical safety

XX CE, RCM, UKCA, normal location (c-UL-us) Food/pharmaceutical certificate X without food/pharmaceutical certificate **Process connection** Thread G 3/4 PN16, DIN3852-A / 316/316L Thread 3/4" NPT PN16, ASME B1.20.1 / 316/316L Thread G 1 PN16, DIN3852-A / 316/316L K Thread 1" NPT PN16, ASME B1.20.1 / 316/316L Additional hygiene adapters XX without additional hygiene adapters Material/seal/process temperature AA Material PEEK, seal FKM, process temperature -40...+130°C QB Material PTFE, seal FKM, process temperature -40...+130°C Electrical connection/ enclosure rating M M12x1 plastic / IP66/IP67/IP69 E M12x1 stainless steel / IP66/IP67/IP69 Display and control module/360° status indicator without display / without status indicator A without display / with status indicator **Electronics** A Three-wire with IO-Link (2x transistor or 4... 20mA plus 1x transistor) WPAN without WPAN with WPAN LXRC -1 XX Н Χ XX

Not all variants of the type code can be combined!

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

