



## LBR SicWave

Simply brilliant - level measurement in bulk materials with 80 GHz radar

**SICK**  
Sensor Intelligence.



## Technical data overview

<b>Measurement principle</b>	Free-space radar
<b>Detection principle</b>	Non contact
<b>Medium</b>	Bulk solids
<b>Measurement</b>	Continuous
<b>Process temperature</b>	-40 °C ... +200 °C (depending on type)
<b>Process pressure</b>	-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 ... 300 kPa / -14.5 psig ... 43.5 psig) (depending on type)
<b>Output signal</b>	4 mA ... 20 mA / HART
<b>Accuracy of sensor element</b>	≤ 5 mm

## Product description

The LBR SicWave free-space radar makes continuous level measurements and works with all solids. It is highly resistant to external interference, dust or deposits. Thanks to its non-contact 80 GHz radar technology, the LBR 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 120 m
- Process temperature: -40 °C ... +200 °C
- Process pressure: -1 bar ... 20 bar
- Process connection: thread, flange, special brackets
- Housing: plastic (IP66 / IP67) or aluminum (IP66 / IP68)
- With or without display and WPAN
- Certificates: Ex d, Ex ia, Ex ta

## Your benefits

- One device for all continuous level measurements in solids, 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
- Rugged to external interference for high plant availability
- Insensitive to foam and dust, preventing unexpected plant downtime
- Ex-certificates available
- Simplified service and diagnostic via HART or WPAN

## Fields of application

- Crushers, belt transfer, raw meal, clinker and cement silos as well as silos for solid fuels in cement systems
- Breakers, storage silos for ores, silos in the metal and steel industry
- Breakers, bulk material stockpiles, belt transfer, buffer and production silos in the mining industry
- Storage and small silos in the food and beverage industry



## 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](http://www.sick.com)