



# Distance measurement even in poor visibility

Radar sensor for harsh environmental and weather conditions

- Long ranges and a wide temperature range
- Reliable measurements even in precipitation, fog, dust and dirt
- Simultaneous detection of distance and speed
- Adaptable to specific applications thanks to various operating modes
- Intuitive set-up and visualisation of the measurement data with the ifm Vision Assistant software

**ifm** – close to you!

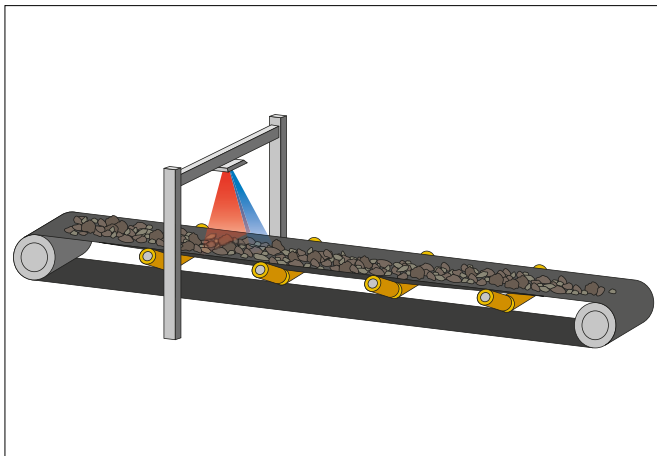


Horizontal x vertical opening angle [°]	Type	Frequency [GHz]	Order no.
40 x 30	distance sensor	60...64	<b>R1D100</b>
40 x 30	distance sensor with reduced transmitter power	60...64	<b>R1D102</b>
40 x 20	distance sensor	77...81	<b>R1D200</b>

### Distance sensor

The R1D distance sensor detects objects by means of a focused radar beam. The powerful technology also allows the detection of targets whose reflection properties are poor.

The data obtained in this way can be clearly visualised using the "Vision Assistant" software. For example, the distance profile can show multiple objects simultaneously, while their relative speed can also be output at the same time.



The radar sensor detects the load height and speed of a conveyor belt.

### Common technical data

Output	IO-Link 4...20 mA   0...10 V
Number of digital outputs	2
Protection rating	IP65   IP67   IP69K

### Reliable detection in harsh environments

With its long range, shock and vibration resistance properties and different operating modes, the radar sensor is designed to accurately detect objects even in the most adverse conditions. Whether in rain, snow, strong wind or extreme dust: the powerful radar sensor technology ensures reliable operation at all times.

### Application areas

The result is a wide range of applications for the sensor, for example the detection of vehicles such as trucks and ships, during docking processes at loading and unloading ramps.

In addition, the radar sensor enables conveyor belt monitoring with regard to load and speed and scores in car washes with its robustness against spray. In a nutshell: a true all-rounder in distance and speed measurement.

## BEST FRIENDS



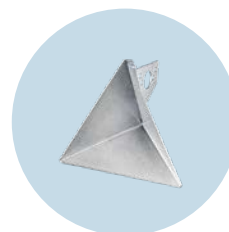
### IO-Link interface

For setting the parameters of IO-Link devices on a PC



### IO-Key

Sending IO-Link sensor data to the cloud via a mobile network



### Corner reflectors

Used as set-up aid and as a reliable target object



For further technical details, please visit: [ifm.com/fs/R1D100](https://ifm.com/fs/R1D100)