



Area surveillance in all weather conditions

3D radar sensor for mobile use

- Simultaneous detection of several objects and intelligent target selection by distance, signal strength or RCS
- Output of position (x, y, z), distance and speed of the objects via IO-Link and CAN
- Large angle of aperture, freely adjustable 3D detection field



ifm – close to you!

Type	Angle of aperture horizontal x vertical [°]	Frequency [GHz]	Output (2x configurable)	Order no.
3D Distance	140 x 50	60...64	IO-Link binary 4...20 mA 0...10 V	R2D100
3D Distance & 3D Area	140 x 50	60...64	CAN J1939	R2D101
3D Area	140 x 50	60...64	IO-Link binary	R2D110
3D Distance	140 x 30	77...81	IO-Link binary 4...20 mA 0...10 V	R2D200
3D Distance & 3D Area	140 x 30	77...81	CAN J1939	R2D201
3D Area	140 x 30	77...81	IO-Link binary	R2D210

The application area of the respective device depends on the base frequency used and the country in which it is operated. You will find an overview in the operating instructions and at ifm.com.

Reliable object detection in any weather

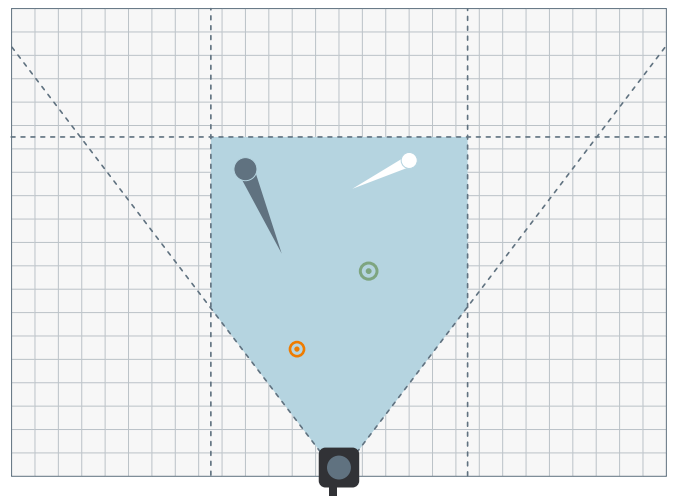
Detecting objects, determining their direction of movement and speed – even in the presence of precipitation, dust, fog and dirt: the R2D is the perfect addition to your mobile machines when it comes to avoiding collisions with objects. Whether alone or in combination with the mobile 3D sensors from ifm: the robust radar sensors ensure reliable distance detection even in poor visibility.

Two versions, many setting options

The large horizontal angle of aperture of 140° ensures maximum area coverage. In the "3D Distance" version, the sensor transmits the x, y and z coordinates of the objects in the form of a dense point cloud. The "3D Area" type sensor summarises the information itself into objects, transmitting their position, direction of movement and speed.

The detection field of both versions can be limited individually. Various filter options and other settings such as warning zones and early warning times further increase the effectiveness of the R2D.

Common technical data		
Temperature range	[°C]	-40...80
Protection rating		IP65 IP67 IP69K



The radar detection field can be customised. Static and dynamic targets are displayed differently.

BEST FRIENDS

We reserve the right to make technical alterations without prior notice. · 11.2024
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Graphic display
Programmable HMI for the control of mobile machines



BasicController
Controller with H-bridge, 16 inputs and outputs



3D sensor suitable for mobile use
Robust distance measurement using time-of-flight technology



For further technical details, please visit:
ifm.com/fs/R2D100