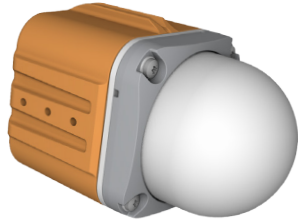
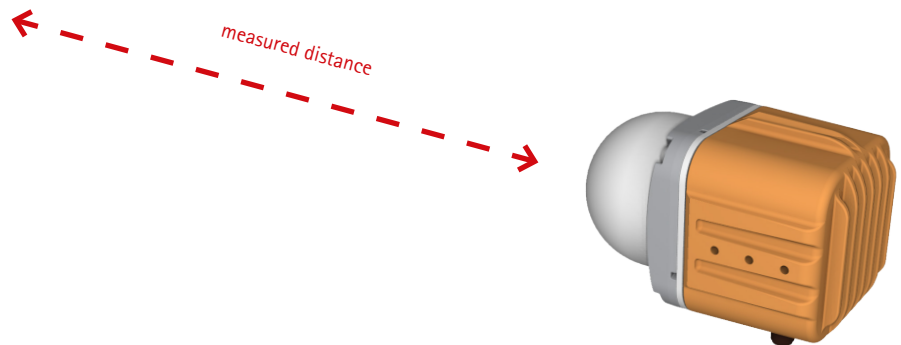


PRODUCT DATA SHEET



LPR[®]-1DHP-260 for measurements between two sensors (secondary radar)



LPR[®]-1DHP-260

Robust Medium-Range Distance Measurement with an Accuracy in the Millimeter Domain

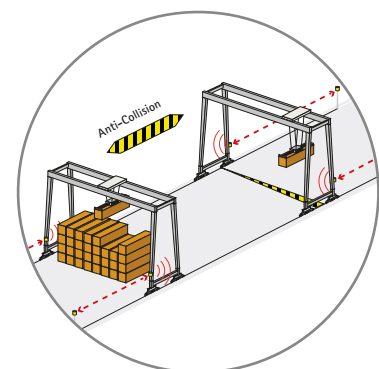
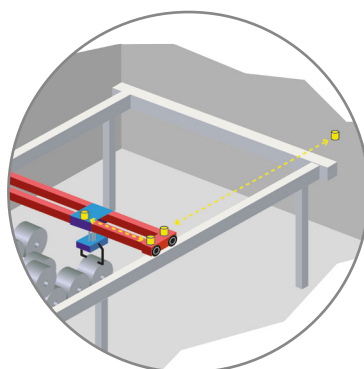
- Contactless distance measurements via radio waves
- Latest ultra-wideband technology for measurements in the millimeter range
- Compact and robust housing
- Impervious to dirt, harsh weather and vibrations
- Ideal for semi- and full-automated crane systems
- Maintenance- and wear-free

The LPR[®]-1DHP-260 secondary radar system performs high-precision 1D distance measurements for short and medium ranges. By combining two sensors into one measuring pair, the LPR[®]-1DHP-260 can detect the position and speed - for example of cranes and railbound transport systems - in real-time and make the data available via the device interfaces. The sensors are simple to install and easy to put into operation with the aid of a web interface. A directional antenna is integrated into the robust housing.

The LPR[®]-1DHP-260 radar system is a successor to the LPR[®]-1DHP and features an even higher accuracy and measurement rate in a more compact design. The device furthermore supports the latest ultra-wideband technology, allowing it to achieve highly-precise measurements in the millimeter range. The sensor can be optimally configured for the required accuracy and range by selecting individual measurement modes. Even under the harshest conditions and weather environments such as rain, fog, snow, dust, smoke or vibrations, the maintenance- and wear-and-tear-free wireless technology operates reliably and with a high degree of availability - indoors and outdoors.

Typical Applications

- Crane Positioning
- Collision Avoidance
- Goods Tracking
- Process Monitoring
- Process Control
- Process Automation



PRODUCT DATA SHEET

Technical Data

LPR [®] -1 DHP-260	
Radar measuring mode	Secondary radar
Frequency range	57,0-64,0 GHz
Measuring range ¹⁾	0,5 m to 300 m
Measurement accuracy ¹⁾²⁾	up to ± 5 mm
Repeatability ¹⁾²⁾	up to ± 3 mm
Measurement rate	up to 110 Hz
Supply voltage	11-36 V DC
Power consumption	7 W
Ambient temperature	-40 °C to +70 °C
Protection class housing	IP65
Housing dimensions (LxWxH); weight	95 x 95 x 155 mm; 800 g
Interfaces	Ethernet (TCP / IP, Profinet)
External connector	Ethernet (M12), supply voltage (M12)
Antenna	integrated, beam width = $\pm 2,5^\circ$
Compliance	CE, FCC, IC (others on request)

Bandwidth Modes³⁾: Secondary Radar

Bandwidth	0,5 GHz	2 GHz
Measurement accuracy ²⁾	up to ± 10 mm	up to ± 5 mm
Repeatability ²⁾	up to ± 6 mm	up to ± 3 mm
Measurement rate	up to 110 Hz	up to 110 Hz
Measuring range ETSI ¹⁾	2 m to 300 m	0,5 m to 300 m
Measuring range FCC ¹⁾	2 m to 300 m	0,5 m to 225 m

¹⁾ Depending on the environment and the selected bandwidth mode.

²⁾ Error under consistent ambient conditions.

³⁾ Multiple bandwidth modes can be selected in the device settings. The selection is limited by regional radio regulations.