

LPR[®]-1DHP-R

Distance Measurement and Obstacle/Object Detection on Passive Targets

- Long range distance measurement with radar
- Unaffected by contamination, weather and vibration
- Suited for indoor and outdoor applications
- Ideal for crane/vehicle anti-collision applications
- Flexible and easy configuration
- Maintenance-free

LPR[®]-1DHP-R features high precision distance measurement with radio signals for long range distance measurement and anti-collision applications. The sensor is also suited for collision avoidance between moving cranes / vehicles or between any other obstacles indoors and outdoors.

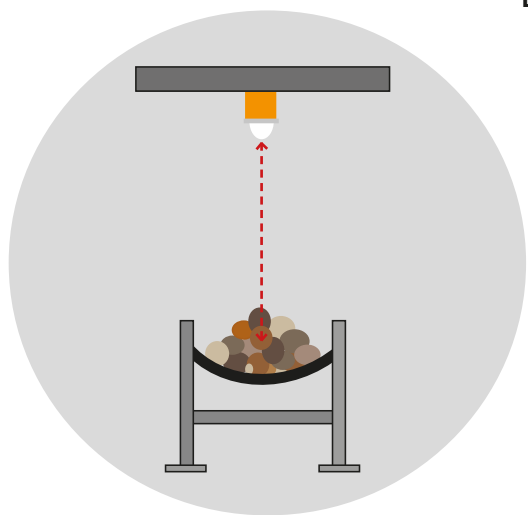
All components including antennas are integrated into one single housing, are of very robust design and operate maintenance-free. Depending on the parameterized application, the signal processing uses the closest or the most strongly reflecting object for the distance evaluation.

Project specific configurations with several sensors in parallel operation are easy to parameterize in order to implement complex solutions for collision avoidance without false alarms.

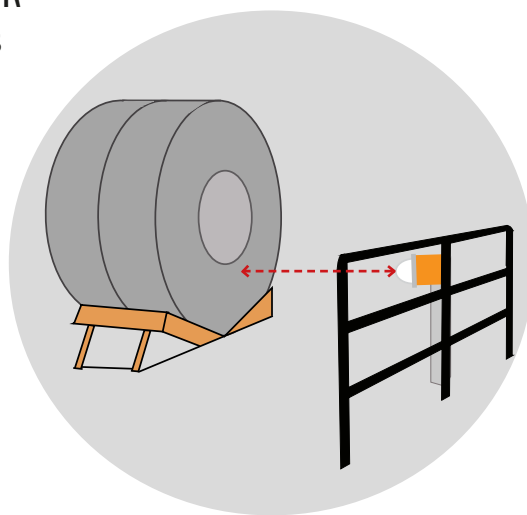
The sensor is suited for indoor and outdoor applications and works highly reliable even in harsh and dirty environments.

The simultaneous, interference-free operation of a radio data network (WiFi) is possible without any restrictions.

Typical LPR®-1DHP-R applications



Material detection on the conveyor belt (e.g. bulk material)



Presence/absence check (e.g. of coils)

Technical Data: LPR®-1DHP-R

Frequency range	61.0-61.5 GHz, ISM-band
Output power	max. 0.1 W EIRP
Signal opening angle (hor./vert. 3dB limit)	$\pm 2^\circ$ hor. / $\pm 2^\circ$ vert.
Measuring distance	typically up to 70 m (truck), 50 m (car), 5 m (person) *
Typical accuracy	up to ± 1 cm *
Repeat rate	max. 40 Hz
Voltage	10-36 V DC
Power consumption at max. update rate	15 W
Ambient temperature	-40 °C to +75 °C
Protection class	IP65
Housing dimensions (LxWxH); weight	205 x 140 x 140 mm; 2.4 kg
Hardware interface	serial RS232, Ethernet TCP/IP or UDP, Profibus (optional)
Data interface	Syмео LPR®-1D protocol
Status indication	LED
External connection	cable gland, plug (TCP/IP)
Antenna	integrated
Compliance	CE, FCC, IC

* depending on application conditions and scattering coefficient of the objects in range