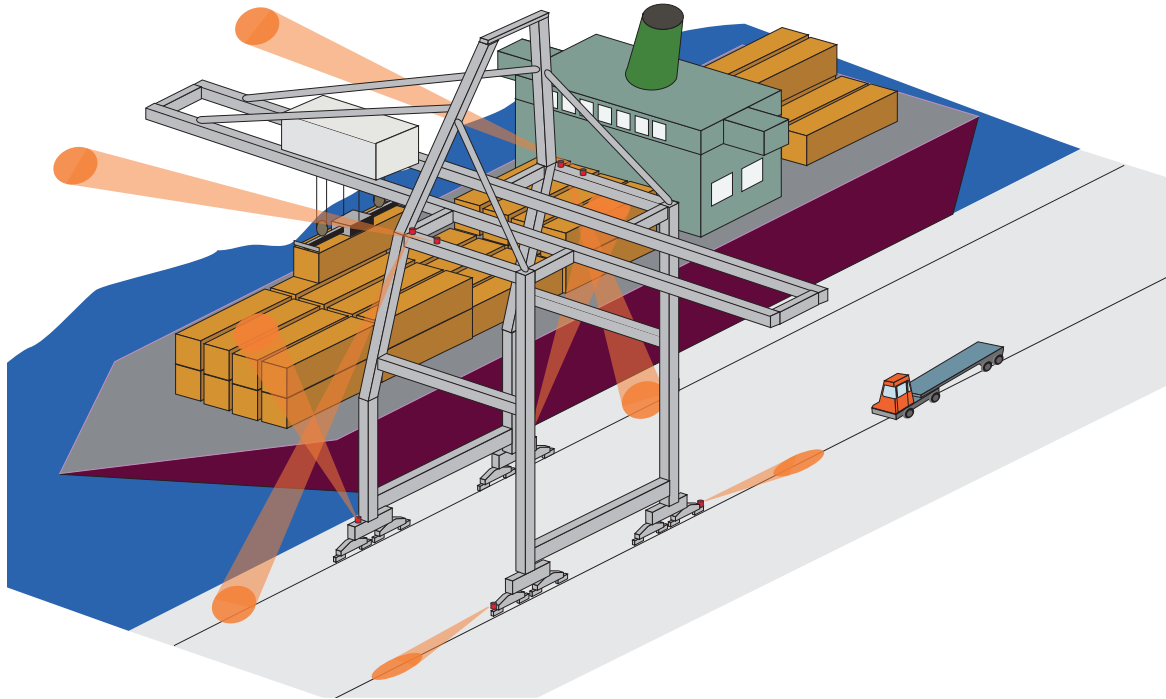


# Distance Measurement and Obstacle Detection



## DR-1DHP

### Distance Radar On Passive Targets

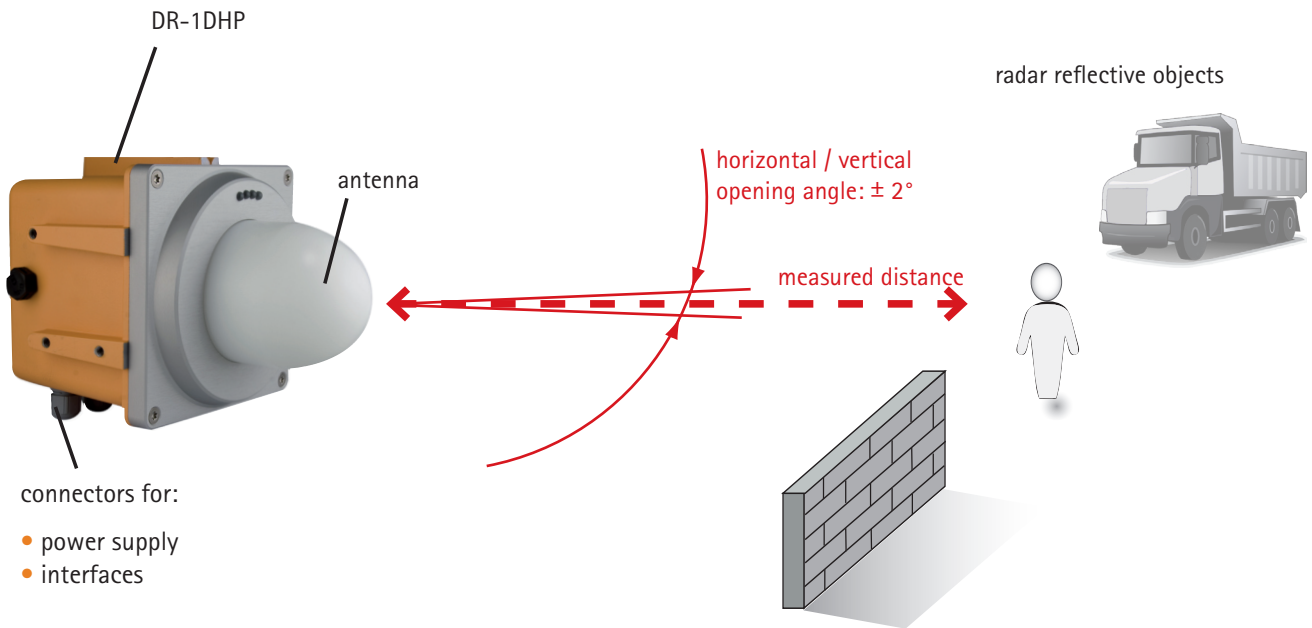
- Long range measurement with radar
- Unaffected by contamination, weather and vibration
- Suited for indoor and outdoor applications
- Ideal for cranes/vehicle anti collision applications
- Flexible and easy configuration
- Maintenance free

DR-1DHP features high precision distance measurement with radio signals for long range distance measurement and anti collision applications. The sensor is especially suited for collision avoidance between moving cranes/vehicles or between any other obstacles.

All components including antenna are integrated into one single casing, of very robust design and operates maintenance-free. There is no specific sensor configuration required and processing of the received signal has to be customized according to application requirements.

To consider project specific requirements e.g. in regard to coverage range, type of target, the sensor can easily be combined with other Symeo DR sensors to complete anti-collision systems.

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 (WLAN) is possible without any restrictions.



## Technical Data: DR-1DHP

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 $\pm 1$ cm *
Repeat rate	Max. 25 Hz
Voltage	10-36 V DC
Power consumption	15 W at max. update rate
Ambient temperature	-40 °C to +75 °C
Protection class	IP65
Housing dimensions (LxWxH); weight	205 x 140 x 140 mm; 0.9 kg
Hardware interface	Serial RS232, Ethernet TCP/IP or UDP (optional), Profibus (optional)
Data interface	Syмео LPR-1D protocol
External connection	cable gland, plug (TCP/IP)
Antenna	integrated

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