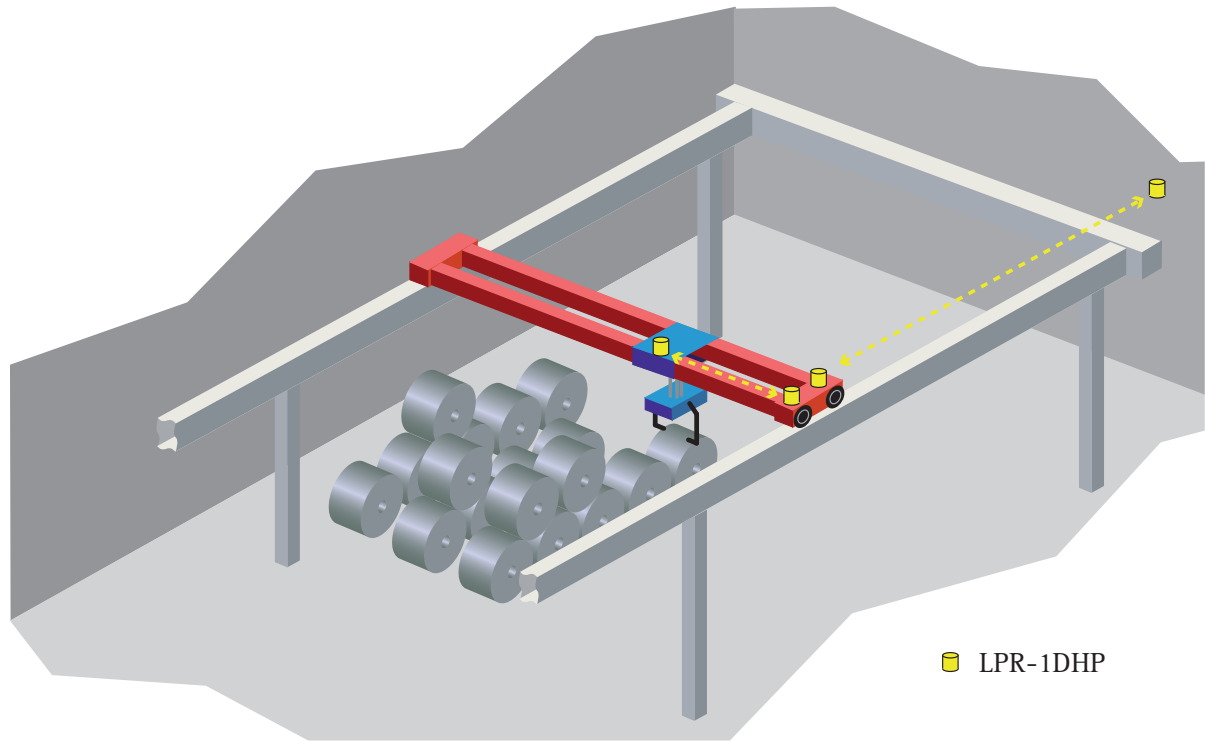


# High Precision Distance Measurement



## LPR-1DHP

### Crane bridge and trolley position detection

- Easy-to-implement position detection
- Contact-less measurement by means of radio waves
- Unaffected by contamination, weather and vibration
- Usable indoors and outdoors
- Ideal for semi-automatic and automatic cranes
- No additional operating or maintenance costs

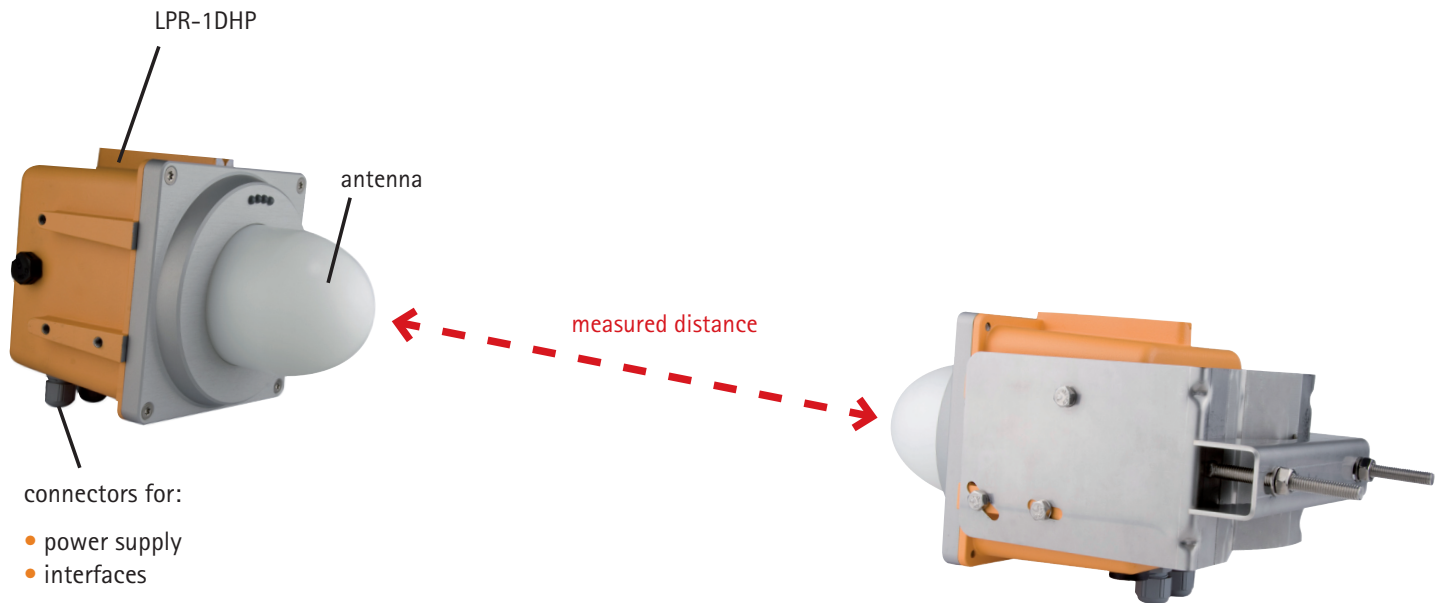
LPR-1DHP features high precision sensors for distance measurement with radio signals. With two sensor pairs, the exact position of a crane trolley can be dynamically determined in real-time.

In addition to the distance reading, the relative approach speed of the LPR sensors is available. All data is made available at standard interfaces.

The devices are easy to install and operate. Rough alignment between facing units is sufficient, even for large distances and uneven crane rails. The radio antenna is integrated in the robust housing design. The systems are supplied preconfigured and ready to run.

Symeo LPR radio works highly reliable under adverse conditions. Due to the operation frequency, there is absolutely no influence on any wireless LAN operating in parallel.

LPR-1DHP sensors are maintenance-free.



## Technical Data: LPR-1DHP

Frequency range	61,0 -61,5 GHz, ISM-band
Output power	Max. 0.1 W EIRP
Measuring distance	Up to 500 m *
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 connector type	Plug
Antenna	integrated
Compliance	CE mark, FCC in preparation

\* depending on the application conditions