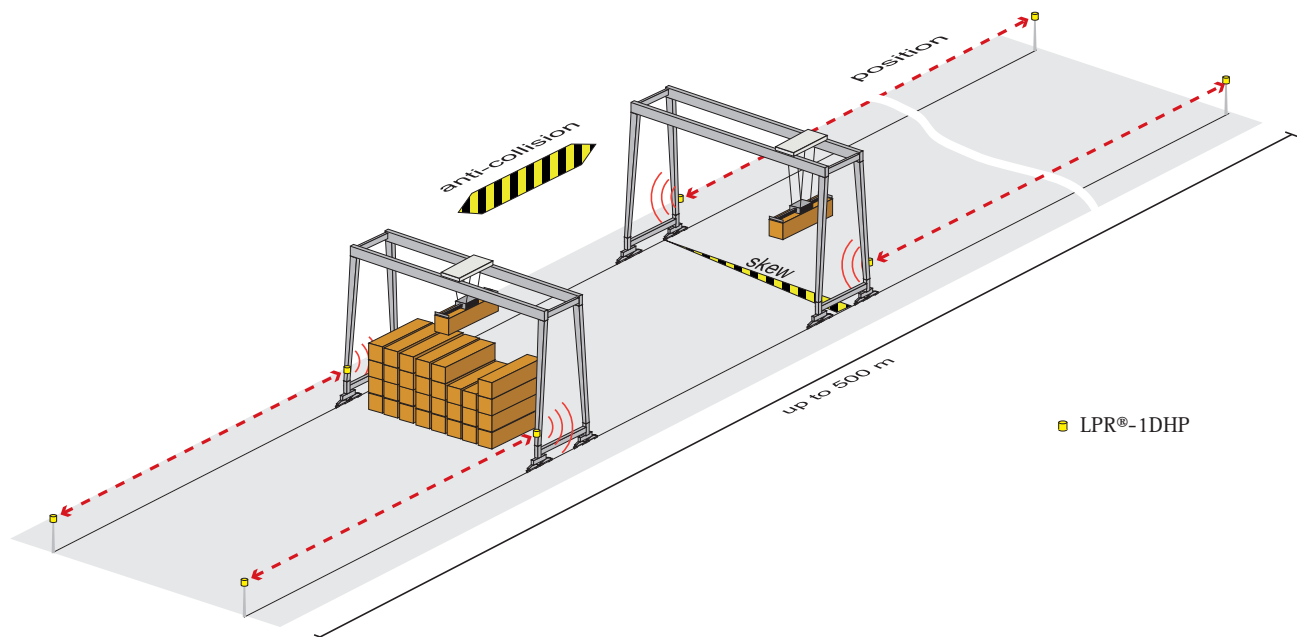


Absolute Position For Stacker Cranes



Data Sheet



LPR®-1DHP Radio Sensors

for Drive Synchronisation on Gantry Cranes

- Position, anti-collision and anti-skew with one sensor type
- Non-wearing, contactless measurement
- Unaffected by contamination, adverse weather and vibration
- Quick installation and retrofit
- Maintenance-free

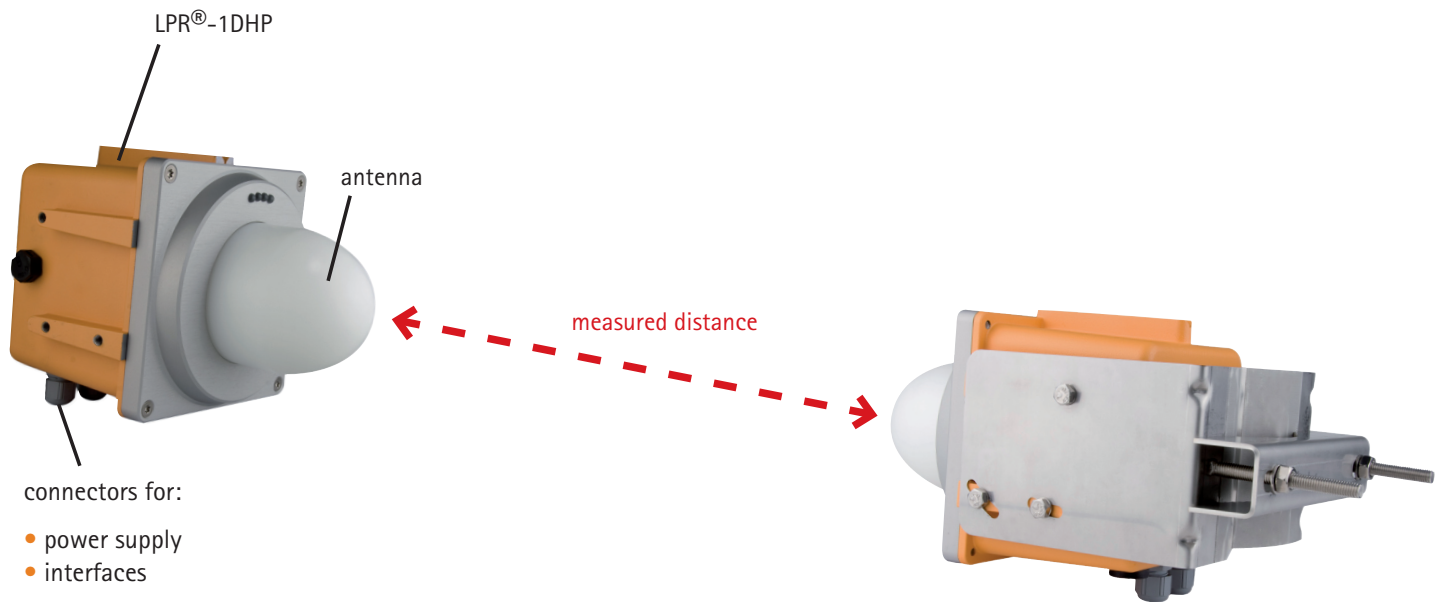
LPR®-1DHP features high precision distance measurement with radio signals. With two sensor pairs, the position and skew of a rail mounted gantry crane can be dynamically determined in real-time.

Absolute distances, unaffected by wheel slippage or any objects on the rails, are measured to reference units at the end of the crane rail. LPR® sensors can easily be retrofitted and operated on existing cranes. 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.

In a layout with two cranes on the same rails, radio communication between the crane mounted units allows the exchange of the dynamic crane position. Relays (dry contacts) in an optional breakout box can be switched depending on preset warning and stopping distances.

Symeo LPR® radio works highly reliable under adverse conditions. Due to the measurement radio frequency, there is 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 ± 1 cm *
Repeat rate	Max. 30 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; 2.9 kg
Hardware interface	Serial RS232, Ethernet TCP/IP or UDP (optional), Profibus (optional)
Data interface	Symeo LPR®-1D protocol
External connector type	Plug
Antenna	Integrated
Compliance	CE, FCC (in preparation)

* depending on application conditions