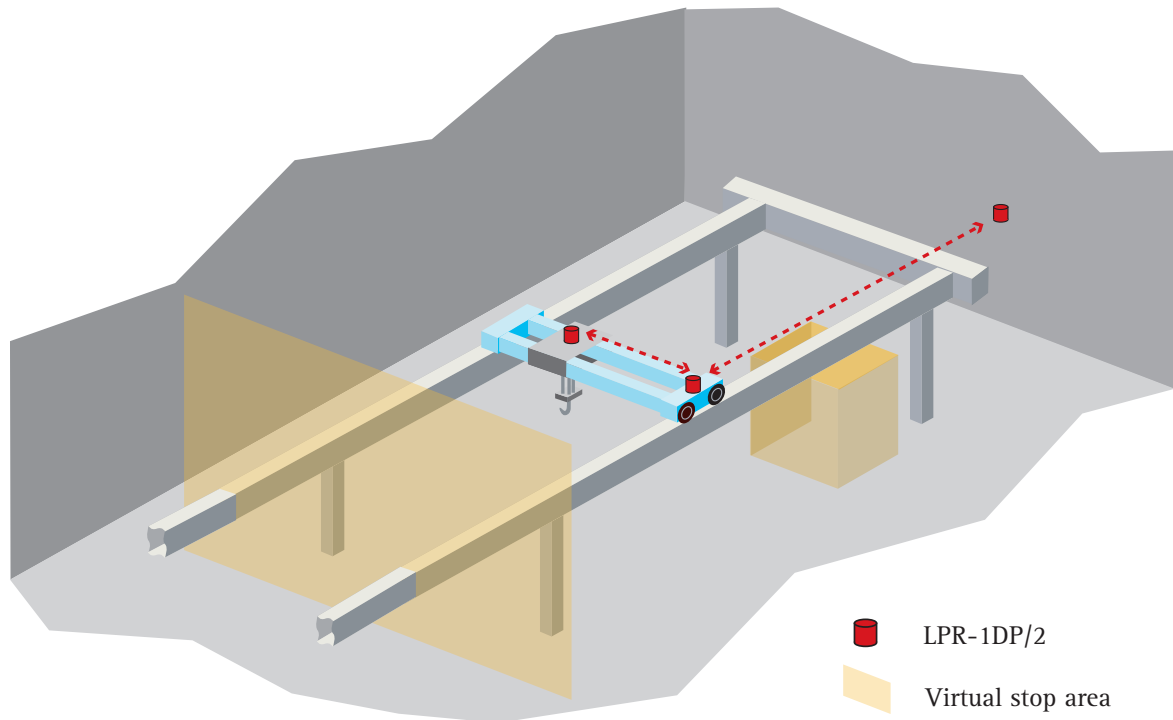


Position Detection and Anticollision



LPR-1DP/2

Crane bridge and trolley position detection

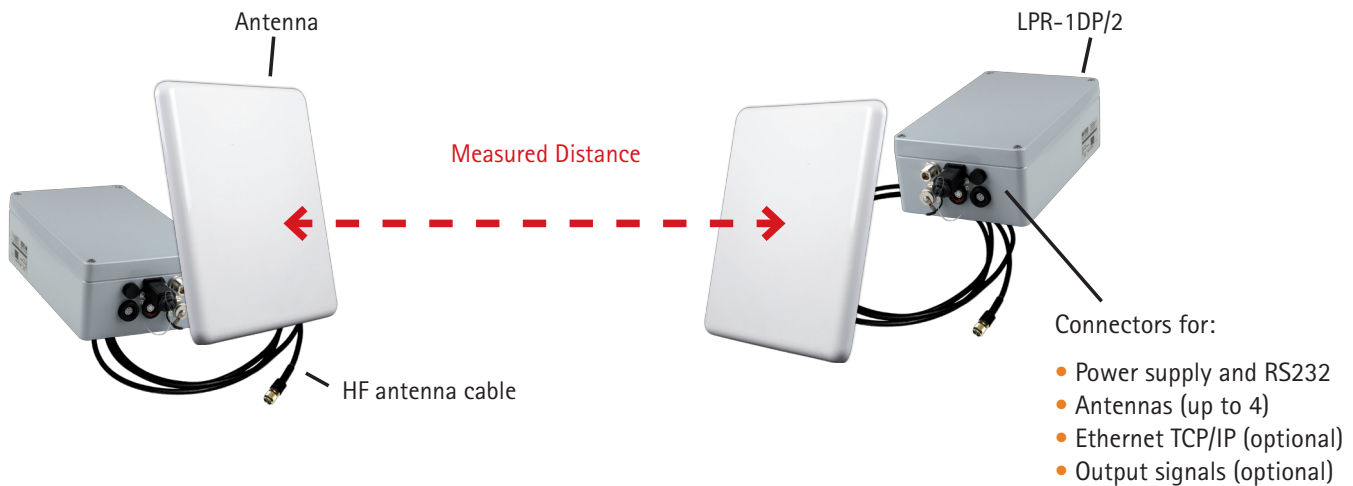
- Easy-to-implement position detection
- Contact-less measurement by means of radio waves
- Unaffected by contamination, weather and vibration
- Usable indoors and outdoors
- No precise alignment necessary
- Easy to configure
- Redundant system set-up for high-security applications
- No additional operating or maintenance costs

By measuring the 1-D distances along the crane track and on the crane bridge, the trolley's 2-D position can be determined in order to prevent collisions between moving objects as well as entries into restricted areas. The crane travel paths are detected in real time.

LPR-1DP/2 always measures the speed of the measured object relative to a fixed reference mark. This can be used, for example, for varying shut-off points during an approach. The measured values are available on all units at their respective device interfaces.

With the integrated SymeoBasic parameterization software, switching points or virtual blocked-off areas can be easily determined based on position and speed. When the freely configurable switching criteria are reached, potential-free contacts can be opened via the optionally built-in switching relays based on the traveling direction.

The simultaneous, interference-free operation of a radio data network (WLAN) is possible.



Technical Data: LPR-1DP/2

Frequency range	5.725–5.875 GHz, ISM-band
Output power	Max. 0.025 W EIRP
Measuring distance	Up to 1,800 m *
Typical accuracy	Up to ± 5 cm *
Repeat rate	Max. 30 Hz
Voltage	10–36 V DC
Power consumption	4–8 W at max. update rate
Ambient temperature	-40 °C to +75 °C
Protection class	Up to IP65
Housing dimensions (LxWxH); weight	260 x 160 x 91 mm; 2.5 kg
Hardware interface	Serial RS232, TCP/IP (optional), 7x dry contacts (optional, rating: max. 10 W, max. 60 VDC, max. 0.5 A)
Data interface	Syмео binary protocol, ASCII protocol optional with TCP/IP
User data transfer rate	8 bytes/cycle, up to 800 byte/s
External connector type	Plug
Antenna(s)	Up to 4 antennas, N-Connector
Compliance	CE mark

* depending on the type of antenna and application conditions