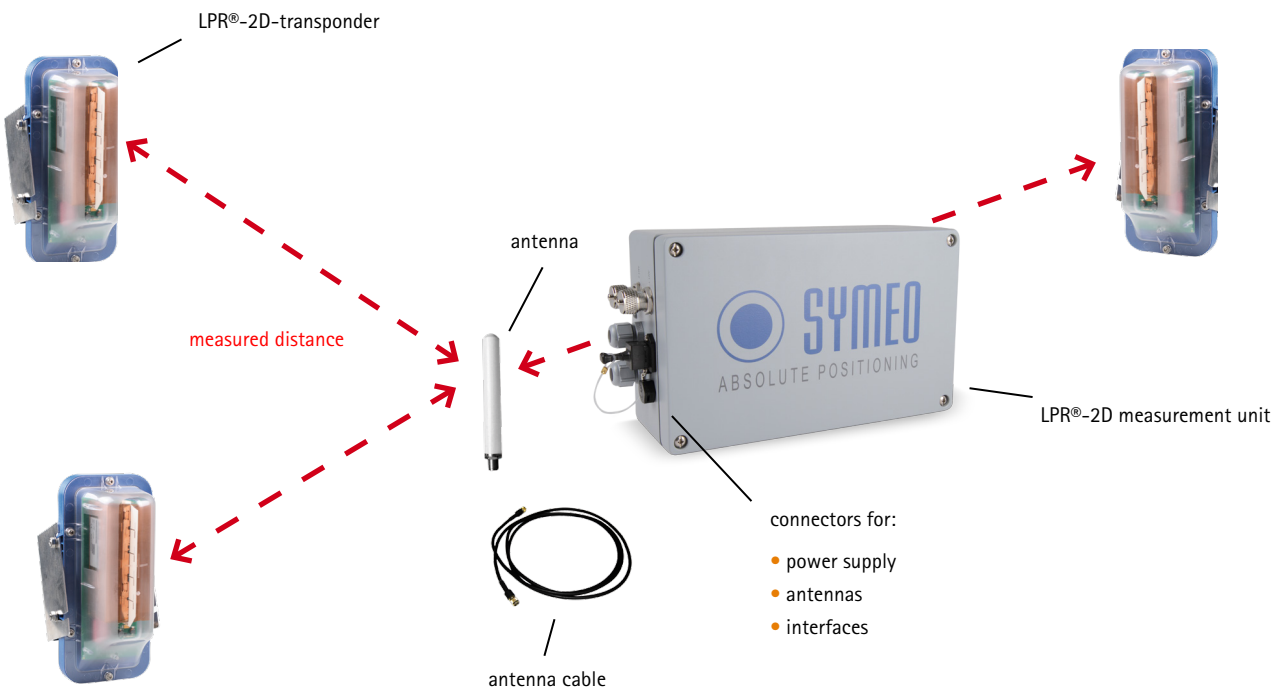
LPR®-2D

Data Sheet



LPR®-2D

Precise Position Detection Indoors and Outdoors

- Precise position detection indoors and outdoors
- Contact-less measurement via radio waves
- Unlimited system range
- Unaffected by contamination, weather and vibration
- Simple installation and commissioning
- Suitable for all vehicle and crane types
- Maintenance-free

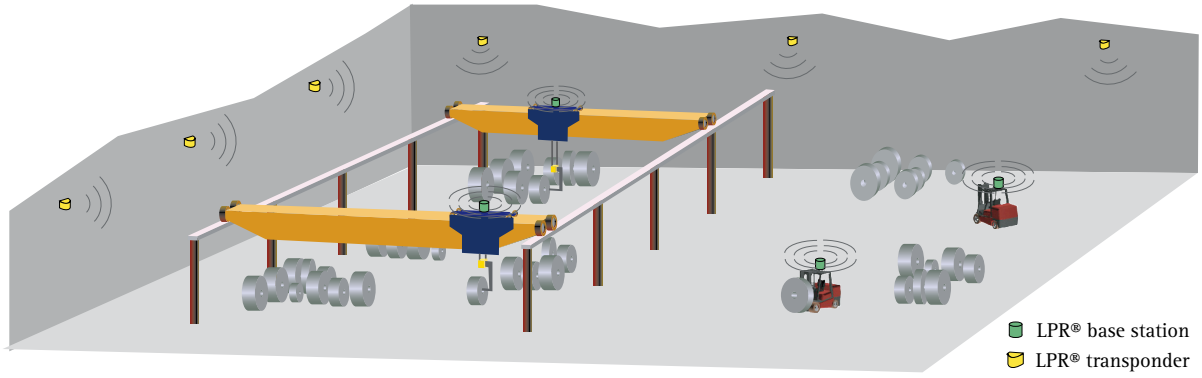
LPR®-2D is an all-purpose measurement unit designed for precise 2D indoor or outdoor localization by radar signals. It is ideally suited for vehicle, forklift and crane positioning.

The LPR®-2D components are extremely robust and maintenance-free. The highly-precise measurement unit directly determines the position of the moving object by utilizing stationary local reference markers (LPR®-2D transponder). The transponders are maintenance-free and can be installed either indoors or outdoors. An area as large as 100,000 square meters (approximately 300 m x 300 m) can be covered with just six transponders.

The LPR®-2D measurement unit features a flexible design that permits the capture and analysis of additional sensor data such as weight, lift height or loading status, depending on the application. The reliability of the maintenance-free sensors is unaffected by heavy dirt and grime or by the vibrations that typically result from rough and bumpy crane/vehicle operations.

Symeo LPR®-2D uses the international license-free 5.8 GHz ISM-band. WiFi data networks can be operated in parallel at any time without the risk of interference.

Typical LPR®-2D application



Technical Data: LPR®-2D	
Frequency range	5.725-5.875 GHz, ISM-band
Output power	max. 0.025 W EIRP
Measuring distance base station to transponder	up to 400 m *
System range	unlimited
Typical accuracy	up to ± 5-20 cm *
Repeat rate	up to 20 Hz
Voltage	10-36 V DC
Power consumption at max. update rate	8 W (continuous operation)
Ambient temperature	-40 °C to +75 °C
Protection class	IP65
Housing base station (LxWxH); weight	260 x 160 x 91 mm; 2.7 kg
Housing transponder (LxWxH); weight	281 x 125 x 150 mm; 1 kg
Hardware interface	serial RS232, Ethernet TCP/IP
Data interface	Symeo ASCII protocol
Status indication	LED
External connector type	2 antenna connectors N-type, Ethernet housing connector, voltage and interfaces via cable gland
Antennas	up to 2 independent antennas, N-connector
Compliance	CE

** based on sufficient LPR® transponders with required signal quality available*

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