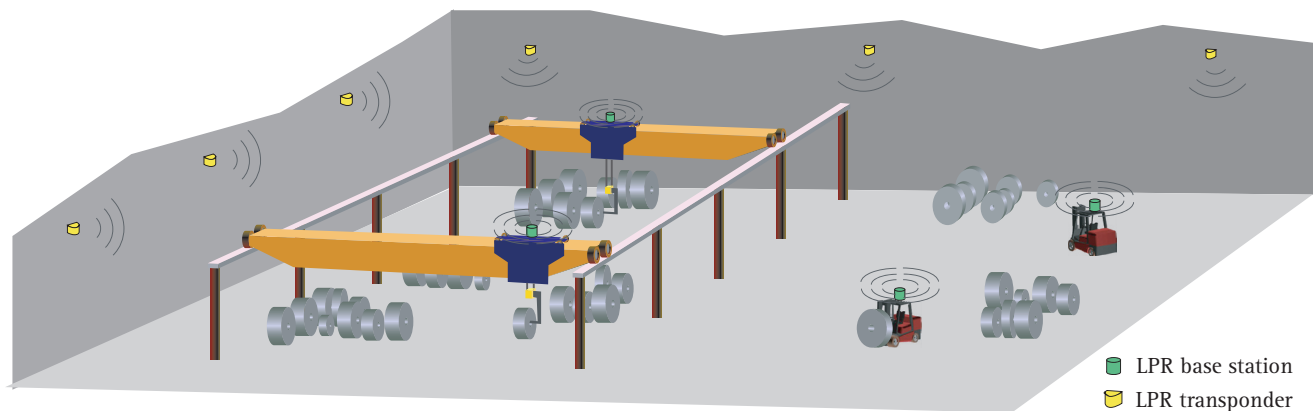


# Absolute Accurate Position Detection



Available in the UK and Ireland only from  
**CL CRANE CARE LTD**

## Data Sheet 5



## LPR-2D

### Position detection of cranes and vehicles for the tracking of goods

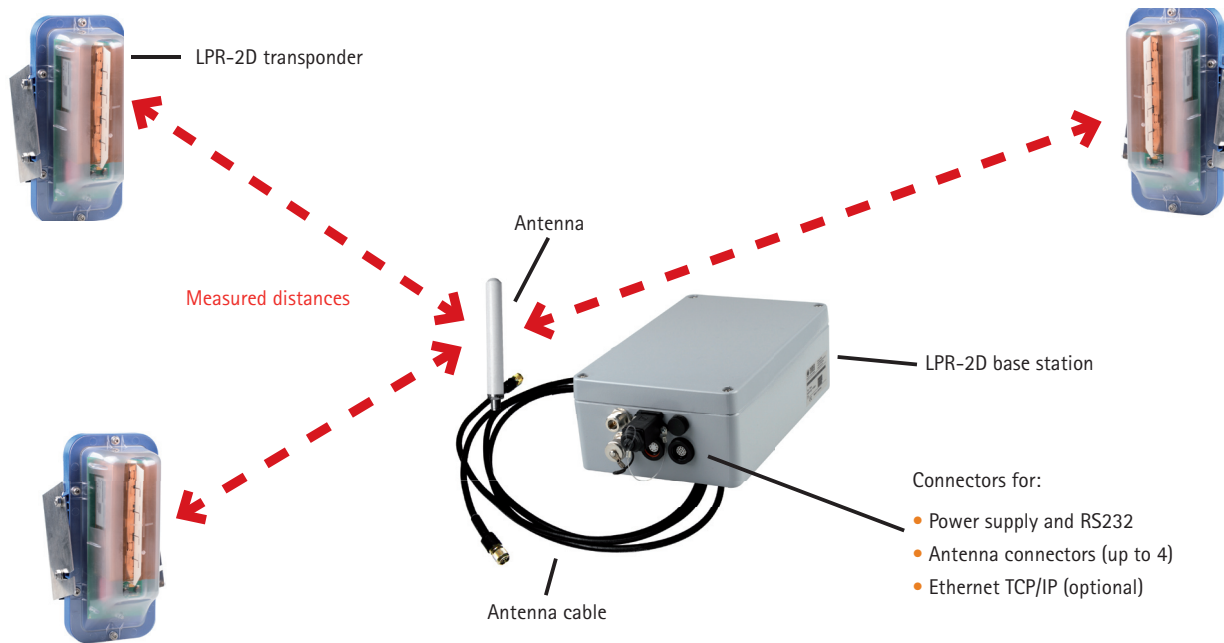
- Determination of position and orientation
- Contact-free measurement via radio waves
- Unlimited system range
- Unaffected by contamination, vibration or the weather
- Simple installation indoors and outdoors
- Retrofit during continued operations is possible
- Suitable for all types of vehicle and crane
- Maintenance-free

LPR-2D detects the exact position of cranes and transport vehicles indoors or out, even under the harshest industrial conditions. The system measures the distance between fixed reference marks – LPR transponders – and base stations placed on moving objects, in order to compute their current position and direction of travel.

With an LPR-2D system, several cranes on one long travel rail or vehicles in the same area can be detected dynamically and with high accuracy. Determining a position requires the input of at least three transponders.

LPR-2D is easily adapted to local conditions. The transponders can be mounted at varying heights and distances from each other. With a typical arrangement, full position detection functionality is maintained even if contact with a transponder is interrupted. The performance of the maintenance-free sensors is unaffected by heavy contamination or vibration.

A radio data network (WLAN) can be operated at the same time with no interference.



## 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 $\pm 5$ cm *
Repeat rate	Up to 25 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 base station (LxWxH); weight	260 x 160 x 91 mm; 2.5 kg
Housing transponder (LxWxH); weight	281x125x150 mm; 1.0 kg
Hardware interface	Serial RS232, TCP/IP (optional)
Data interface	Symeo ASCII or binary protocol
External connector type	Plug
Antenna(s)	Up to 4 antennas, N-connector
Compliance	CE mark

\* depending on the type of antenna and application conditions