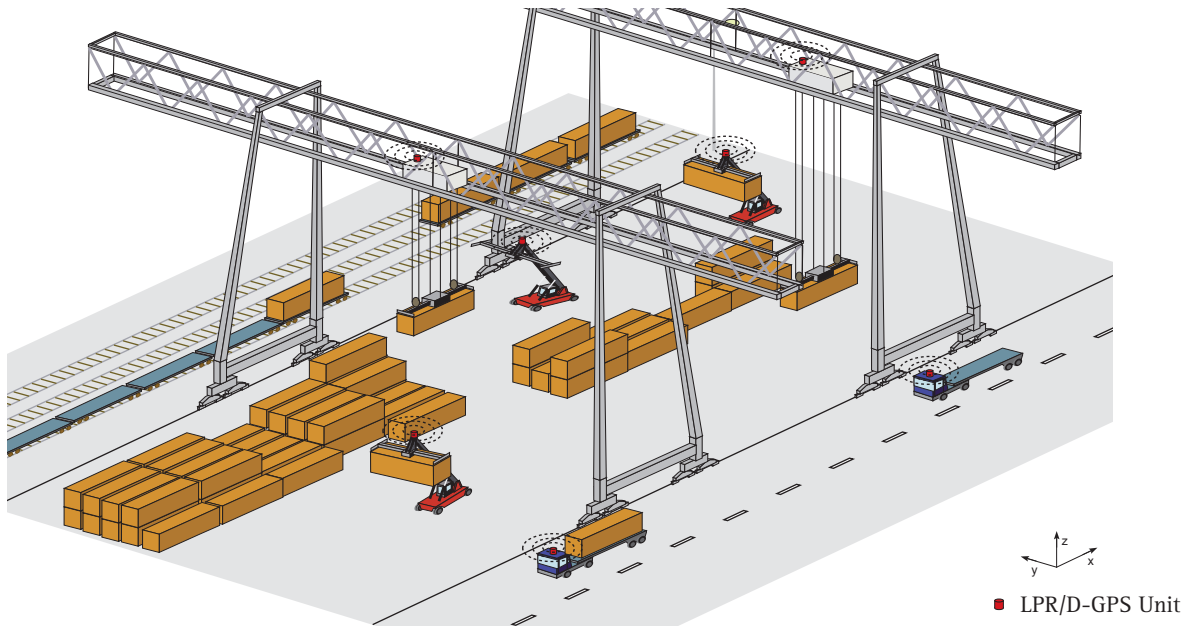


LPR Enhanced Satellite Position Measurement



LPR-2DB/D-GPS

Position detection of on-terminal vehicles with satellite navigation and LPR sensors

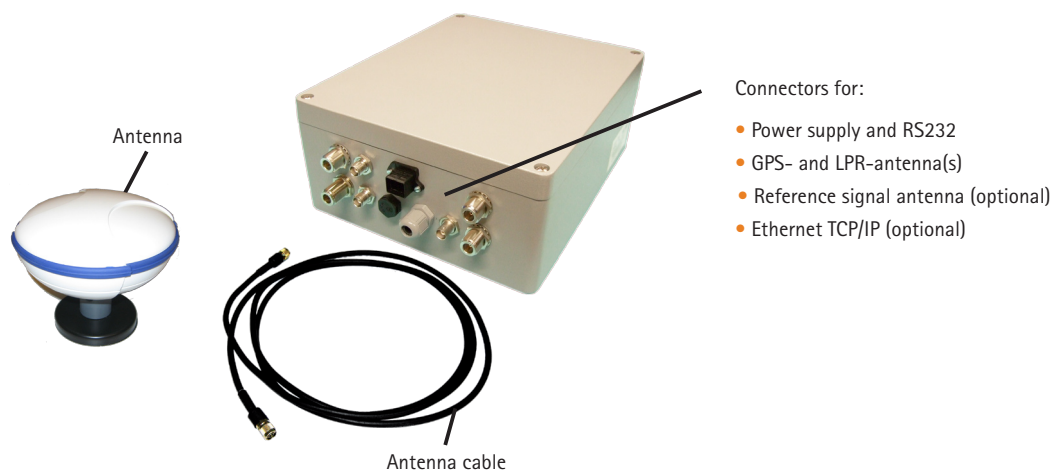
- Determination of vehicle position and direction of travel
- Independent from commercial correction signals with own reference station
- Unaffected by contamination, vibration or the weather
- Quick installation
- Retrofit during continued operations is possible
- Suitable for all types of vehicle and crane
- Maintenance-free

Symeo D-GPS integrates an LPR receiver with industrial GPS using an independent reference station to provide a correction signal for a typical ± 0.5 m accuracy. With two antennas connected, the vehicle's exact direction of travel can also be determined.

For even greater accuracy and consistent position signals in areas where satellites are temporarily shielded or unavailable, the optionally integrated LPR-2D receiver is activated. This will ensure that, even under cranes, vehicle positions are continuously available, with precision up to ± 5 cm in LPR-enhanced areas.

Additional signals like spreader load status can be acquired by the receiver and forwarded through the Symeo data protocol.

For ease of installation, the receiver and the physical signal interface box can be installed with a radio interconnection on the vehicle. This avoids any complex wiring to an existing on-board control unit without interfering with original vehicle components.



Technical Data: Symeo LPR-2DB/D-GPS

Receiver type	L1, C/A code
Channels	12-channel, parallel tracking
Start up time	60 s (no almanac and RTC)
Satellite reacquisition	< 1s
Typical accuracy (horizontal)	Up to: ± 50 cm (D-GPS); ± 5 cm (LPR)*
Repeat rate	1 to 20 Hz
Voltage	10-36 V DC
Power consumption	8 W at max. update rate
Ambient temperature	-10 °C to +50 °C
Protection class	Up to IP65
Housing dimensions (LxWxH)	280 x 230 x 110 mm
GPS Antenna dimensions	$\varnothing 150$ mm, height 130 mm
Hardware interface	Serial RS232, TCP/IP (optional)
Data interface	Symeo GPS protocol, LPR-2D protocol
External connector type	Plug and cable gland
Antenna(s)	Up to 2 GPS & 2 LPR antennas, 1 each for reference signal and radio interconnection to IO-box
Compliance	CE mark
LPR 2DB	optional-slot available, data acc. to LPR-2DB data sheet

* depending on satellite availability and signal quality