Wireless sensors detect and report parking space occupancy, thus enabling active parking lot management features, such as search, navigation and reservation. The easy retrofit solution for off-street parking is installed in minutes. It was designed for detecting with the highest reliability if a parking space is occupied or available.

**KEY FEATURES**
- Robust algorithm for parking space occupancy detection
- Two independent sensor principles: magnetometer and radar
- Up to 5 years battery lifetime

**PERFORMANCE PARAMETERS**
- Model based optimized parking state detection algorithm development with millions of data points from real parking events
- 96% average parking state change detection performance proven in field-tests with more than 2000 sensors and more than 46 different car types in real parking environments.
- Adaptive algorithms ensure highest detection reliability during the whole sensor lifetime
- Self-learning calibration during the first five parking events
- Reporting of parking state changes within 35 seconds (typical)
- Passenger cars with ground clearance of < 30 cm

**INSTALLATION AND MAINTENANCE**
- Easy and fast installation: sensor is glued to different surfaces or screwed in the ground\(^4\)
- No maintenance needed
- Exchangeable sensor core
- Low cost, low power, easily replicable sensor solution
- Sensor core exchangeable without removing the base from the ground

**COMMUNICATION**
- LoRaWAN
- Wireless device management

**TARGET MARKETS**
- EU (Frequency Band 868MHz)
- JP (Frequency Band 923MHz)

**OPERATING CONDITIONS**
- Operating temperature range: -30 to +65°C
- Humidity range: 0 to 95%
- Resistant to mechanical influences\(^1\): snow-plough\(^2\), heavy goods vehicles (CV) (N1 - N3)\(^3\) and high-pressure cleaning

**SENSOR SPECIFICATIONS**
- Diameter: 145.4 mm
- Max height: 30.5 mm
- Weight: 191 g
- Power supply: Lithium battery
- Protection grade: IP67/IPx9K

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1. According to product specifications
2. Max. weight of 5,5 tons, shield: flexible flap towards ground, weight max. 1 ton, max. speed 20km/h
4. Requires separate 2K-Epoxy based adhesive or screws anchor belts and sealing
Sensor Core (TPS110)

GENERAL DESCRIPTION
▶ Color  RAL9005 / black
       RAL7011 / irongrey
▶ Weight  124 g
▶ Size  height: 28.2 mm
diameter: 104.4 mm
▶ Material  PA6 GF35
▶ Description  The Sensor-Core contains the sensing unit. It consists of a housing with integrated battery, electronics and O-rings.

Sensor-Base (plasma treated)

GENERAL DESCRIPTION
▶ Color  RAL7011 / irongrey
▶ Weight  65 g
▶ Size  height: 17.9mm
diameter: 145.4mm
▶ Material  PA6 GF35
▶ Description  The Sensor-Base is the in the ground anchored unit of the parking sensor. It is the mount for the sensor core.

Cover Cap

GENERAL DESCRIPTION
▶ Color  RAL9005 / black
▶ Weight  2g
▶ Size  height: 10.3mm  |  diameter: 14.8 mm
▶ Material  PA6 GF35
▶ Description  The cap with O-ring is positioned on top of the sensor core to protect the screw.

GET IN CONTACT WITH US!

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