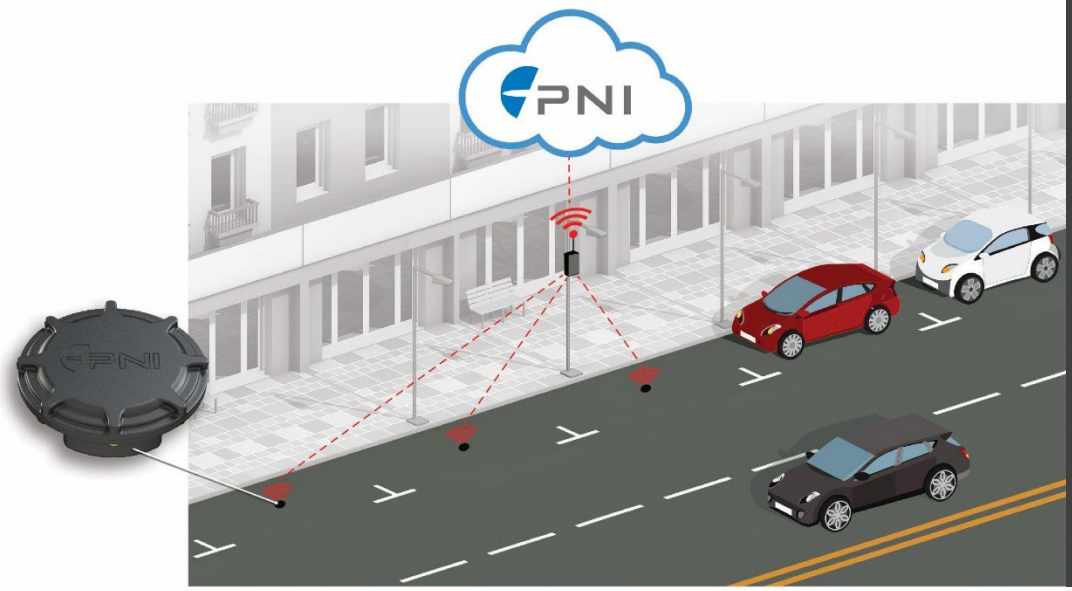
PlacePod® Vehicle Detection Sensor

High-accuracy smart parking sensor technology



Applications

- Smart Parking Management & Reporting
- Smart City
- Parking Guidance Systems
- Event Parking Management
- Commercial & Mixed-use Real Estate
- Public & Private Parking Facility Management

PNI's PlacePod is an IoT-enabled Vehicle Detection sensor for on-street and off-street municipal and private parking management.

PlacePod solves the most mission-critical aspects of parking management: accurate, real-time vehicle detection and location of available parking spaces.

PlacePod is an in-ground or surface-mounted smart parking sensor that communicates with a LoRa® gateway to provide real-time parking data. It provides accurate vehicle detection in parking spaces, up to seven years of battery life, and is stable over temperature fluctuations, even in harsh environments.

Unlike other magnetic sensor-based parking sensors, PlacePod accurately detects parking events in dense urban environments and filters out magnetic interference from underground trains, passing traffic, and overhead power lines which can trigger false parking events.

Features & Benefits

- Includes the industry's most accurate magnetic sensing system for vehicle detection with the combination of PNI's high-performance magnetic sensor and vehicle detection algorithms that accurately detect the presence or absence of a car in a parking space.
- Vehicle detection algorithms offer machine learning capability. This unique feature provides improved accuracy when filtering out local electromagnetic interference and changes in the local magnetic field. Improved vehicle detection algorithms and continuous monitoring provide more accurate detection for vehicles in neighboring parking spaces.
- With its auto-calibration feature, PlacePod does not require any calibration during installation or when firmware is updated. Calibration is optional. This saves time during installation and lowers total cost of ownership of the system.
- Data can be shared with third-party applications
- Capability for wireless configuration and software updates using Bluetooth Low Energy (BLE) via PNI's mobile iOS™ and Android™ applications.

Specifications*

Communication	• LoRa 915 MHz, 868 MHz, 923 MHz, 865 MHz Module • LoRaWAN™ compliant • Uses Sub-GHz ISM bands in North America, Europe and other regions
LoRaWAN Device Type	Class A
Outputs	2 states: • Occupied • Vacant
Battery Life/Type	• Up to seven years depending on configuration and distance from gateway • Lithium-Thionyl Chloride
Dimensions In-Ground	4.3 in (10.92 cm) diameter -minimum hole 4.5 in (11.43 cm) 1.18 in (3.0 cm) height -minimum hole 2.5 in (6.35 cm)
Dimensions Surface-Mount	9.0 in (22.86 cm) diameter 1.25 in (3.15 cm) height
Installation Position	Center of the parking space
Operating Temperature	-30°C to +70°C / -22°F to +158°F
Storage Temperature	-40°C to +85°C / -40°F to +185°F
Activation Type	OTAA
Certifications	FCC (915 MHz), CE (868 MHz)

In-Ground

Surface-Mount

For more information about PlacePod Smart Parking sensors visit: PlacePod.

With over 30 years of experience, PNI is the world's foremost expert in precision location, motion tracking, and fusion of sensor systems into real-world applications.

PNI's sensors and algorithms serve as the cornerstone of successful IoT projects and other mission-critical applications where pinpoint location, accuracy, and low power consumption are essential.

Building on decades of patented sensor and algorithm development, PNI offers the industry's highest-performance geomagnetic sensor in its class, location and motion coprocessors, high-performance modules, sensor fusion algorithms, and complete sensor systems.

To learn more, please visit www.pnicorp.com.

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*Specifications are subject to change.

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