



# WIRELESS SENSORS nwave

## Low-profile wireless sensors with exceptional performance under the most challenging conditions

Nwave wireless parking sensors streamline vehicle detection and provide a single source of data intelligence for all types of parking assets: on-street, off-street, garages, roof-tops. The wireless sensors excel both in per-space parking availability and aggregate vehicle counting applications, for highly flexible hybrid parking solutions.



Exceptional accuracy in all environments



Per Space & Car counting

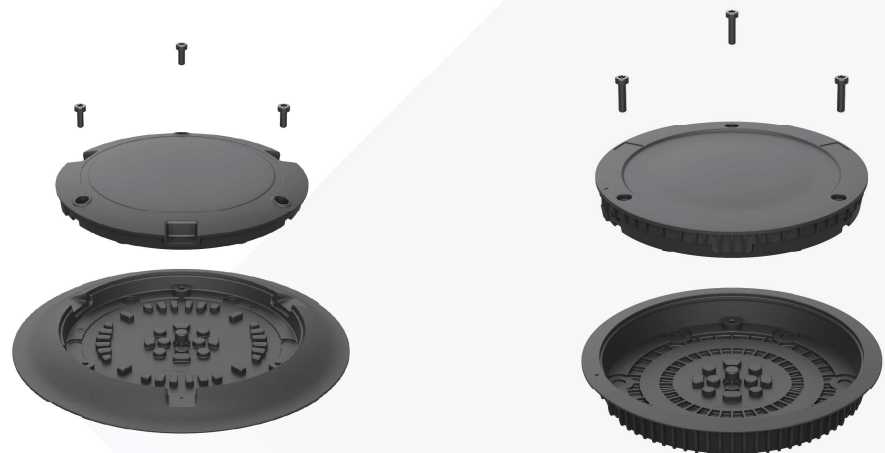


Replaceable battery with up to 10 year life

### The new standard in parking sensors

- 99.9% Accuracy
- Up to 10 years battery life
- 5 sec. detection time
- Up to 3-mile range
- Low-profile (3/4")
- Secure Park ID Technology
- Surface- and flush-mount
- Removable body
- Replaceable battery
- Firmware updates over Bluetooth
- Extended flexible APIs

### Replaceable body design for faster field maintenance



### Multiple wireless protocols

A wide range of radio communication protocols supported to provide flexibility on wireless network selection.



## Technical Specifications



	Surface Mount	Flush Mount
SKU	NPS-4.5-SM-W	NPS-4.5-FM-W
Installation Method	Adhesive or screw anchors	Adhesive or cement affixing into pre-drilled hole (6")
Detection Accuracy	99.9%	
Detection Speed	5-7 seconds	
Battery Life	9-10 years at 20 parking sessions per day	
Communication Range	Up to 3 km / 2 mi urban, up to 6 km / 4 mi in rural	
Dimensions	Height 20 mm / 3/4" Dia. 205 mm / 8 5/64"	Dia. 156 mm / 6"
Enclosure	UV-stabilized polycarbonate, IP68, black (default)	
Operating Temp.	-40 C to +85 C (-40 F to +185 F), 0-100% humidity	
Load Resistance	< 5,000 kg / 11,000 lbs. per wheel	
LPWAN Radio	Weightless-N, SigFox, LoRaWAN 1.0.3 Class A	
Communication Frequency (ISM bands)	US: 902-928 MHz, EU/UK: 865-868 MHz, AU: 915-928 MHz	
Bluetooth Protocol	v. 5.1 standard + Secure Park Identification (SPI)	
Battery Type	3.6V AA Li-SOCI2 primary cell, replaceable	
Road Temperature Measurement	0.5C / 1F accuracy	
Secure Park ID Technology	Secure Park Identification technology for vehicle/driver identification. Enables a wide range of contactless per-space access control, reservation, payment, etc. solutions (US Patent granted)	
Rain/Snow Operation	Seamless operation under rain and snow (wet/dry)	

## Wireless Sensors are Sustainable

- Reduced reliability on electricity
- Up to 10-year sensor battery life eliminates the need for hard-wiring devices to AC power, reduces cost and energy usage
- Replaceable battery design in sensor for the longest product life

