



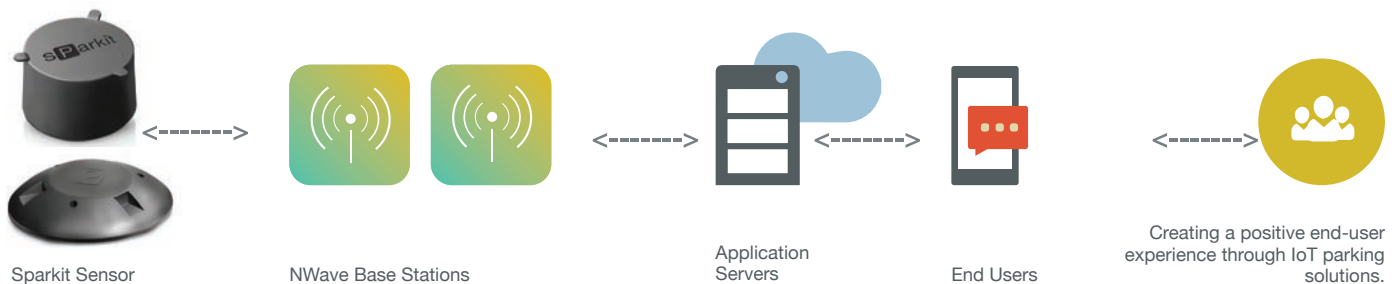
nwave

Sparkit Wireless Smart Parking Management.

Problems with parking lead to congestion, pollution, and lost revenue for councils, parking management companies and businesses. To address these issues, Nwave has developed Sparkit, a rugged, low cost, low power, electro-magnetic wireless sensor system for Smart Parking, available in both flush-mount and surface mount models.

When connected to Nwave's secure low power wide area (LPWA) wireless communications network, cities and businesses can monitor and manage parking space occupancy and enforcement in real-time, and drivers can find a place to park fast.

Sparkit Wireless Smart Parking Architecture



System Features

Radio Technology Nwave low power wide area communications network in sub-1GHz bands (868/915MHz)

Coverage Up to 5km in urban environment

Deployment Low sensor installation cost and no additional street furniture required

Low Power Each Sparkit sensor operates for 5-9 years from built-in battery

Fits any installation requirement Surface-mount and flush-mount

Maintenance Zero maintenance costs with Sparkit's rugged design

Security All data is secure and encrypted (AES-128 encryption)

The Benefits

Occupancy Optimised parking space occupancy

Enforcement Real-time parking space data enables efficient enforcement, increasing parking revenue by up to 35%

Traffic Congestion can be reduced by 15-30%

Pollution Less time spent looking for a parking space reduces urban exhaust emissions by up to 10%

Management Real-time data and analytics improves city planning and allocation of resources

Retail and Business Reduction in time spent looking for a parking space increases retail and business revenues

nwave Sparkit Wireless Parking Occupancy Sensors.



Sparkit Surface-Mount



Sparkit Flush-Mount

Mounting	Adhesive fixing to road surface	Insertion into road
Load Resistance (per wheel)	> 800kg	>1000kg
Dimensions	Ø 174 mm (6.85") height 33 mm (1.3")	Ø 98 mm (3.86") height 58 mm (2.28")
Weight	376 grams (13.3oz)	418 grams (14.7oz)
Enclosure	UV-stabilized and solvent-resistant glass-filled polycarbonate	UV-stabilized and solvent-resistant glass-filled polycarbonate
Protection	IP67	IP67
Color	Black (default) custom colors on request	Black (default) custom colors on request
Operating Temperature	-40°C to +85°C (-40°F to +185°F)	-40°C to +85°C (-40°F to +185°F)
Detection Distance	0-50cm (0-1.5 ft)	0-50cm (0-1.5 ft)
Detection Algorithm	3 axis magnetic field regression	3 axis magnetic field regression
Communication Range	3-5km (2-3 miles)	3-5km (2-3 miles)
Communication Frequency	ISM bands - EU: 865-868MHz U.S.: 915MHz	ISM bands - EU: 865-868MHz U.S.: 915MHz
EIRP	25mW (14dBm)	25mW (14dBm)
Power Supply	Built-in lithium battery	Built-in lithium battery
Battery Life*	5-8 years	5-9 years

* Dependent on number of transmissions.

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