

On-Street Parking Guidance System

Our Parking Information / Guidance System is designed to make it very easy for users to discover the nearest available parking lot, guide them to the selected parking lot using online maps and to the available parking aisle. Due to the simplicity of the mobile app, more users park vehicles in the designated areas instead of in unauthorized areas.

Our Parking Information / Guidance System consists of Underground Magnetic Sensors, Network Gateway and Mobile app for citizens.

Our Parking Information / Guidance System works independent of Parking Access Control / Management System. It connects directly with the Central Management Server and provides and updates the occupancy status based on real occupancy. This helps in detecting any intentional or accidentally missed payments, under-charging etc.

Magnetic Parking Occupancy Sensor

The magnetic sensors for an outdoor parking lot are installed on the ground. These sensor modules come with battery and a transceiver. Upon occupancy, the sensor immediately updates the gateway which is few meters away, wirelessly. The sensor gets wake up trigger during an event; either car coming in or going out. When the trigger comes, the sensor comes out of sleep mode to capture the data. The sensor has self-diagnostics and self-correction algorithms for magnetic field aberrations and temperature fluctuations. Thus the hardware is extremely low power giving a battery life of at least 5 years depending on usage.



SPECIFICATION

Parameter	Value
Model	SVP-EM0-01
Detection	Magnetometer
Detection Range	1 m
Load Resistance	1 ton
Protection	IP65
Mounting	Flush mounted under the surface
Dimension	30 mm depth, 119 mm dia
Wireless Frequency	2.4 GHz
Communication Range	100 m (line of sight)
Power Supply	3.7v Lithium battery
Battery Lifetime	5 years
Operating Temperature	-40C to 85C

Parking Gateway

The Parking Gateway is the heart of the Parking Guidance System. It receives the occupancy information from the sensors and relays it to the Central Management System in real-time. The communication between the Sensor Controller and the Gateway is over ZigBee and between the Gateway and the CMS is over GSM. Apart from providing communication between devices and CMS, it also tracks the sensor and reports any faults to the CMS.



SPECIFICATION

Parameter	Value
Model	GZM-ERW-SB
In & Out Protocols	ZigBee (2.4 GHz) & GSM (2G/3G/4G)
Ports	USB 2.0, UART Serial Port, 10/100M Ethernet
Enclosure	All weather proof
Power Supply	230V AC
Operating Temperature	-10C to 70C