FCC Rules

Compliance Statement (Part 15.19)
The enclosed hardware device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received including interference that may cause undesired operation.

Warning (Part 15.21)
Changes or modifications not expressly approved by IPS Group, Inc. could void the user's authority to operate the equipment. Manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment.

Label Warning Statement

The enclosed hardware device complies with Part 15 of the FCC Rules. Operation is subject to Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and
(2) This device must accept any interference received including interference that may cause undesired operation.

Compliance Statement (Part 15.105(b))
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

• Reorient or relocate the receiving antenna
• Increase the separation between the equipment and receiver
• Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
• Consult the dealer or an experienced radio/TV technician for help

Vehicle Sensor Theory

IPS Vehicle Detection Sensor provides a reliable and secure detection system which detects the presence and absence of a vehicle in a public or garage parking space.

The IPS sensor uniquely directs all sensing information via the IPS single or multispace parking meter cellular communications backbone.

The parking locations weather they are located on a city street or parking structure will detect whatever is parked over it. This build in an added measure of security not only does it detect when a vehicle is located at a parking location it will also detect when it is vacant so if a vehicle is abandon, stolen or has been left on the street somewhere it can be immediately located and it will time date stamp the actual event.

It will also tell the city workers that have shut down specific parking locations due to either road work or an event if someone has inadvertently left their vehicle on the street in a restricted area.

The sensor because it is mounted in either an asphalt or concrete street has a battery life of 3 - 5 years depending on detection activity. To maximize and conserve battery life the sensor remains dormant until it actually senses a vehicle at which time it will wake up to detect whatever is covered up by it and relays the information or data to the meter and then returns to dormant state until the next event which is when the vehicle leaves.

The IPS sensor uses multiple sensing technologies combining RF as well as IR to detect large metal objects.

Its unique design provides the most accurate data on the sensor market and allows for quick installation and servicing.

FEATURES

• Sensor is wirelessly paired with an IPS parking meter to detect the presence or absence of a vehicle

• Sensors are 3" in diameter and 3" in height and

• Sensor is fully encapsulated from the elements and contains its own battery power source of two lithium ion high capacity 3.6VDC cells. The open wire loop antenna is a ¼ wavelength and correctly characterized for very low reflected power loss for a completely wireless solution

• IPS utilizes an air/water tight sensor housing, which allows sensor to be easily removed should service in the field be required.

SENSING METHODOLOGY

IPS Vehicle Detection Sensors use multiple sensing elements to produce maximum sensor sensitivity. A ferrous object, such as a vehicle's engine block, alters the local magnetic field surrounding the sensor. As a car pulls into a parking space, the sensor detects the change in the magnetic field and relays the information to the IPS parking meter. The sensor can also be fine tune to register a movement of a vehicle in a specific space increasing accuracy and making data received more valuable.

INSTALLATION

For best performance, sensors are installed below-grade, typically 2 – 3 inches below the surface with the loop antenna and optics above grade or street level to be able to detect vehicles.

For the most accurate results, sensors are installed in the ground under the area where the transmission and engine of the car is expected to be.

BENEFITS

• Sensor communicates directly to IPS meter rather than a mesh communication network, providing the most reliable communication transmission available at a significantly lower cost

• Security of Real-time occupancy data is available via web-based data feed, supporting maps and smartphone applications

• Supports anti-meter feeding policies

• Option to reset meter when car pulls away

• Ability to add courtesy time on the meter, which gives motorists free time when they first pull into a space

The IPS solution utilizes wireless technology to allow meters and sensors to talk to one another and then transfer data to a centralized data management system. IPS single-space and multispace parking meters work as a team with vehicle detection sensors and our web-based

Data so in the even a vehicle is abandon or left on the streets after curfew hours it has built into it an added measure of security. This also become useful if a meter is broken into or tampered with because typically if they are not on foot they like to park next to the meter as cover and sometimes less detectable.

Database Management System (DMS) to help customers effectively evaluate parking trends and adjust programs accordingly. Cities are able to quickly upgrade existing meters, easily track revenue, send enforcement directly to vehicles in violation, and improve the efficiency of overall parking operations; all while holding customer satisfaction at a premium.