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ESTACIONAMIENTOS INTELIGENTES

Surfaced Geomagnetic Wireless Parking Sensor



WBP-T10S

1. Keywords

Surface Dual-mode Geomagnetic Parking Detector; **Size:** $\Phi 175 \times 40$ mm in specification; **Function:** Combines wireless microwave radar and geomagnetic technology for parking space detection (detection accuracy over 99%), wireless communication, supports Bluetooth debugging and wireless upgrade, IP68 protection, compressive, anti-interference and corrosion-resistant; **Usage:** Installed at specific positions of the parking space (near the front of the vehicle for standard parking spaces and in the middle for non-standard parking spaces), used for detecting parking space status in outdoor parking guidance systems

2. Product Introduction

The dual-mode geomagnetic parking detector is an important component of the outdoor parking guidance system. Dual sensing technology, with an accuracy rate of 99% for straight/non straight vertical parking spaces. The protection level is as high as IP68, and it is installed in the middle of the parking space. It has the characteristics of waterproofing, snow resistance, corrosion resistance, pressure resistance, and strong anti-interference ability, which can effectively cope with the harsh environment of outdoor parking spaces.

3. Product Features

1. Adopting wireless microwave radar and geomagnetic dual judgment method, advanced recognition algorithm, with a detection accuracy of over 99%.
2. Strong anti-interference ability, no impact on underground rail transit, cellar covers, base stations, metal support sunshades, etc.
3. Wireless communication eliminates wiring troubles and reduces construction difficulty.
4. The geomagnetic parking detector has a small external size and minimal damage to the parking space ground.
5. High strength shell design, with compressive and anti-corrosion characteristics, and long service life.
6. Adopting a protection design of up to IP68, it can effectively cope with various harsh environments in outdoor parking spaces.
7. Bluetooth debugging for mobile apps, convenient and simple. Convenient maintenance.

4. Technical Parameter

Product model:	WBP-T10S
Specifications and dimensions:	Φ175×40mm
Shell material:	Black PC+ABS+PA66
Protection level:	IP68
Net weight:	645g
Installation method:	Surfaced
Working temperature:	-40°C~+85°C
Pressure resistance:	20t
Wireless upgrade:	supports
Working voltage:	3.4V-3.6V(built-in battery)
Battery Capacity:	18000mAh
Average current:	<50uA
Battery life:	3-5 years
Communication method:	LoRaWan/LoRa Frequency band customizable
Communication Distance:	≤ 300m (supporting Lorawan gateway testing)
Detection Accuracy:	≥99%
Environmental humidity:	≤90%RH (non condensing)
Mobile APP debugging	support

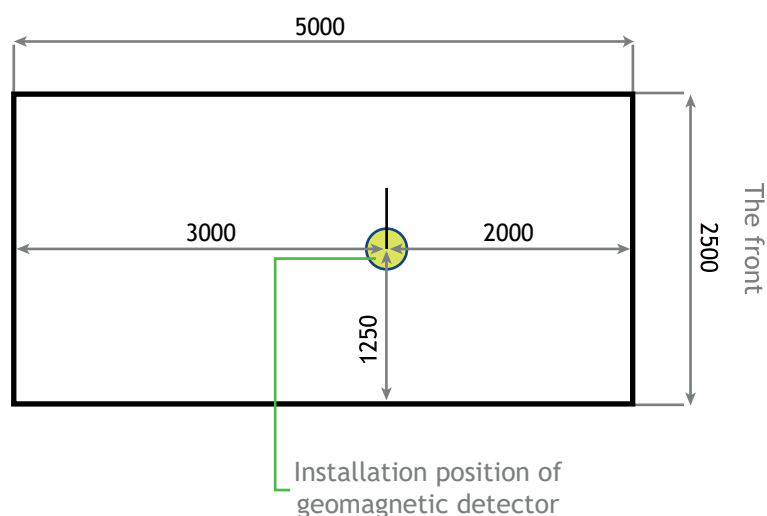
Table 1 Technical Parameters of Geomagnetic Parking Space Detectors

Thoroughfare	Uplink frequency/MHz								Gateway - Center frequency setting/MHz	
	Ch0	Ch1	Ch2	Ch3	Ch4	Ch5	Ch6	Ch7	Radio frequency 0	Radio frequency 1
EU868	867.1	867.3	867.5	867.7	867.9	868.1	868.3	868.5	867.5	868.5
AU915	915.2	915.4	915.6	915.8	916	916.2	916.4	916.6	915.5	916.3

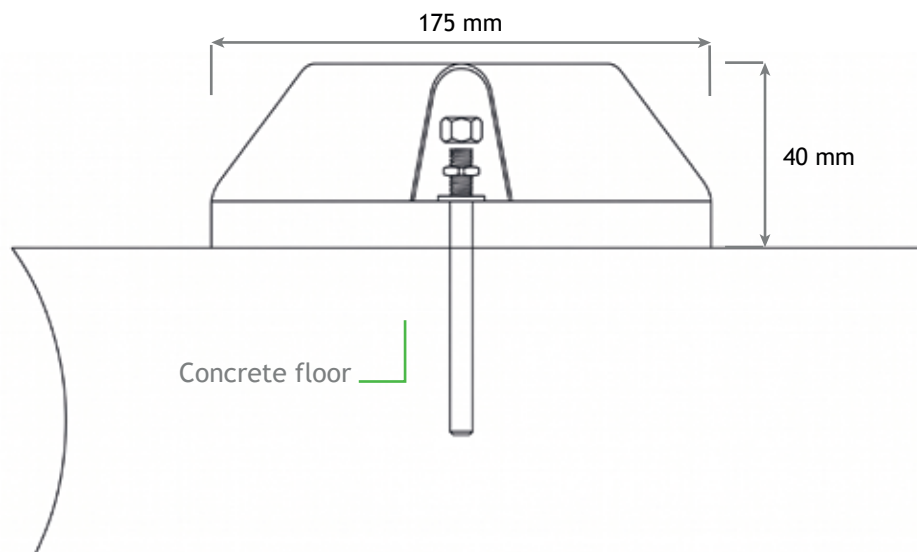
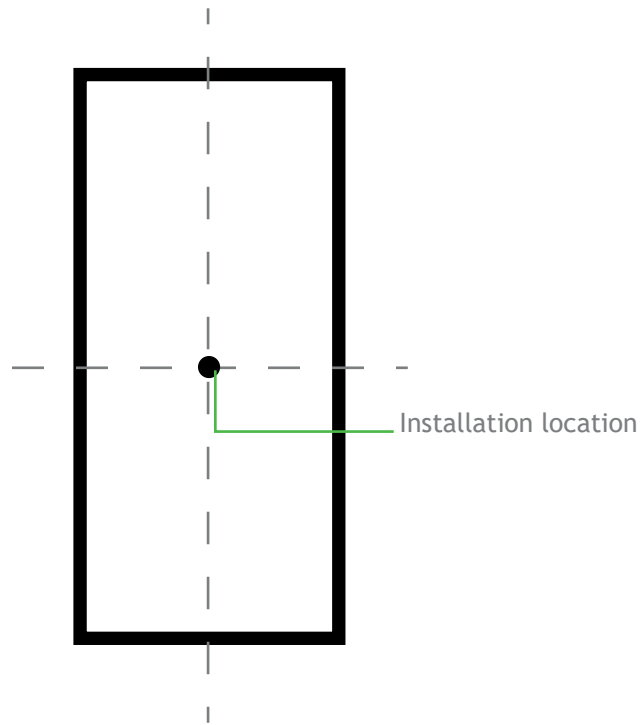
*Table 2 Equipment uplink channel frequency point table
The table is the default configuration of the device at the factory and can be configured and modified.*

5. Product Installation

Installation position of the detector: For standard parking spaces of 2500 * 5000mm, the geomagnetic detector is installed near the front of the vehicle; As shown in the follow figure:



For other non-standard parking spaces, the geomagnetic detector is installed in the middle of the parking space, as shown in the following figure



Installation diagram of geomagnetic parking spot detector

6. Usage and maintenance

1. Non system maintenance personnel are not allowed to operate system equipment at will to prevent misoperation and system failure.
2. After the system configuration file is completed, please make a backup to prevent it from being damaged and unable to recover, reducing maintenance workload.