The SmartSpot Gateway introduces a new class of smart cities communications infrastructure device which is used to deliver SmartZones. It provides a universally flexible gateway between sensors and devices to be able to securely connect with Internet cloud hosted application services.
Maximise the usage & efficiency of your car parking asset
Whether you’re providing car parking for businesses, residents or visitors, the demands being placed on your car parking facility are growing.

Smart Parking Limited is an Australian Securities Exchange (ASX:SPZ) public listed company. Our advanced real-time vehicle parking event sensor information solution, known as ‘SmartPark’ has been adopted in 16 countries. As a pioneering technology innovator and services company, we have achieved the position of holding the largest market share for global intelligent parking sensor and integrated smart parking services.

We are a proven and comprehensive full service provider of technology and solution services to the parking industry, with over a decade of experience in implementing successful customer parking environments. Smart Parking has installed over 60,000 wireless vehicle detection sensors worldwide and supports sophisticated sensing based parking solution systems in a range of environments including shopping centres, supermarkets, airports, commercial parking sites, universities and large scale municipal street environments.

Alongside the technology division our managed services division operates and manages in excess of 500,000 car parking spaces across the UK using complementary ANPR technology, as a single solution, combined with Pay & Display or integrated with sensing technology

**Security & peace of mind**

A publicly listed company on the ASX, Smart Parking are a global business with offices and teams in Europe, Australia and New Zealand along with a rapidly growing network of expert partners across the globe. Smart Parking has access to investment funds and the commitment to take our parking management solutions to the next level.
The SmartSpot Gateway is a highly flexible IoT building block that allows city operators to begin with the deployment of smart parking sensing.

Using the same infrastructure SmartSpot Gateways equip smart cities with the effective means to have a single ‘street furniture’ device installed throughout the city that can accommodate a wide range of additional services such as public broadband, safety video surveillance, air quality, lighting control, and many more.

It provides a common IoT gateway platform which is flexible enough to accommodate a wide range of connectivity requirements and protocols within smart city environments ranging from vehicle smart parking detection sensors to common Ethernet and WiFi compatible devices and open standards such as ZigBee/802.15.4, LoRaWAN, 3G, 4G, and the upcoming 5G. We like to call these areas of open connectivity - SmartZones.

SmartZones make obsolete the growing problem faced by cities driven by a multitude of costly and isolated communication devices installed within city street environments by enabling a single, flexible and low cost delivery of many types of smart services.

Smart Parking offers a family of SmartSpot Base Stations.

SmartSpot Omni models offer wider options for connectivity including Ethernet/Fibre Optic, WiFi, as well as wireless type sensors.

SmartSpot Lite models are focused towards wireless type sensor connectivity.
SmartSpot
turn your city into a Smart City

Features & Benefits

• Industry compatible with Power over Ethernet (PoE) power.
• Optional battery/solar PoE connected power pack.
• Multi-band global 3G based uplink communications with integrated global SIM (activation is bundled with the SmartCloud service) with a failover option to a second SIM/carrier if required.
• Dynamic star mesh networking for high availability and reliability of vehicle detection sensor communications.
• Ultra Low Power vehicle sensor communications management and aggregation.
• Synchronized UTC real-time clock for accurate time reference for all message timestamps and vehicle detection sensor clocks/events.
• Supports RFID based vehicle identity based services and electronic permits.
• Independently validated for accuracy and compliance.
• Site planning RF Survey system to guarantee optimal SmartSpot placement for coverage and high availability operation.
• Easy, automated activation via an Android based SmartInstaller application.
• Over-The-Air (OTA) provisioning, configuration management, firmware updates.
• IP-67+ rated, low-mass, high strength aluminium alloy construction means that they will survive many years of extreme operational environment conditions – indoors or outdoors.
• Pole and/or wall mounting fixtures.
• No conflict, independent co-existence with existing IT infrastructure.
• Centrally managed and operated from the SmartCloud service platform.
• Simple, Plug’n’Play deployment and activation.
• Automatic, Rugged and Robust – dependable network coverage for smart sensors and devices.
• Enables powerful strategic options for SmartZone infrastructure – including future open IoT opportunities.
# SmartSpot technical specification

<table>
<thead>
<tr>
<th>Function</th>
<th>Secure, High Availability Internet communications gateway for SmartZone Infrastructure (sensors, etc).</th>
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</table>
| **Communications Modes** | 433/868/915Mhz ISM bands sensors  
Multiband 3G with Dual SIM – default integrated internal SIM/pluggable second SIM  
IEEE 802.3 100BaseT Ethernet WiFi (IEEE 802.11n) |
| **RF Frequencies** | 3G Cellular Pentaband  
902-928MHz ISM Band  
868-870 SRD Band  
433MHz LPD ISM Band  
Dual Band 2.4/5GHz WiFi |
| **SmartZone Services** | Vehicle detection sensors  
Digital displays  
WiFi Network Access  
Video/Audio surveillance  
Environmental sensors (air/temperature/light/etc)  
Command/Control devices |
| **Power Supply Modes** | Mains power 90 – 264VAC  
Passive 24Volt PoE IN/OUT  
Optional 802.3af/at PoE  
Optional Battery Backup  
Optional Solar Panel |
| **Power Supply Compliance** | FCC, CE, RCM |
| **Average Sensor Communications RF TX Power** | 433MHz = 10dBm  
868-870MHz = 10dBm  
902-918MHz = 10dBm |
| **Sensor Communications RX Sensitivity** | 433MHz = -110dBm  
868-870MHz = -112dBm  
915MHz = -112dBm |
| **Enclosures Characteristics** | SmartSpot Lite Base Station models  
121.5mm x 214.5mm x 64.6mm (WxHxD)  
SmartSpot Omni Base Station models  
255.0mm x 255.0mm x 82.4mm (WxHxD)  
Outdoor/indoor  
IP67+  
Wall/Pole mounting |
| **RoHS Compliance** | Yes |

[www.smartparking.com](http://www.smartparking.com)
SmartSpot
turn your city
into a Smart City

The Smart Parking SmartSpot Gateway automatically use a star typology for creating high availability/redundant ‘mesh’ RF communications coverage with long lifetime battery powered vehicle detection sensors.

The ratio of Sensors to Concentrator should be approximately 1:25 or more.

Each SmartSpot Gateway can support large clusters of sensors if they are within SRD RF communications range. Typically it is recommended that all sensors have redundant coverage from two or more SmartSpots. This is economically achieved when extended coverage is designed and established for production scale sensor deployments.

SmartSpot Gateways use global 3G cellular communications as the default and bundled mechanism for communications to the SmartCloud services platform. A secondary SIM can be installed to allow automated failover to a second carrier if required. An optional version of the SmartSpot can include 802.11n WiFi client support using either WPA2-AES or 802.1X security authentication modes.
SmartSpot
REINVENTING THE PARKING EXPERIENCE TODAY

Expert management, intelligent technology, measurable results

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Disclaimer: All product specifications and data are subject to change without notice to improve reliability, function or design or otherwise.

02.17/EA/V2