

Parkmobile Gateway

Overview

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Contents

Overview	2
Hardware	3
Component layout from left to right:	4

Revision date	Page	Description	Version
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Overview

The Parkmobile Gateway is a device that links bay parking sensors to the main parking system known as RingGo. Sensors buried in the ground will send data to the RingGo system via the gateway relating to the occupancy of a parking bay in real-time 24/7/365.

The Gateway comprises of two communication devices that will link with sensor repeaters (433 MHZ) and the core RingGo system via 3G comms. Data relating to sensor activity is subsequently accessed from Smartphone Apps. via GPRS. The Gateway components are housed within a box which is mounted externally on street furniture such as existing street lamp poles and would normally be located well above street level to avoid potential interference or vandalism, equally its position would ensure maximum coverage for the communications links.

The quantity of Cobalt Sensor Gateway units will vary from one installation to another and is dependent on the quantity of sensors and repeaters that are installed on-site.



Hardware

The following details provide specific information about each internal component of the Gateway.

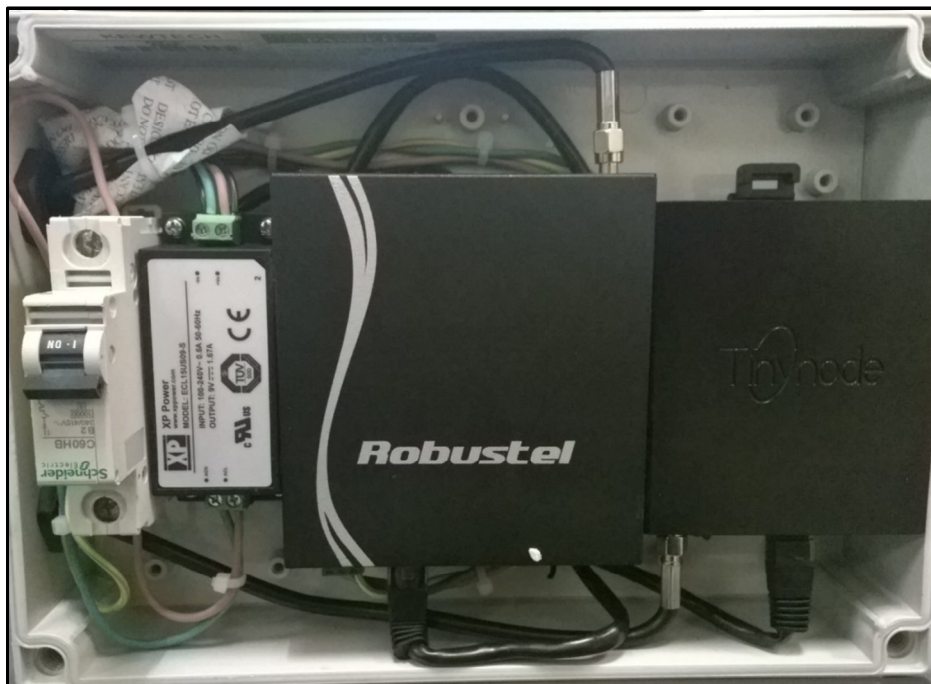
1. IP67 polycarbonate box 255 x 180 x 75
2. GSM antenna
 - GSM (900 MHz)
 - DCS (1800 MHz)
 - PCS (1900 MHz)
 - 3G (UMTS 2.1 GHz)
 - WIFI / BLUETOOTH (2.4 GHz)
3. Antenna
4. Mains isolator
5. Gateway interface 5v – 12v dc
6. M2M Cellular Router 9v dc
7. 9v Power supply Ac – DC 9v
8. Mains terminal / Din rail fuse block
9. Silicon anti-moisture bag
10. Din rail + mounting clips
11. SIM carr

The mains isolator serves as means of electrically protecting and isolating the Gateway if any components require attention when in situ i.e. for a hard reset of the internal components.

Antennae's are mounted 180 deg. apart and are located above the Gateway unit. Cables for the antennae need to be pre-terminated for connecting to the Gateway in situ and therefore of a suitable length for the installation. Antenna cables will be terminated to 1.5M.



All cable entries are via the base of the polycarbonate box using a suitable cable gland to prevent the ingress of water and to protect its IP rating.



Component layout from left to right:

Isolator, PSU, Modem & Gateway receiver / transmitter