



PLACEPOD® VEHICLE DETECTION SENSOR RELEASE NOTES

PlacePod® Version 2.0

Release Date: October 1, 2018

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1 OVERVIEW

This document contains information about the new features, functions, and performance improvements incorporated in the following software release: PlacePod Version 2.0. There are major firmware changes to this release; therefore, existing PlacePod sensors will not be field upgradable to version 2.0.

2 VERSION INFORMATION

Part	Version Number
iOS Application	V1.1.2.16
LoRa Radio	V3.1.0
Host MCU	V5.2.0.688

3 NEW AND UPDATED FEATURES

3.1 New Features

- PlacePod now uses Cayenne Low Power Payload (LPP) format [1]. This allows for smaller payload sizes. PlacePod specific information can be found in the PlacePod Communications Protocol document [2].
- US915 and AU915 PlacePod default Frequency Sub-Band changed from 1 to 2.
- All PlacePod transmitted messages are now unconfirmed.
- Default PlacePod messages will be sent on spreading factor 10 for all regions:
- US915, AS923 = Spreading Factor 10 - cannot be changed by user
- EU868, AU915, IN865 = Spreading Factor 10 but can be changed by user with the new iOS Application).
- Bluetooth Low Energy (BLE) will now advertise once every second while PlacePod is deactivated and once every 10 seconds once the PlacePod is activated.
- New PlacePod Vehicle Detection Sensor Utility iOS Application for secure communication with PlacePod over BLE. This will be used for activation and configuration of PlacePod [3].
- LoRaWAN Over-the-Air Activation (OTAA) AppEUI and AppKey are now programmable through the iOS Application. DevEUI is still Device LoRa MAC address (Serial Number).

3.2 Updated Features

- Car presence events are transmitted with SF 10; max power, lowest data rate/spreading factor available for NA915.
- Default frame port set to 3.
- PlacePod no longer requires the Activation Tool to turn on BLE and activate the device. BLE now advertises once every second while PlacePod is deactivated and once every 10 seconds once the PlacePod is activated. To activate the PlacePod, please use the new iOS Application, information on the activation procedure using the application can be found in the PlacePod Vehicle Detection Sensor User Guide [4].
- Android Application will be available in the near future, please check in with customer service for the latest update.

Table 1: Updated Default Settings

Setting	Version 1.0	Version 2.0
Frequency Sub Band (US915, AU915)	1	2
Spreading Factor	9	US915, EU868 = 10
Frame Port	1	3
Adaptive Data Rate Support	No	Yes (Configurable, Off by default)
Keep-Alive Interval	5 Minutes	1 Hour
Over-The-Air Activation Keys	Fixed	Programmable
Payload Format	PNI 17 Byte	CayenneLPP [1]
Confirmed Messages	Parking Events	None
BLE Advertise	Off	Once every second while deactivated and once every 10 seconds once activated

4 DOCUMENTATION

[1] Cayenne Low Power Payload (LPP), <https://mydevices.com/cayenne/docs/lora/#lora-cayenne-low-power-payload>.

[2] PlacePod Communications Protocol, <https://>

[3] PlacePod Vehicle Detection Sensor Utility iOS Application, <https://>

[4] PlacePod Vehicle Detection Sensor User Manual <https://>