

PLT004 User Manual

Specifications, device installation, compliance, and safety information

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Revision History

Name	Date	Description	Version
MARIA	2023/06/13	Create document	1.0

Introduction

The PLT004COREInsight® BLE Beacon tag is an active BLE beacon which utilises the Nordic nRF5810 module encased in a housing. This document explains how to use the PLT004tag in a production setting. The PLT004tag advertises at an optimal interval of 7 times every 60seconds. The beacon message is sent on the advertisement channels for BLE: 37 (2402 MHz), 38 (2440 MHz) and 39 (2480 MHz).

The tag has a Theoretical lifetime of 5 years.

Specifications

FCC ID	2A4F8-PLT004
RF specification operating frequency	2402 MHz (low), 2440 MHz (medium), 2480 MHz (high)
Type of modulation	GFSK
Number of channels	40 channels
Antenna type	Pillar
Antenna gain	-0.4dBi
Specialty	Bluetooth Low Energy
Function	Bluetooth Low Energy
Power supply	N/A
Power cord	N/A
Battery	2 lithium metal cell batteries
Lifetime	5 years

Compliance

Per FCC 15.19(a)(3) and (a)(4): This 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.

Per FCC 15.21: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: 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.

Our beacon device falls under FCC rules part 15.247 as it transmits within 2400-2483.5MHz.

PLT004

Production versions of the tag come in a sealed case with the batteries installed. They are already powered on and ready for installation. The tags pass through a quality assurance phase to ensure they are fit for purpose. This includes a range test to ensure the tag performs well at a distance.

Installation

The tag is already powered on and ready to install. Simply insert the tag into the rail on the pallet. Once it has been installed, assign the tag into the CORE system.





Usage

The PLT004COREInsight BLE Beacon tag is an active BLE beacon. The PLT004tag advertises at an interval of 7 times every 60seconds. COREInsight® Readers listen for special (custom) adverts from the Beacon Tag and when it is in range (approx. 60 meters), the Reader collects these detections.