

PLT003 User Manual

Specifications, device installation, compliance and safety information

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PDF

Table Of Contents

Revision History	3
Introduction	4
Specifications	4
Compliance	5
Safety	5
PLT003	6
Installation	6
Usage	6

Revision History

Name	Date	Description	Version
RORIE	2022/01/18	Create document	1.0
RORIE	2022/02/01	Compliance section	1.1
RORIE	2022/02/02	Specifications	1.2
RORIE	2022/02/15	Add FCC ID	1.3

Introduction

The PLT003 COREInsight[®] 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 PLT003 tag in a production setting. The PLT003 tag 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 (2426 MHz) and 39 (2480 MHz).

The tag has a Theoretical lifetime of 5 years.

FCC ID	2A4F8-PLT003
RF specification operating frequency	2402 MHz (low), 2426 MHz (medium), 2480 MHz (high)
Type of modulation	GFSK
Number of channels	3 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	3 lithium metal cell batteries
Lifetime	5 years

Specifications

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.

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

Safety

Per FCC KDB 784748, Section A.8: To satisfy RF exposure requirements, this device and its antenna must operate with a separation distance of at least 20 cm from all persons. Please maintain at least a 20 cm spacing from the antenna and device.

PLT003

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 PLT003 COREInsight BLE Beacon tag is an active BLE beacon. The PLT003 tag 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.