COREInsight® BLE Pallet Tag

Hardware Specification

COREInsight® Bluetooth Low Energy (BLE) tags are not active advertising BLE tags. The COREInsight® Pallet tag is passive until in range (approx.100 meters) of a reader.

COREInsight® tag is a BLE tag that listens for the presence of a reader before transmitting its payload. Once a tag has communicated with a reader it goes into a long sleep mode (neither listens nor transmits) for a period set by the reader's instruction. In the absence of a reader (i.e., in an aircraft) and not in a long sleep mode the tag will revert to short sleep mode, where it listens for a reader every few seconds.

The COREInsight® Pallet tag includes a movement sensor, to dynamically adjust sleep times and detect abnormal movement to further its capabilities.

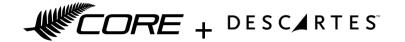Images are indicative only, actual product may vary

Name of the Product:	Core Pallet Tag
Model:	PLT002
Description:	Bluetooth Low Energy (BLE) tag used to monitor movement of goods and equipment. Each tag is made up of an Ublox NINA-B112 module encased in a housing. Also included is two lithium metal cell batteries.
Battery:	Two CR2450 Rated At 620mAh each. Total 1240mAh
Size:	4.4" x 1.7" x .7" (112mm x 44mm x 19mm)
Weight:	2.9 oz (85 Grams)
Temperature Range:	-20˚C to +60˚C

Bluetooth Module:	Ublox NINA-B112
Bluetooth Type:	Bluetooth Low Energy 5.0
Bluetooth Sensitivity:	-95dBm
Bluetooth Max Power Output:	+4dBm
Bluetooth Antenna:	+2dBi SMD on Module ProAnt Antenna, Omni Directional
Frequency Supported:	2.4GHz ISM, 40 BLE Channels & Adv. Ch. No. 37, 38, 39
Movement Sensor:	STMicroelectronics LIS2DH12 3-axis digital output motion sensor
Power Consumption - Max:	<7.6mA
Power Consumption - Sleep:	3.5 uA
Operational Life Running:	Theoretical life time of >2 years
	Managing sleep time and lower polling rates used by COREInsight network can extend the life significantly
NFC:	Used to read Tag ID for identification
Transportation:	Meets IATA Dangerous Goods Regulations 2015-2016 Edition (UN3091) Exemption Requirements PI 970 Section 2. Less than 4 lithium metal cells encased in equipment. No declaration required
Transport:	BLE Tags do not transmit until "pinged" by a Core Reader. Since a reader is not present during air or sea shipments, the tag is in a dormant state.
FAA:	Meets turn on/turn off requirements similar to personal electronic devices (PED).

Certifications:

Core Pallet Tag (PLT001)	Bluetooth	D037239 (PLT001)
	FCC	TBA
	IC	TBA
	CE	TBA
NINA-B112	FCC	XPYNINAB1
	IC	8595A-NINAB1
	CE / RoHS	*See NINA-B1 Declaration of Conformity*
	Japan Radio EC	Complies
	NCC Taiwan	CCAJ16LP6460T0
	KCC South Korea	MSIP-CRM-ULX-NINA-B112
	Anatel Brazil	MSIP-CRM-ULX-NINA-B112
	AS/NZS	Complies with AS/NZS 4268:2012/AMDT 1:2013
	ICASA	TA-2016/2760 APPROVED
	Bluetooth	D032220 (85618)