

## COREInsight® BLE Standard Tag

## **Hardware Specification**

COREInsight® BLE tag is not a standard active BLE beacon. The COREInsight tag is passive until in range (100 meters) of a reader. COREInsight tag is a Bluetooth Low Energy tag that listens for the presence of a reader before transmitting its payload. In the absence of a reader (i.e., in an aircraft) it does not transmit. The tag and reader do not establish a "pairing" as is the case with an active beacon. Once a tag has communicated with a reader it goes into sleep mode (neither listens nor transmits) for a period by the reader's instruction. When the tag is away from a reader and not in a sleep mode it will revert to passive mode (constantly listening but not transmitting).

In order to conserve battery life until active deployment, the tag can be turned off by instruction from a reader. It can be turned on again by touching an active NFC device against the top of the tag.



Images are indicative only, actual product may vary

Name of the Product:	Core Standard Tag
Model:	STD001
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 one lithium thionyl chloride metal batteries.
Battery:	One ER14505 battery rated at 3.6V and 2400mAh.
Size:	4.9" x 2" x 1" (124mm x 51mm x 26mm)
Weight:	< 3.5 oz (100 Grams)



Temperature Range:	-20°C to +60°C	
Bluetooth Module:	Ublox NINA-B112	
Bluetooth Type:	Bluetooth Low Energy 4.2	
Bluetooth Sensitivity:	-95dBm	
Bluetooth Max Power Output:	+4dBm	
Bluetooth Antenna:	+2dBi SMD ProAnt Antenna, Omni Directional	
Frequency Supported:	2.4GHz ISM, 40 BLE Channels & Adv. Ch. No. 37, 38, 39	
Power Consumption - Max:	<7.6mA	
Power Consumption - Sleep:	3.5 uA	
Operational Life Running:	Theoretical life time of >3 years	
	Managing sleep time and lower polling rates used by COREInsight network can extend the life significantly	
NFC:	Used to toggle Tag on and read Tag ID	
Transportation:	Meets IATA Dangerous Goods Regulations 2015-2016 57 <sup>th</sup> Edition (UN3091) Less than 4 lithium metal cells encased in equipment. No declaration required Battery passed UN38.3 tests.	
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 Standard Tag (STD001)	Bluetooth	D037239 (STD001)
	FCC	ТВА
	IC	ТВА
	CE	ТВА
NINI-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)