ED210

LoRaWAN Smart Badge User Manual

V1.0.0

Document Revision Record

Version	Time	Description	Remark
V1.0.0	2019-12-28	Preliminary version	Mike

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1. Description

ED210 is a smart ID badge based on LORAWAN network transmission. It supports GPS and Beidou dual-mode outdoor positioning and Bluetooth 4.0 indoor positioning. The positioning accuracy is 10～20meters outdoor and 3~5 meters indoor. Through the intelligent tracker, beacons, LoRaWAN gateway and Web platform/APP, it can realize the real-time positioning of staff and visitors. Help enterprises and institutions achieve personnel management and safe production.

Application

- ✓ Construction
- ✓ Factory
- ✓ Hotel

- ✓ State power station
- ✓ Large Oil&Gas Company
- ✓ Petrochemical

2. Features

- ✓ Indoor & Outdoor real-time positioning
- ✓ Build in NFC (Opt.),
- ✓ SOS in emergency: Press the positioning button to relocate your position and send to the platform.
- ✓ External personnel management
- ✓ OEM and ODM service available.

3. Interface

3.1 LED Indicator&Buttons

No.	Status	Description	Remark
1	RGB Red LED indicator	Solid red under charging	
		Flashes every 32seconds when battery less than 10%	
2	RGB Green LED indicator	Solid green when fully charged	
3	RGB Blue LED indicator	Flashes 5 times in a row when successfully positioned	
		Lit up for 3s when joined the LoRaWAN network	
		Data transmission, fast flashing 10 times	
4	Power button	Short press 1s to power on the device, long press 5s to power off the device	
5	Positioning button	Short press the button to re-positioning, the device will upload the current position information to the platform after successful positioning	

Table3.1 LED indicator&buttons

4. Specification

Spec	Description
Communication	LoRa
Communication range	1KM in dense environment,3~5KM Los
Tx power	14dBm
Frequency	Free ISM Band，470~510MHz. EU868MHz and US915Mhz optional
Bluetooth	Build in Bluetooth 4.0
Positioning	Outdoor: Support GPS, Beidou dual mode; indoor: active Positioning (Bluetooth)
Positioning accuracy	10meter（outdoor） 3-5meter（indoor）

Battery	Build in 900mah Rechargeable Li -battery
Charging interface	Type-c Waterproof charging interface
Buttons	1-power button 2-Re-positioning button
Battery life	More than 40h@ 5 minutes GNSS positioning interval
Enclosure	IP66
Dimensions	86.5*55*8mm
NFC	Build in NFC, detect range : 1-15cm
RFID	can customize
Indicator	With LED indicator
Operation temperature	-20℃~60℃
Upload frequency	Customized
Supply voltage	5V

Table 4.1 specification

5. Operation guide

5.1 Power on

Short press power button 1 second, the red Led indicator lit up.

5.2 Power off

Long press the power button 5s , the red led indicator extinguish.

5.3 Re-locate

Once in danger or need assistance, short press the positioning key 1S, immediately relocate your

current position, the device will upload the current position information to the platform after

successful positioning.

6. Package

Item	Method	QTY	Dimensions	G.W	Accessories	Remark
Smart ID badge	Gift box	1pcs/box			Charging cable, user manual, Warranty card	60pcs/cartoon