

UA-210 Indoor Base Station

Introduction

CyraSecurity UA-210 is an indoor positioning base station designed based on ultra-wideband (UWB) technology. By deploying this base station, UWB signal coverage in the target area is achieved. It supports ToF/TDoA positioning mode and has the advantages of long coverage distance and high positioning accuracy. The ceiling-mounted installation of the product can be widely used in personnel and material positioning in factories, courts, hospitals, data center and other scenarios.

Main Features

- **Based on IEEE 802.15.4a UWB**
 - Nanosecond-level pulse signals achieve centimeter-level positioning accuracy
- **Built-In Antenna**
 - Built-in omnidirectional antenna, coverage radius is greater than 35m
- **TDMA Technology**

- Achieve high concurrent tag access, the number of tag access in TOF positioning mode > 150@1Hz, TDoA mode > 950@1Hz
- **UWB Air Interface Encryption (AIE)**
 - Support air interface encryption to prevent illegal device access
- **Wired Access Authentication and Encryption**
 - Through base station access control, the legitimacy of access to the base station is ensured; through encryption, the security of data transmission between the base station and the engine is secured
- **Seamless Roaming**
 - Tags can be smoothly switched between different base stations

Product Base Station



UA-210 Indoor positioning base station

Product Specifications

Item	Description
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Overview

Product Model	UA-210	
Related Specifications	IEEE 802.15.4a	
	IEEE 802.3 af/at	
Interface	RJ45 × 1	
	DC Power Supply Interface × 1	
Input Voltage	IEEE 802.3 af/at	
	Rated Voltage DC 48V	
Maximum Power Consumption	< 5W	
Installation Method	Ceiling	
Light Display Status	PWR	Green, always on when working
	UWB	Green, flashing when UWB is working

RF Specifications (UWB)

Working Frequency Band	3.24GHz~3.74GHz (channel1)	
	3.77GHz~4.24GHz (channel2)	
	6.24GHz~6.74GHz (channel5)	

Speed Rate	110 kbps
	850 kbps
	6.8 Mbps
Output Power (25°C)	- 41.3dBm/MHz (Typical Value)
	- 13dBm/MHz (Maximal Value)
Channel Bandwidth	500MHz
Antenna Gain	1dBi

Software Specifications

UWB Mode	TDoA
	ToF
Time Synchronization	Wireless Time Synchronization
Configuration Method	Server Configuration Web UI configuration
Configuration Management	Web-based User Management Interface
Network Protocol	DHCP Client
Uplink Interface	B interface (Private)

Physical Specifications

Dimensions	190×190×60
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(mm)	
Weight (grams)	468 (without packaging)

Environmental Specifications

Temperature	Working Temperature	-20°C~75°C
	Storage Temperature	-40°C~85°C
Temperature	Humidity	5%~95% With no condensation
Flame Retardant Grade	UL94 V-0	
RoHs	Compatible	

Delivery Content

Name	Description	Quantity	Part number
UA-210	Indoor Base Station	1	AA01UA210000
Mounting Bracket	Ceiling Mounting Bracket	1	Nil