

UA-210-O Datasheet

Nanjing Woxu Communication Technology Co., Ltd.

www.woxuwireless.com

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1 Introduction

UA-210-O is an IEEE 802.15.4a positioning anchor designed by Nanjing Woxu Communication Technology Co., Ltd. It can support both ToF/TDoA positioning methods. The main application is long-distance, high-precision positioning, and can be used in factories, tunnels, pipe gallery and other fields.

The device adopts wired backhaul and can be connected to the computing engine through a switch.

The device is powered through the network port, supports standard IEEE 802.3 af/at PoE power supply, and can be centrally managed through a PoE switch.

The device can be installed on a wall or pole. Has lightning protection design, but reliable grounding measures must be taken during installation

2 Main feature

- IEEE 802.15.4a UWB wireless
- IEEE 802.3 af/at PoE power supply
- External omnidirectional high gain antenna

3 Product picture



4 Product specification

Item	Description
Overview	
Model	UA-210-O
Specification	IEEE 802.15.4a
	IEEE 802.3 af/at
Interface	RJ45 10/100Mbps × 1
	N type × 1(UWB)
Input voltage	48~57V
Average power consumption	< 5W

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Installation method	Wall, pole
RF Spec. (UWB)	
Working frequency	3.24GHz ~ 3.74GHz (channel1)
	3.77GHz ~ 4.24GHz (channel2)
	6.24GHz ~ 6.74GHz (channel5)
Physical rate	850 kbps
	6.8 Mbps
Output power (25°C)	-41dBm/MHz (typical), -13dBm/MHz (adjustable)
Channel bandwidth	500MHz
Antenna gain	4.5 dBi

Software Spec.

UWB working mode	TDoA
	TOF
Time synchronization	Wireless time synchronization
Configuration method	Server configuration
	Web configuration

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Configuration management	Web-based user management interface (remote management/local management)
	TFTP/HTTP software update
Network protocol	DHCP client
Uplink interface	Interface B

Physical Spec.

Size	190×190×60mm
Weight	650g (Without packaging)

Environment Spec.

Temperature	Working temperature -40°C~65°C
	Storage temperature -40°C~85°C
Humidity	Work humidity: 0%~90% non-condensing
IP rate	IP67
RoHs	Compatible

5 Delivery content

Model	Specification	Quantity	Order number
UA-210-O	UWB outdoor positioning anchor	1	AA01UA210O00

Antenna	UWB fiberglass antenna	1	/
POE module	PoE module (accessory)	1	/
Power adapter	48V 0.5A (accessories)	1	/
Mounting brackets	L-shaped bracket, U-shaped hoop combined mounting bracket (accessories)	1	/