

UA-180-DHO Datasheet

Nanjing Woxu Communication Technology Co., Ltd.



1 Introduction

UA-180-DHO is an IEEE802.15.4a dual-module positioning anchor designed by Nanjing Woxu Communication Technology Co., Ltd., which can support the positioning method of ToF ranging. The device is a UWB high-power device, in the line-of-sight mode, the working distance exceeds 300 meters. Mainly used in long-distance, high-precision positioning, can be used in tunnels, pipe corridors and other fields.

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

UA-180-DHO supplies power through the network port, supports standard IEEE 802.3af/at PoE power supply, and can be centrally managed through a PoE switch. At the same time, the equipment is installed outdoors. The product supports lightning protection design, but the installation must have a reliable grounding Measures.

The UA-180-DHO device supports a temperature range of -40 to 65 °C, and it can be wall-mounted with a bracket.

2 Main feature

- IEEE 802.15.4a UWB wireless
- UWB dual channel
- High gain directional antenna
- High power, 300 meters line-of-sight working distance
- IEEE 802. 3 af/at PoE power supply
- IP67 protection level

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3 Picture



4 Specification

Item	Description	
Overview		
Model	UA-180-DHO	
Specification	IEEE 802.15.4a	
- T	IEEE 802.3 af/at	
Interface	RJ45 10/100Mbps	
	N type × 2 (UWB)	
Input power	48~57V	
Average power consumption	< 8W	

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Installation method	Pole / Wall mounting			
RF Spec. (UWB)				
Working range	3.77GHz ~ 4.24GHz (Channel 2)			
Working runge	6.24GHz ~ 6.74GHz (Channel 5)			
	110 Kbps			
Physical rate	850 Kbps			
	6.8 Mbps			
Output power(25°C)	-41.3dBm/MHz (typical) , -13dBm/MHz (maximum)			
Channel bandwidth	500MHz			
Software Spec.				
UWB work mode	TOF			
UWB effective distance	300 meters@6.8Mbps unobstructed			
Time synchronization	Wireless time synchronization			
Configuration	Server configuration			
method	Web configuration			
Configuration management	Web-based user management interface (remote management/local management)			

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•	TFTP/HTTP software update
Network protocol	DHCP user terminal
Uplink interface	Interface B
Physical Spec.	
Size	235×216×70mm
Weight	1550g
Environment Spec.	
Temperature	Working temperature -40°C~65°C
Temperature	Storage temperature -40°C~85°C
Humidity	Working humidity: 0%~90% non-condensing
Protection level	IP67

5 Delivery content

RoHs

Model	Specification	Quantity	Order number
UA-180-DHO	Dual UWB outdoor positioning base station	1	AA01UA180D00
PoE module	PoE module (accessories)	1	/
Power adapter	48V 0.5A(accessories)	1	/

Compatible

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Mounting	L-shaped bracket, U-shaped hoop combined	1	1
brackets	mounting bracket (accessories)	1	

Attachments (not included in the scope of delivery, please contact Woxu Business in advance if you need it)

Model	Specification	Order number
Directional antenna	190×190×23Mm, white	AE20UWHK0000
Feeder	N male to N male, 6m	AE0712400600

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