Add: 6/F, Building A3, Zidong International Creative Park, Zidong Road, Qixia District, Nanjing, China.

# MX5012A-MI6U AP & UWB Dual-band 802.11ac WiFi Signal Coverage & Positioning Base Station

#### **Features**

- -Positioning accuracy 30cm
- -Support positioning frequency 0.1Hz ~ 1Hz
- -The capacity of a single base station can reach 200 tags
- -Suitable for one and two-dimensional positioning scenarios
- -Support IEEE 802.11a/b/g/n/ac standards
- -Maximum transmission rate 300Mbps (2.4G) & 867Mbps (5.8G)
- -Supports bridge and routing modes, flexible deployment of network architecture can be achieved by adjusting the network mode of the device
- -Support wireless controller (AC) management to realize remote centralized configuration and upgrade management



- -Support ceiling-mounted installation and pole-mounted installation, suitable for installation in different scenarios
- -Support Gigabit Ethernet port, adapt to multi-type network access

### **Description**

MX5012A-MI6U AP & UWB dual-band 11ac base station design fully considers the application in harsh environments. It meets the IP68 protection requirement which is an ideal choice for high-precision positioning and Wi-Fi coverage.

It fully considers the requirements of industrial information security and precise positioning at the same time, it also opens up the information intercommunication and interconnection between systems. It comprehensively improves and perfects the construction of an integrated intrinsically safe platform and industrial intrinsic safety. It can realise the control of the whole process of external personnel, visitors, and operators, the real-time information of industrial intrinsic safety management, process controllability, operation standardization and effective controllability of safety risks by using the UWB high-precision positioning system.

5012A-MI6U integrates the AP & UWB within its base station to realise dual-network together which meets the industrial requirements and also greatly saves the overall cost.



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### 25dBm high power

The highest output power can reach 25dBm, and the built-in omnidirectional 6dBi antenna brings excellent Wi-Fi signal transmission



#### **Positioning service**

Support wireless probe function, docking with positioning server, which can meet the positioning requirements of smart underground pipeline and factory



## Easy to install

Ceiling & Pole mounted



#### **Protection Class IP68**

Protection Class reaches to IP68, suitable for a variety of environments



#### 2x2 MIMO

Supports 2x2 MIMO



### **High throughput**

Maximum transfer rate 300Mbps (2.4G)& 867Mbps (5.8G)



### **Gigabit Ethernet**

Supports Gigabit Ethernet



#### **POE** powered

Supports 100-meter Ethernet POE power supply, which is convenient for deployment and networking

## **Specification**

HARDWARE	Shell	Metal+PC
	Host size (mm)	262*194*72
	Net weight	1510g
	Installation	Ceiling(standard) , Pole(optional)
	Protection class	IP68
	Antenna Gain	Wifi: 6dBi; UWB: 6dBi
	Antenna type	Built-in Dual-band Omnidirectional + UWB Antenna
	Transmission distance	Wifi: 0~200m; UWB Built-in Antenna:0~200m
	Accuracy	≤30cm (Without interference)
	Single base station capacity	more than 200 tags



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HARDWARE	Positioning system capacity	more than 8,000 tags
	Positioning frequency	0.1~1Hz
	Power supply mode	48V 0.5A POE
	Maximum power consumption (W)	<14.5W
	Maximum transmit power	2.4G: 25dBm; 5.8G: 24dBm
	Connector	100/1000Mbps
	Button	1*Reset
	Indicator	1*Power, 1*2.4G, 1*5.8G, 1*UWB
	Operating temperature	-40°C~70°C/-40~158°F
	Storage temperature	-40°C~85°C/-40~185°F
	Working humidity	5%~95%RH (non-condensing)
	Surge immunity	POE/GE: common mode 4KV, differential mode 2KV
	Electrostatic discharge immunity	Contact discharge: 6KV, Air discharge: 8KV
	Mounting kit	1 x M25 PG waterproof connector 1 x Ceiling Mounting Bracket Kit 1 x 48V 0.5A POE Adapter 1 x AC Power Cord 1 x Product Instruction Manual 1 x Product Certificate & Warranty Card
SOFTWARE	Protocol	802.11 a/b/g/n/ac
	Maximum speed	1167Mbps
	Frequency range	2.4G: 2412~2472MHz 5.8G: 5180~5320MHz, 5745~5825MHz
	Channel width	20/40/80MHz
	Working Mode	Access Point, Client, WDS Access Point, WDS Client
	Security configuration	WPA2-PSK, hide SSID, IP/MAC filtering
	Application Mode	Access Point, Client
	Configuration management	Support web configuration, support AC remote management, support SNMP management

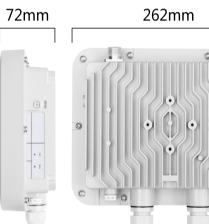


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	Ethernet software features	Support IPv4/IPv6 dual protocol stack DHCP Server/Client, DNS, HTTPS, IPv4, LLDP, Proxy ARP, SMTP, SNMP, v2c/v3, Syslog, TCP/IP, SSH, UDP, VLAN
SOFTWARE	Dynamic frequency selection	Support intelligent channel analysis & automatic optimal channel selection Support 5.8GHz DFS
	Roaming	Based on 802.11r seamless roaming
	Intelligent Bandwidth Rate Limiting	Support IP and MAC-based upstream and downstream rate limiting
	Others	Scheduled restart, QoS, Watchdog
APPLICATION	Enterprises, underground pipeline, smart parks & factories, petrochemicals, digital warehousing, other wireless coverage + positioning	

### **Dimensions**





### Connector





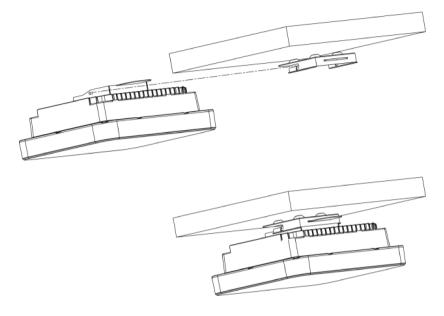
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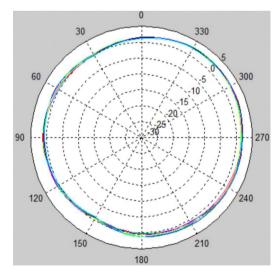
## **Ceiling Mounting Drawing**



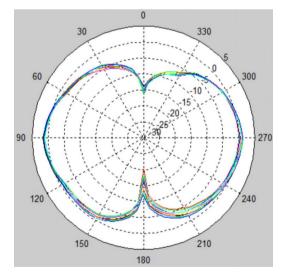
#### Instruction:

- 1. Remove the bracket rack from the product. Use 4pcs M6\*30 expansion screws to fix the bracket on the wall;
- 2. After the bracket installation is completed, push the product into the ceiling bracket rail to insert the installation bracket into it.

#### **Antenna Radiation Pattern**



2.4G horizontal pattern



2.4G vertical pattern

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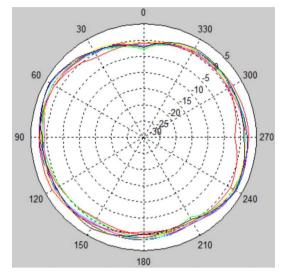
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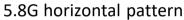
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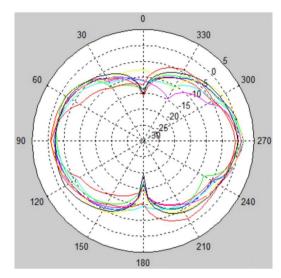
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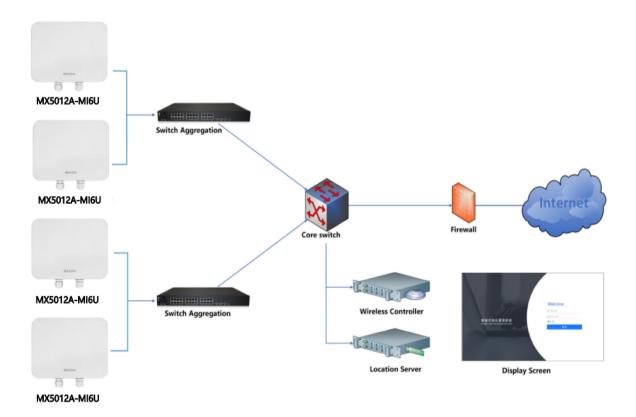






5.8G vertical pattern

## **Application**





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