

11AX 1800 Mbps Dual Band Wi-Fi 6 Ceiling Wireless AP



OVERVIEW

WIS new series EAP520 is an 11ax Wi-Fi 6 standard Chipset high power Ceiling Wireless Access Point support MU-MIMO, Wave2.0, OFDMA and Seamless Roaming. Combined 1800Mbps Wi-Fi speed over 2 radios: 2.4GHz (600Mbps 11ax 2*2) + 5GHz (1200Mbps 2*2), equipped Gigabit 2*LAN ports, support MU-MIMO and DL/UL-OFDMA modulation, faster Ethernet data rate and more users, then multiple users can upload or download multiple packets at same time, narrower subcarrier spacing and longer symbol time, improved the stability and data processing efficiency, publicly to be used in high density access environment such as university campus, concert venue, gymnasium, etc.

FEATURES

- Comply with IEEE 802.11ax/ac/b/g/n Standard
- Wave2.0, Dual band, Wi-Fi 6, 1800Mbps Data Rate.
- 11ax 2x2 MU-MIMO technology, 2*10/100/1000 Mbps Ethernet Ports.
- Support active IEEE 802.3af 48V PoE standard.
- Support SSID broadcasting, Multi SSID up to 8 (4 SSID in 2.4GHz, 4 SSID in 5GHz) .
- Support Gateway (Static IP, dynamic IP).
- Wireless AP, Repeater, supports FIT/FAT operation mode.
- Build in firewall, IP filter, URL filter and MAC filter.
- RF power adjustment and frequency analyzer for better application in different environment .

FIT/FAT Operation Mode

WIS-EAP520 supports FIT/FAT operation mode;

FIT AP, work with AC controller, plug and play, central management by AC controller, mostly for enterprise application.

FAT AP, support AP, repeater, gateway, WISP operation mode, can be configured by GUI, suitable for home Use.

Multiple Protection for Stable Performance

WIS-EAP520 with ABS fireproof material, white color, suitable for various decoration styles. And PCB board with watchdog design, can reboot automatically in case of failure. What's more, it support lightning protection and ESD protection, can install in various harsh environment.

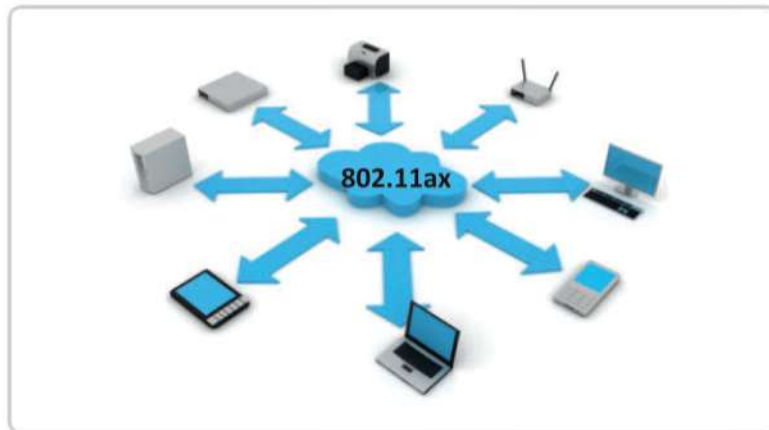
Power over Ethernet

WIS-EAP520 has integrated IEEE802.3af Power over Ethernet (PoE), for easy installation and lower cost. So it can be installed in areas where power outlets are not available, eliminating the mess of altering existing network infrastructure.



Four obvious advantages for Wi-Fi 6

Wi-Fi(802.11ax), new generation Wi-Fi standard, High speed, high capacity, low latency, less power consumption.

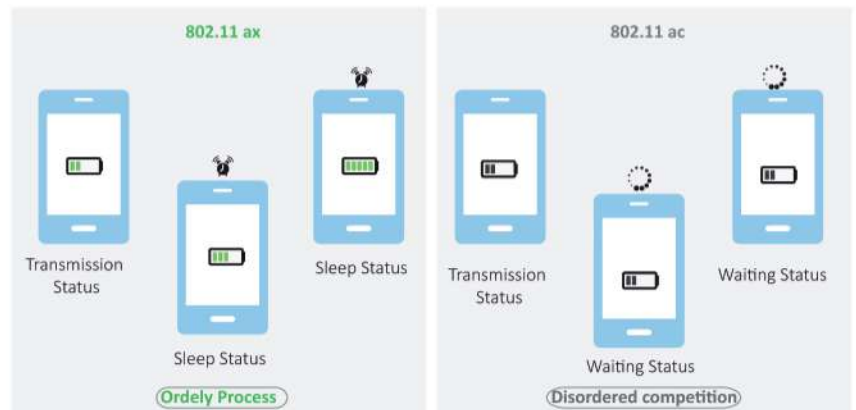


DL/UL MU-MIMO

802.11ax support both downlink MU-MIMO and uplink MU-MIMO. It can communicate with multiple end users at the same time, greatly improving the user's uplink transmission rate and the system's uplink and downlink capacity, improving the efficiency of multi-user concurrent scenarios, reducing the terminal application latency.

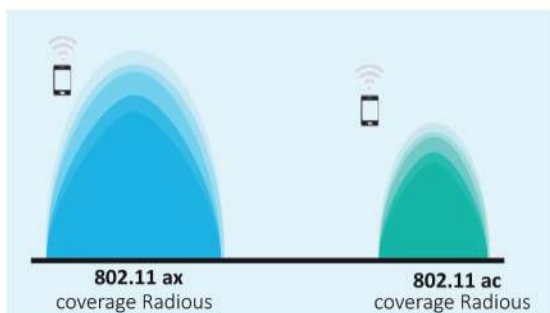
TWT (Target Wake-up Time)

802.11ax support TWT, allowing devices to negotiate when need to wake up, send and receive data. In addition, wireless AP can group the device into different TWT cycles, increase sleep time, reduce the device competing after wake-up, and save the device power.



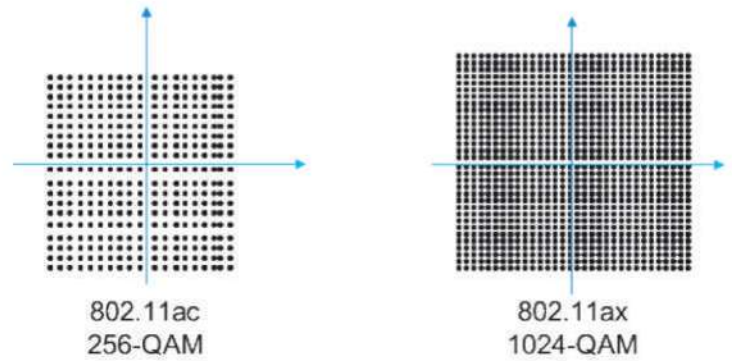
Coverage Improvement

802.11ax support long OFDM symbol transmission mechanism and 2MHz narrowband transmission, effectively reduced the packet loss rate and noise interference, improve the receive sensitivity and increase the WiFi coverage



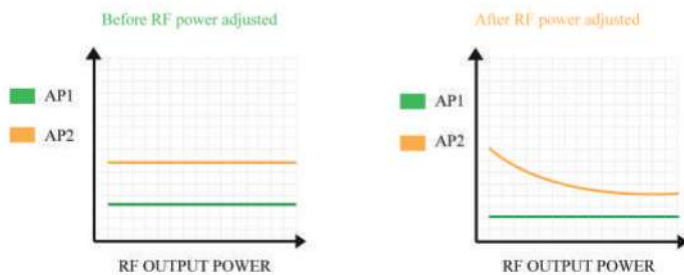
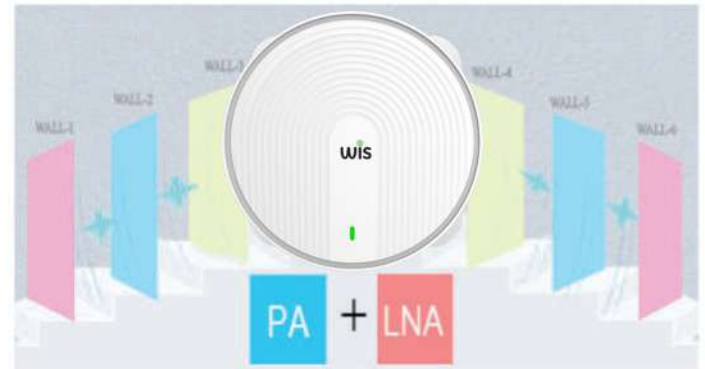
1024-QAM Modulation Mode

802.11ax adopt 1024-QAM modulation, which is more efficient than 802.11ac modulation, the throughput of single spatial traffic is increased by 25%.



More Wi-Fi Coverage

More Wi-Fi Coverage. PCB board adopt Skyworks POWER Amplifier and Low Noise Amplifier design improved the wireless coverage and reduced the noise interference.



Adjustable RF Power, Improve Wireless Quality

Adjustable RF Power, Improve Wireless Quality. The transmission RF power is adjustable based on environment, Cut down RF power in place with high density of people or wireless AP to reduce Wi-Fi interference; Increase RF power in large area to improve the signal strength.

Seamless Roaming, no loss in Wi-Fi loss During Moving

When AP recognizes that the terminal user's signal is lower than the setted coverage threshold, it will automatically remove the terminal user to connect to the AP with strong signal to achieve seamless rooming.



Watchdog design, No internet loss

The watchdog chip + circuit design make the equipment with selfinspection in network disconnection, link detection and network backup. When it found that device is disconnected, the watchdog circuit will restart the system automatically to ensure the reliability and safety.



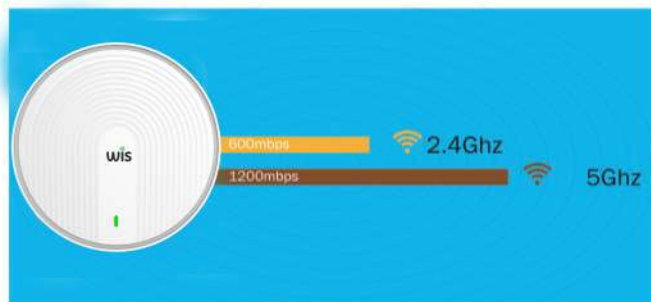
Watchdog



Self Inspection



Link Detection



2.4G & 5.8G Dual-Band concurrent, The Wi-Fi speed up to 1800Mbps

2.4Ghz strong compatibility and long range ;5.8Ghz more channels and less Wi-Fi Interference, dual band concurrent rate up to 1800Mbps, Full meet the needs of wireless coverage in crowded places

Three ways of WIS Controller Solution

All configuration and management is centrally and effectively operated by the WIScloud controller.

Deploy Wiscoud AP and scale up easily with any one of the controller

Cloud Controller | App Based Controller | Hardware Controller



Cable /port hidden design, integrated into all kinds of decoration

Network port hidden structure, skillfully hidden the network cable, integrated into the exist decoration, keep it clean and unified scene. the working status at a glance.

Faster dual-Ethernet ports design

1*10/1000M LAN port, support 48V active PoE(Can be used as WAN)1*10/1000M LAN port more convenient to use.



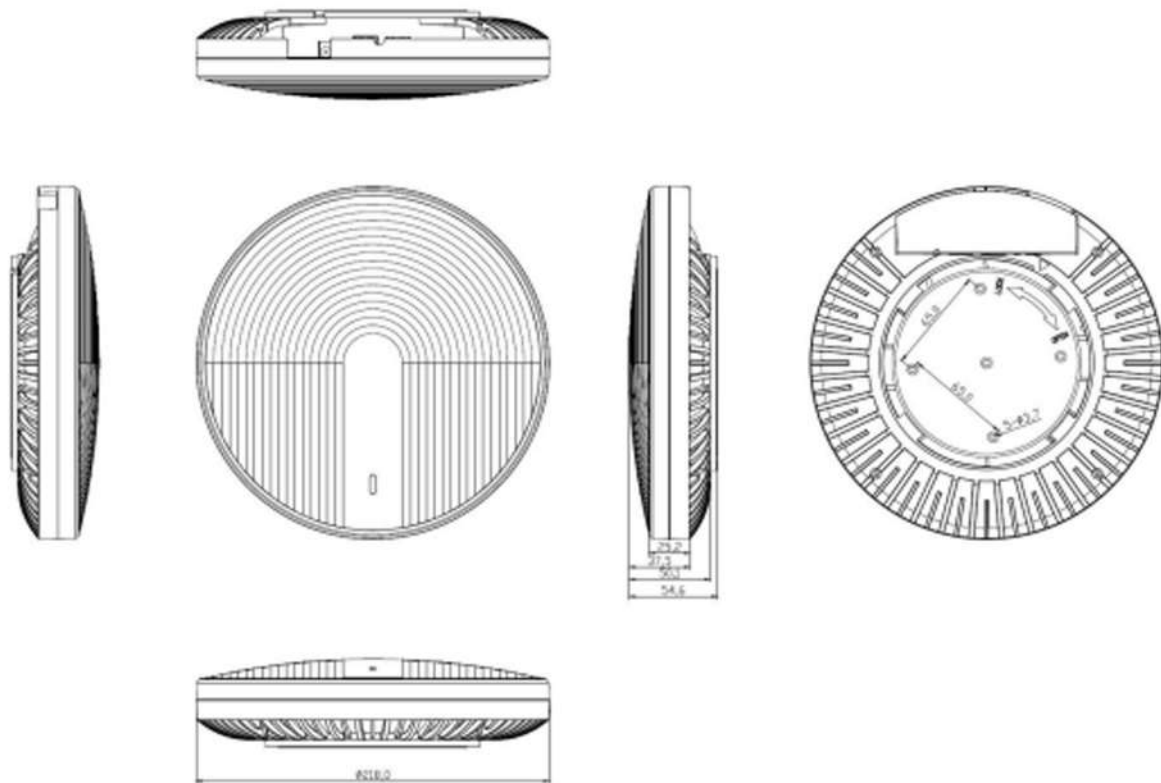
Multiple Application Scene

WIS-EAP-520 Gigabit ceiling mount wireless Ap can be used for indore environment where need wireless coverage like dormitory,Family Hotel,Hospital,Office, ktv Room.

SPECIFICATION

WIS-EAP520	
Standard	802.11ax/ac/b/g/n (Bluetooth Optional)
Flash	SPI NOR 16MB
Memory	256MB
2.4G Frequency	2.4GHz- 2.484GHz
2.4G Wi-Fi standard	802.11b/g/n/ac/ax
5.8G Frequency	5150~5850MHz
5.8G Wi-Fi Standard	802.11 a/n/ac/ax
Interface	1 * 10/100 /1000 RJ45 LAN Port(Can be used as WAN) 1 * 10/100 /1000 RJ45 LAN Port 1 * Reset button, press 10 seconds to revert to default setting USB3.0 and Bluetooth are optional if need.
Antenna	Build in 4dBi MIMO Antenna
Data Rate	1800Mbps
End Users	150
RF Power	≤ 20dBm
DC	12V----1.5A
PoE	48V (IEEE 802.3af/at)
LED light	Sys and WiFi,*2LAN
Power Consumption	≤ 15W
Size	168mmX168mmX32mm
Firmware Specification	
Working Mode	Gateway, AP
Wireless Functions	Multiple SSID functions: 2.4GHz: 4; 5.8GHz: 4. Support SSID hidden Support seamless roaming, 802.11kvr standard. Support 5G Prior for a faster Ethernet. Wireless Security: Open, WPA, WPA2PSK_TKIPAES, WAP2_EAP, 802.1x Support MAC filter Support Wi-Fi time on/off to save energy Support client isolation to improve the wireless stability Support RF power adjustable, adjust the RF power based on environment. Support user quantity limited, Max 64 users to access each band.
Networking Function	VLAN settings Cloud access support in gateway mode
Device Management	Back-up the configuration Restore the configuration Reset to factory default Reboot the device: including time reboot or reboot immediately Admin management password modify Firmware upgrade System log Support firmware GUI web management, AC controller management, remote management and cloud management
Protocols	IPv4
Antenna Specification	
Frequency Range	2.4-2.5GHz
Impedance	50 Ohms nominal
Gain	4dBi
Radiation	Omni
Polarization	Vertical
Other	
Environment	Operating Temperature:-20~55 °C Storage Temperature:-40~70 °C Humidity: 5%~95% non-condensing; Storage Humidity: 5%~90% non-condensing
Package Contents	1800Mbps Dual Band wireless access point Mounting kit Quick Installation Guide

DIMENSIONS



ORDERING INFORMATION

WIS-EAP520

11AX 1800Mbps Giga Dual Band Ceiling Wireless Access Point



*Product specifications and availability are subject to change without notice

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