Foredge

Dual band AX3000 WIFI 6 wireless access point W688HAP

Product Brochure

Shenzhen Fengrunda Technology Co., Ltd



Product Introduction:

W688HAP is a high-performance, high-speed 11ax indoor dual-band ceiling AP that can provide 2.4G and 5.8GHz dual-band wireless services. 2.4G provides a maximum access rate of 574Mbps, and 5G provides a maximum access rate of 2402Mbps.



Foredge

Product Features:

- It has better transmission quality, higher transmission rate, and the concurrent rate of the whole machine can reach up to 3000 Mbps.
- Adopt IPQ 5018 chip, support 160Mhz, greatly expand the user capacity, and can support 1 28 users .
- The heat sink adopts a snap-on structure design and special surface coating treatment, which makes the heat dissipation effect more ideal.
- The radio frequency uses a high-power external FEM, which has stable performance, wide wireless range and longer transmission distance.



Specifications:

Hardware specifications					
Product number	W688HAP				
CPU	IPQ5018 +QCN61 0 2				
Flash	SPI NOR 8MB SPI NAND 128MB				
DDR3	External 512MB*1				
2.4GHz operating frequency band	2.4GHz ~ 2.484GHz				
2.4GHz WIFI transmission protocol	802.11 b/g/n/ ac /ax				
5GHz operating frequency band	5.150GHz ~ 5.825GHz				
5GHzWIFI transmission protocol	802.11 a / n / ac / ax				
Built-in antenna 2.4G	2 2.4G antennas, each with a gain of 4dBi				
Built-in antenna 5G	2 5.8G antennas, each gain: 4dBi				
Maximum rate	2.4G provides a maximum access rate of 574Mbps, and 5G provides a maximum access rate of 2402Mbps				
	802.11b	11M	26±2dBm	1M	26±2dBm
2.4G wireless power	802.11g	54M	23±2dBm	6M	25±2dBm
	802.11n HT20	MCS7	22±2dBm	MCS0	24±2dBm
	802.11n HT40	MCS7	22±2dBm	MCS0	24±2dBm
	802.11ax HE20	MCS11	20 ±2 dBm	MCS0	2 4 ±2 dBm
	802.11ax HE40	MCS11	20 ±2 dBm	MCS0	2 4 ±2 dBm



Specifications:

5G Wireless Power	802.11a	54M	22 ±2 dBm	6M	2 5 ±2 dBm
	802.11n HT20	MCS7	21 ±2 dBm	MCS0	23±2dBm
	802.11n HT40	MCS7	21±2dBm	MCS0	23±2dBm
	802.11ac VHT80	MCS9	20±2dBm	MCS0	23±2dBm
	802.11ax HE20	MCS11	20±2dBm	MCS0	22±2dBm
	802.11ax HE40	MCS11	20±2dBm	MCS0	22±2dBm
	802.11ax HE80	MCS11	20±2dBm	MCS0	22±2dBm
	802.11ax HE160	MCS11	20 ±2 dBm	MCS0	2 2 ±2 dBm
	802.11b	11M	- 87 dBm	1M	-9 4 dBm
	802.11g	54M	-7 5 dBm	6M	- 88 dBm
2.4G receiving sensitivity	802.11n HT20	MCS7	-7 2 dBm	MCS0	-8 8 dBm
	802.11n HT40	MCS7	- 70 dBm	MCS0	- 88 dBm
	802.11ax HE20	MCS11	-6 3 dBm	MCS0	- 88 dBm
	802.11ax HE40	MCS11	- 61 dBm	MCS0	- 88 dBm
5G reception sensitivity	802.11a	54M	-7 5 dBm	6M	-90dBm
	802.11n HT20	MCS7	-73dBm	MCS0	-88dBm
	802.11n HT40	MCS7	-63dBm	MCS0	-88dBm
	802.11ac VHT80	MCS9	-60dBm	MCS0	-88dBm
	802.11ax HE20	MCS11	-61dBm	MCS0	-88dBm
	802.11ax HE40	MCS11	-58dBm	MCS0	-88dBm
	802.11ax HE80	MCS11	-55dBm	MCS0	-84dBm
	802.11ax HE160	MCS11	-51dBm	MCS0	-82dBm



Specifications:

2.4G EVM	802.11b: ≤-10 dB; 802.11g: ≤-25 dB; 802.11n: ≤-28 dB; 802.11ax: ≤-35 dB
5G EVM	802.11a:≤-25 dB; 802.11n: ≤-28 dB; 802.11ac:≤-32 dB; 802.11ax:≤-35 dB
Frequency deviation (ppm)	±20ppm
Interface (WAN)	1 10/100/1000/ 2500Mbps adaptive WAN port, supporting POE 48V power supply;
Interface (LAN)	1 10/100/1000 Mbps auto-sensing LAN port
External buttons	Reset button (press and hold for 6-10 seconds to restore to factory default settings)
Status Indicator	WAN port light, LAN port light, three-color light (three different colors represent: sys-red, 2.4G Hz -green, 5.8G Hz -blue)
powered by	DC2.0 12V2 A, PoE 802.3at
Maximum power consumption	< 22 W
Product Size	198 mm× 198 mm×4 1.02 mm
weight	0.96kg
working environment	Normal operating temperature: -20 °C to 55°C; Storage temperature: -40°C to 70°C; Humidity: 5% to 95% (no condensation)
ESD	Air discharge +/- 8 K, contact discharge +/- 6K
surge	Common mode 2K, differential mode 1K



Software Features:

	Working mode: Fat AP mode and Thin AP mode
front page	Working mode. Fat Ar mode and milit Ar mode
	Wireless AP download rate, wireless AP upload rate, running
	time
	Device information, device description, intranet information,
	WIFI information
Support Mode	Gateway mode: The device is connected to the WAN through
	the WAN port and then uses static IP, DHCP or PPPOE to access the Internet
IVIOUC	AP mode: The device covers other clients and devices with
	wireless network signals, and uses Ethernet to connect to other
	routers to access the WAN.
	SSID Broadcast
	Number of SSIDs: 4 (2.4GHz) + 4 (5GHz), support Chinese SSID
	Hide SSID function
	Wireless encryption: OPEN, WPA/WPA2PSK-TKIPAES, WPA3PSK-
	TKIPAES
wireless function	Wireless MAC address filtering: support whitelist
	Spectrum navigation (5G first)
	WiFi timer off function
	User isolation: isolation between wireless networks and isolation
	within APs
	Transmit power setting
	Wireless client number limit
	QoS: WMM



Software Features:

	Connection method: static address, obtained from the management server, obtained from the gateway
Internet	DHCP server: It can be a built-in DHCP server or an external
function	DHCP server Cloud Platform Server
	Firewall function
	PPPOE function: Support PPPOE dial-up function
	Backing up configuration information
	Restore configuration information
Device	reset
Management	Restart includes scheduled restart and immediate restart
	Firmware Upgrade
	Time management includes system display time and time synchronization
	System log
	Fat and thin AP switching function