

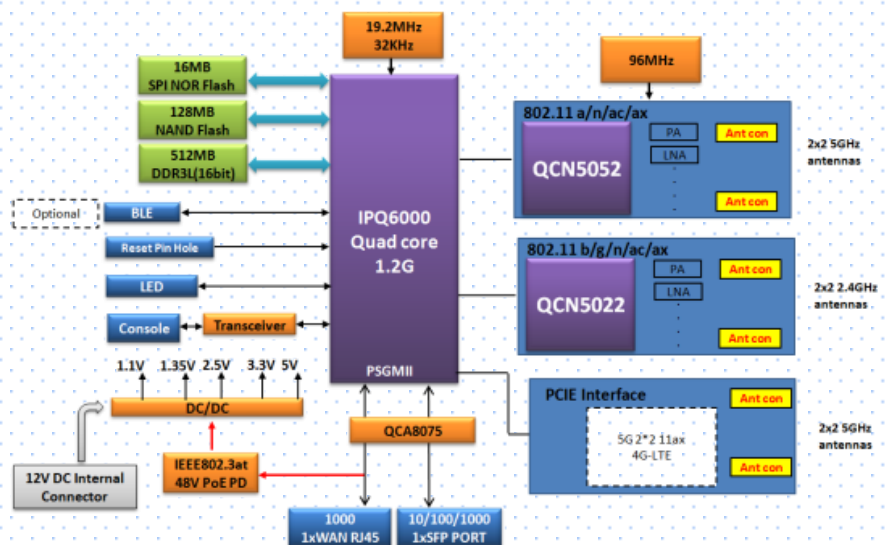
BL300HWX

WiFi6 Industrial Grade Outdoor Wireless Access Point

BL300HWX is a high-performance and high-speed outdoor 11ax 1800Mbps dual-band AP base station. It adopts the excellent and powerful industrial grade wifi6 Qualcomm chip which supports both 2.4GHz and 5.8GHz dual-band. It equips 1 Gigabit WAN/LAN port, 1 optical port. The maximum wireless transmission data rate could reach up to 1800Mbps which enables more wireless access users simultaneously. It provides a professional, stable, reliable, superior and high-speed wireless coverage solution for security monitoring, public safety, mining, wind power, smart grid, smart city, intelligent transportation and other large scales industrial project etc.

The PCB board is equipped with two independent signal amplifiers (PAs) and LNA as well as an external 8dbi Omni-directional dual-polarized cylindrical antenna. The wireless coverage radius can reach up to 200-300 meters. The wireless coverage distance is farther and stronger. It supports intelligent channel analysis and automatic selection of the best channel to greatly reduce interference and latency that provides more stable and fast wireless network signals.

BL300HWX adopts advanced Wave2 MU-MIMO (multi-user multiple inputs multiple outputs) technologies. Furthermore, It supports 8 spatial streams, 160MHz channel bandwidth as well as 256QAM modulation technology, The overall transmission rate is greatly enhanced.





- ❖ BL300HWX is an outdoor high power carrier-grade wireless AP base station.
- ❖ BL300HWX is a high-performance next-generation industrial WiFi6 AP base station that was independently developed by our company. It uses optimized radio frequency transmission technology as well as support the next generation 11AX MU MIMO Wave-2 technology. It can access 6 times users than traditional AP with wider coverage range and higher transmission rate.
- ❖ BL300HWX is based on the latest Wi-Fi6 standard, It adopts 2x2+2x2 dual-band concurrent technology combined with 1024QAM high-order modulation which supports maximum up to 1.8Gbps transmission rate
- ❖ BL300HWX adopts a waterproof, dustproof and ultraviolet protection design. The internal and external antennas can be switched manually. It can be connected with the Omni-directional/directional high-gain antenna, cast aluminum structure and integrated antenna structure. The excellent thermal design enables a wide temperature application environment of -40 to 75 degrees for all-day use. Furthermore, It supports PoE power supply as well as convenient and quick pole installation to minimize the complexity of installation and maintenance.
- ❖ BL300HWX supports 4G LTE and built-in storage: SSD,HDD or SD card. (Optional)

Product Parameters

Model	BL300HWX		
Chipset	IPQ6000+QCA8075+QCN5052+QCN5022		
Rom	512MB DDR3L		
Flash	16MB Nor Flash+128MB NAND Flash		
Dimension	245*200*90mm		
Interface	1x10/100/1000 Gigabit Ethernet LAN supports 802.3at POE Power over Ethernet		
	1*optical port		
	1* console		
	Power Supply x1	Green	ON : Power ON OFF : Power OFF
	SFP	Green	Active: Blinking To 4019 GPIO_45
WLAN x1	Green	Link: Solid Light Active: Blinking 5G to 4019 GPIO_48 2.4G to 4019 GPIO_49	
PoE supply	POE/48V0.65A		

Wireless specification

Working Frequency	Radio I: 11b/g/n : 2.412 ~ 2.484 GHz Radio II: 11ac/a/n :5.18 ~ 5.24 & 5.26 ~ 5.32 & 5.5 ~ 5.7 & 5.745 ~ 5.825 GHz
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WiFi Standard		
Modulation	OFDM: BPSK, QPSK, 16-QAM, 64-QAM DBPSK, DQPSK, CCK	
Recommend Frequency	Northern America ¹¹ , Japan ¹⁴ , Europe ¹³	
Wireless Settings	Working mode AP 2.4GWIFI transmission protocol 802.11b/g/n 5GWIFI transmission protocol 802.11 a/n/ac/ax Channel selection (display the number of channels in different regions by country setting) Channel bandwidth (automatic, 20Mhz, 40Mhz 80Mhz 160Mhz) Transmission rate 2.4GHz: only 11n, 11b/g/n mixed, only 11b, 11b/g, only 11g 5GHz: 11n mode only, 11a/n mixed mode, 11a mode only, 11ac mode only, 11ax mode only	
Supported Rates	2.4G Radio: 802.11b: 1, 2, 5.5, and 11Mbps 802.11g: 6, 9, 12, 18, 24, 36, 48, and 54Mbps 802.11n HT20/ HT40: MCS0~MCS15 (400/ 800ns GI) 802.11ac VHT20/VHT40: MCS0 ~ MCS9(400/ 800ns GI) 802.11ax HE20/ HE40: MSC0 ~ MCS11(400/ 800ns GI)	
Receive Sensitivity	802.11n	
	MCS0/7 HT20	-90dBm
	MCS7/15 HT20	-71dBm
	MCS0/8/16 HT40	-87dBm
	MCS7/15 HT40	-68dBm
	802.11a	
	-89dBm@6Mbps	
-74dBm@54Mbps		

Wireless Standard

802.11ac 802.11ax	802.11ac	
	MCS0 VHT20: -90dBm	VHT 40:-87dBm VHT80:-84dBm
	MCS8 VHT20: -67dBm	VHT 40:-61dBm VHT80:-58dBm
	802.11ax	
	MCS0:HE20 -90dBm	HE40:-87dBm VHT80:-84dBm
	MCS11: HE20-56dBm	HE40:-53dBm VHT80:-50dBm
	Internal antenna parameters	
	2400-2500	13
	4940-5850	11

Wireless Function List

Operation Mode	AP
802.11Mode Selection	802.11b/g/n 802.11ac/11ax
Channel settings	Manually/Auto (Automatically select the best channel)
Transmission rate setting	Manually/Auto
Output power control	User-defined output power (unit: dBm)
Power saving mode	Controllable wireless power saving mode
Multiple SSID support (multiple APs)	Support 2.4G 4 SSID Support 5.8G 4 SSID Set WIFI and security settings for each SSID

Software specifications

Software control

Centralized management	Cloud AC or Local AC or Micro AC (single AP can manage 16 AP)
IP address management	Fixed address and configuration address dual management
Black and white list	Division of wireless MAC address black and white list
Internet time-sharing	Control the Internet time
Wireless alarm	When there is a problem with AP, the rescue SSID will be released
Wireless serial port	When the AP fault is not configured with an IP address, you can log into the AP by wireless connecting
Network diagnosis	Diagnose IP information, VLAN information, routing information, AC status, etc.
KVR fast and seamless roaming	When the terminal switches to wireless, it is really fast and non-perceptive without packet loss

Environmental and physical parameters

Working Temperature	Working Temperature: -40°C~70°C Storage Temperature: -40°C~85°C
Humidity	0%~90% (non-condensing)

Packing List

BL300HWX. Mounting bracket. Instruction manual. Installation manual. Warranty card. Waterproof plug. Optical fiber plug. Industrial power supply. Antenna. Feeder. 3m network cable