

# Outdoor AP Specification



BL85HW is a high performance, cost-effective outdoor AP product. Designed with Qualcomm QCA9531 chipset, 16M flash memory /128M memory, 100 Mbps network interface, output power up to 500mw, support 2.4g 802.11n MIMO technology wireless speed up to 300Mbps, can meet the needs of 32 end users at the same time. The enclosure is designed with IP65 protection against wind, rain, dust and sun. It can easily adapt to the outdoor extreme environment of high temperature and extreme cold. External 2 \*5dBi omnidirectional antennas, support pole / wall mount installation, and support 48V 802.3at standard PoE power supply, flexible power supply, plug and play, high gain, high receiving sensitivity, high bandwidth, high access number, wide wireless coverage range, stable performance, apply to the scenic area, the mountains, streets and other outdoor small and medium-sized wireless coverage scenario.

## Product Features:

※ Very cost-effective hardware configuration

Build-in Qualcomm QCA9531 chipset, industrial grade circuit design, 16MB Flash/128MB SDRAM, support IEEE802.11b/g/n protocol, can provide 300Mbps wireless access speed, excellent anti-high and low temperature design, enhance the user experience in extreme environment.

※ 100 Mbps adaptive network interface, support PoE and DC power supply

It provides LAN1/WAN PoE+LAN2 10/100mbps adaptive network interface, and supports 48V 802.3at standard PoE remote power supply and 12V/1A local DC power supply. The power supply mode is flexible, which is suitable for various wireless engineering scenarios with inconvenient power supply and reduces the construction cost.

※ Energy-efficient

Based on the IEEE802.3 az standard hardware design, when the network is not used, the device will automatically enter the low power consumption mode. Once a user accesses the network, it will automatically and automatically switch to the normal mode operation. The whole process of energy saving is on the premise of not affect users, can effectively reduce the power consumption of the 30%, save a lot of wireless network operating costs.

※ Flexible attachment matching

External RPSMA external thread and internal needle standard SMA connector, outdoor 5dBi omni-directional antenna is attached. Users can also flexibly match other 2.4g band antennas according to different operating environments.

※ Stylish compact, simple and flexible installation

Stylish appearance, supports the wall/pole fixed installation mode, flexible installation, greatly reduces the construction difficulty and improves the construction efficiency without affecting the original design.

※ IP65 dust-proof and waterproof, suitable for a variety of harsh environments

The enclosure is IP65 rated for outdoor dust, water and sun protection. It can work normally in extreme environments as low as -30 ° C up to 55 ° C. It can easily adapt to the harsh outdoor environment and ensure stable operation of the network for 24 hours.

## Product technical specifications

Hardware	
Model	BL85HW
Chipset	Qualcomm QCA9531 300Mbps
CPU Clock Speed	550MHz
Standards	2.4G:300M 802.11b/g/n MIMO Technology
Memory	128MB DDR2 RAM



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Flash	16MB
Interface	LAN1/WAN PoE+LAN2 10/100Mbps RJ45
Button	1*Reset Press the button for 3 seconds to restart, and restore the factory Settings for more than 3 seconds
Power Consumption	<13W ;
Power Supply	POE : 48V(IEEE802.3at) 0.5A, DC : 12V 1A
working environment	Temperature : -40°C~+55°C (operating) , -40°C ~+70°C (storage ) Humidity (no-condensing) : 5%~90% (operating) , 5%~95% (storage)
Size	155*85*40(mm)
Weight	0.5KG
Antenna	RPSMA*2 Standard interface, 5dBi outdoor antenna*2, Other antennas are optional

Radio frequency Feature	
Frequency Range	ISM band: 2.400 ~ 2.4835 GHz
Channel	2G:1、 2、 3、 4、 5、 6、 7、 8、 9、 10、 11、 12、 13
Modulation method	OFDM = BPSK,QPSK,16-QAM,64-QAM;DSSS = DBPSK,DQPSK,CCK
Output power	2.4G: 11n @MCS0~2/MCS8~10:27±1dBm @MCS7/MCS15:23±1dBm 11g @6~24M:27±1dBm @54M:23±1dBm 11b @1~11M:27±1dBm



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Receiving sensitivity	2.4G: 11n: -86dbm@MCS0 -68dbm@MCS7 -86dbm@MCS8 -64dbm@MCS15 11g: -90dbm@6Mbps -68dbm@54Mbps 11b: -90dbm@1Mbps -85dBm@11Mbps
EVM	802.11n: ≤-28 dB      802.11g: ≤-25 dB 802.11b: ≤-10 dB

Frequency offset      ±20ppm

Software Feature	
Working Mode	AP Mode, Route Mode, WDS Repeater, Universal Repeater
Users	32
Network	Controller address /DHCP/ static IP
System	Restore factory/system restart