Shenzhen OUTENGDA Electronic Technology Co., Ltd.

OUTENGDAOUTSTANDING NETWORKS

HW6100

11AC Dual Band Waterproof
Base Station Outdoor Wireless

AP



Main Features

- High 500mW Wireless Power Delivers Long-Range Coverage
- IP67 Waterproof Housing for Harsh Outdoor Environments
- Provide dual 2.4G and 5G frequency, data rate up to 600Mbps
- 128MB SDRAM + 16MB Flash Build-in for Higher Performance
- Two External Antenna N Type Connector Maximizes Wireless Connectivity
- One External 8dBi 2.4G and one external 12dBi 5.8G FRP Omni Antennas configured
- Gateway / Repeater / AP / WISP Client operation modes
- IEEE802.3af PoE supports up to 100 meter (300 feet) deployment
- Support IEEE802.11ac/n/g/b, concurrent users up to 128
- Wireless LAN Controller Central Management Support

Descriptions

HW6100 dual-band outdoor AP can work in 2.4GHz/5.8GHz dual-band simultaneously, supporting 450Mbps 11AC (5.8GHz) & 150Mbps 11N (2.4GHz) concurrent, maximum wireless speed up to 600Mbps, access to more wireless clients; HW6100 5.8GHz wireless service is available to provide a cleaner wireless environment and more stable wireless access. MIMO technology is used to provide better wireless transmission performance, stability and wireless coverage. The HW6100 features a dust-proof, waterproof enclosure and two high-gain omnidirectional antennas that can operate in a variety of outdoor environments. HW6100 also supports wireless relay, wireless AP and other practical functions, is your preferred device for wireless Internet access. With a good shape design, give you a new experience.

Aluminum case with IP67 dust-proof/waterproof level, adapt to a variety of outdoor unfavorable weather

The HW6100 shell adopts new generation aluminum material, effectively shield out the signal interference, assist the motherboard to dissipate heat; make it work very well in various thunderstorms, snow and other harsh environments(-40 $^{\circ}$ C to 70 $^{\circ}$ C). Suit for any country.

Qualcomm CPU, SMA connector for external antenna, more range and stable signal HW6100 with Qualcomm industrial chipset adopts intelligent channel analysis technology, can choose the less Wi-Fi interference channel, and equipped 2PCS SMA connector, can connect with panel/omni antenna based on request, can greatly increase the wifi range and supply the stable wifi signal for users.

2.4G & 5G Dual Frequency Concurrency

Provides dual 2.4G and 5G frequency, data rate up to 600Mbps; Support IEEE802.11ac/n/g/b, concurrent users up to 128, increase the bandwidth to 2~3 times; High RF Power and high gain antenna, more signal for each users, more stable performance.

Long Wireless Coverage, Smoothly Transfer All Kinds of Data, Refuse Internet Hang HW6100 high power outdoor base station with 200 meters wireless range, easily to meet the large-area coverage requirements of outdoor Wi-Fi projects, specializes in high-power design, ensure strong wireless signal and stable performance.

Power over Ethernet

HW6100 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 readily available, eliminating the mess of altering existing network infrastructure.

Multiple operation modes to meet the needs of various wireless transmission solutions Fat/Fit two working modes, FAT mode support AP/Gateway/Repeater/WISP operation modes.

Access Controller System

Work with WLAN controller in wireless AP operation mode, easily access advanced network settings through PC, like AP status monitor, change IP address, ESSID, Channel, Password, upgrade firmware, backup and restore.

WPA / WPA2 Encryptions - Advanced Security

With the most attentive wireless security, the HW6100 High Power Wireless Access Point provides multiple protection measures. It can be set to turn off wireless network name (SSID) broadcast so that only stations that have the SSID can be connected. The AP provides wireless LAN 64/128/152-bit WEP encryption security, and WPA/WPA2 and WPA-PSK/WPA2-PSK authentication, as well as TKIP/AES encryption security.

Outdoor Scene Solutions

Provide various scenarios of Wi-Fi coverage and marketing solutions

For small squares/parks, recommended to work with one set of Omni antennas. Installed in the square center, cover all space with strong Wi-Fi signal.

For small driving schools, food stalls, farms, etc.., recommended to work with one set of directional antennas, to provide wireless access.

For large areas with high density user access request, such as scenic spots, parks, rural areas, recommended to use three sets of AP with high gain directional antennas.

Specifications

Wireless	
Standards	2.4G: 802.11b/g/n, 5.8G: 802.11a/n/ac MIMO
Data Rate	600Mbps
Frequency Band	2.4Ghz & 5.8Ghz
Wireless Transmit Power	2.4G: 11n@MCS7:22±2dBm, @MCS0:24±2dBm. 11g@54M:23±2dBm, @6M:25±2dBm. 11b@11M:25±2dBm,@1M:27±2dBm. 5.8G: 11a@54M:22±2dBm,@6M:24±2dBm. 11n@MCS7:20±2dBm,@MCS0:22±2dBm. 11ac@MCS9:19±2dBm, @MCS0:21±2dBm.
Receive Sensitivity	2.4G: 11n: -70dbm@MCS7, -88dbm@MCS0. 11g: -72dbm@54Mbps, -88dbm@6Mbps. 11b: -85dbm@11Mbps, -94dbm@1Mbps. 5.8G: 11a: -72dbm@54Mbps, -90dbm@6Mbps. 11n: -70dbm@MCS7, -90dbm@MCS0. 11ac:-60dbm@MCS9, -86dbm@MCS0.
EVM	11n: ≤-28 dB 11g: ≤-25 dB 11b: ≤-10 dB 11a: ≤-25 dB
PPM	±20ppm
Max Users	128+
Modulation	OFDM = BPSK, QPSK, 16-QAM, 64-QAM; DSSS = DBPSK, DQPSK, CCK
Operation Mode	Gateway, Repeater(Extender), AP(access point), WISP
Wireless Security	64/128-bit WEP, WPA/WPA2, WPA /WPA2-Personal (TKIP/AES)
System Requirements	Windows 7/Vista/XP/2000, Mac OS®, Linux or Android OS, iOS
Hardware	
Chipset MCU	Qualcomm QCA9531+QCA9887
Flash	16MB
SDRAM	128MB
Interfaces	1 x RJ-45 for 10/100Mbps(POE)
Button	Reset Button
LED Indicator	WAN, LAN
Waterproof level	IP67
Antenna	2 N Type Connector
Power Supply	IEEE 802.3af PoE 48V0.5A
Power Consumption	<20w
Base AP Dimensions(W x D x H)	215*280*80mm
Software	
WAN Type	Dynamic IP/Static IP/PPPoE/L2TP(Dual Access) /PPTP(Dual Access)

SSID	Multiple SSID (4 SSID for 2.4G, 4 SSID for 5.8G)
Security	WEP Encryption-64/128/152 bit
	WPA/WPA2 Personal (WPA-PSK using TKIP or AES)
	WPA/WPA2 Enterprise (WPA-EAP using TKIP)
	Hide SSID
	MAC/IP Address & URL filtering
	Wireless STA (Client) connected list
Firewall	DoS, SPI Firewall, IP Address Filter/MAC Address
	Filter/Domain Filter IP and MAC Address Binding
Protocols	IPv4
DHCP	DHCP Server, DHCP Client
Network	Port Mapping, DMZ Host, Statics Routing, DDNS,UPNP
Management	Firmware Upgrade and backup, factory Reset, Restart, WEB
	management, log management, the PING tool
2.4G External ANT	0.000
Frequency range (MHz)	2400~2483
Bandwidth (MHz)	83
Gain (dBi)	8
Half-power beam width(°)	H: 360 V: 12
VSWR	≤1.5
Input Impedance (Ω)	50
Polarization	Vertical
Maximum input power (W)	100
Lightning protection	DC Ground
Input connector type	N Female or Requested
Dimensions (mm)	Φ20*550
Antenna weight (kg)	0.3
Operating temperature (°c)	-40∼60
Rated Wind Velocity (m/s)	60
Radome color	Gray
Mounting way	Pole-holding
Mounting hardware (mm)	⊄ 35- ⊄ 50
5.8G External ANT	1
Frequency range (MHz)	5150~5850
Bandwidth (MHz)	700
Gain (dBi)	12
Half-power beam width (°)	H:360 V:6
VSWR	≤1.8
Input Impedance (Ω)	50
Polarization	Vertical
Maximum input power (W)	100
Lightning protection	DC Ground
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Input connector type	N Female or Requested

Dimensions (mm)	Ф20*580
Antenna weight (kg)	0.28
Operating temperature (°c)	-40~60
Rated Wind Velocity (m/s)	60
Radome color	Gray
Mounting way	Pole-holding
Mounting hardware (mm)	♥ 35- ♥ 50
Others	
Operating Temperature	0°C~40°C (32°F~104°F)
Storage Temperature	-40°C~70°C (-40°F~158°F)
Relative Humidity	10% ~ 95%, Non-condensing
Storage Humidity	5%~95%, Non-condensing
Certifications	CE,FCC,ROHS
Package Contents	1 x Base AP
	1 x 8dbi 2.4G FRP Omni antennas
	1 x 12dbi 5.8G FRP Omni antennas
	2 x Lightning arrester
	1 x Setting accessory
	1 x English user manual