

AL8K WIRELESS BRIDGE DATASHEET

SUNWAVE

AL8K

802.11 a/b/g/n/ac Dual-band Outdoor High-performance AP



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KEY FEATURES

- Supports 802.11a/b/g/n/ac standard
- The highest transmission rate is 867 Mbps (5G) & 300 Mbps (2.4G)
- Outdoor coverage: 5G: 0 ~ 5 km, 2.4G: 0 ~ 150 m
- Integrated antenna, quick installation
- Built-in advanced technology
- Supports bridge and router modes. Network architecture can be flexibly deployed by adjusting the network mode of devices
- Intelligent QoS wireless multimedia optimization technology, providing high priority transmission levels for voice and video
- Supports firmware backup. The mechanism can prevent the device from stopping work in extreme conditions
- Supports web page management, making installation and maintenance of equipment more convenient
- Supports wireless controller (AC) management, realize remote centralized configuration and upgrade management
- Supports 802.3at protocol (POE+)
- IP66

**Wireless controller needs to be purchased separately*

HARDWARE

Dimensions	160 x 160 x 55 mm 6.30 x 6.30 x 2.17 in
Weight	0.48 kg 1.09 lbs
Installation	Pole mounting Diameter ≤ 55 mm Diameter ≤ 2.17 in
Protection Level	IP66
Antenna Gain	2.4G: 3dBi, 5G: 17dBi
Power Supply	48V POE+/ DC 48V
Max Power Consumption	12W
Average Power Consumption	9W
CPU	IPQ4028
DDR & Memory	256MB DDR3L, 32MB Flash
Physical Interface	2*10/100/1000Mbps
Indicator Light	1 x 2.4G Work Indicator 1 x 5G Work Indicator 3 x Signal Strength Indicator
Maximum Transmitted Power	2.4G: 27dBm 5G: 27dBm
Working Temperature	-40 °C ~ +65 °C -40 °F ~ +149 °F
Storage Temperature	-40 °C ~ +85 °C -40 °F ~ +185 °F
Working Humidity	5 ~ 95% RH Non-condensing
Surge	POE/GE: CM 4KV, DM 2KV
ESD Protection	Contact 6KV, Air 8KV
Wind Survivability	134 km/h

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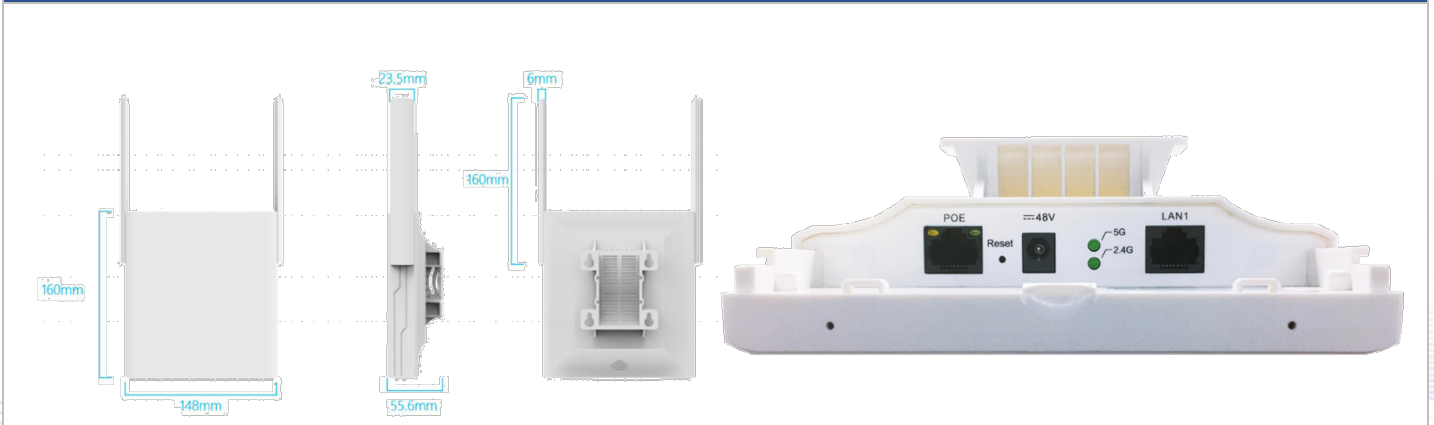
SOFTWARE	
Protocol	802.11a/b/g/n/ac
Frequency	2.4G: 2412~2472 MHz (China) 2412~2462 MHz (United States) 2412~2472 MHz (Most Countries) 5G: 5180~5320 MHz, 5745~5825 MHz (China) 5180~5320 MHz, 5500~5720 MHz, 5745~5825 MHz (United States) 5160~5340 MHz, 5480~5720 MHz, 5745~5865 MHz (India) 5160~5340 MHz, 5480~5720 MHz, 5745~5825 MHz (United Arab Emirates) 5745~5805 MHz (Indonesia) * The above frequencies need specific version support
Operating Mode	AP, Station, WDS AP, WDS Station
Security	WPA2-PSK, Hidden SSID, IP/MAC Filtering
Network Mode	Bridge/ Router
Management	Supports Web/AC/SNMP
Other	Timed restart, Supports VLAN, QoS, Watchdog

RF PARAMETERS						
Transmit Power				Receive Sensitivity		
	Rate	Power	Tolerance	Rate	Sensitivity	Tolerance
11b/g/n	1 Mbps	24dBm	+/- 2dBm	1 Mbps	-96dBm	+/- 2dBm
	11 Mbps	24dBm	+/- 2dBm	11 Mbps	-89dBm	+/- 2dBm
	6 Mbps	24dBm	+/- 2dBm	6 Mbps	-97dBm	+/- 2dBm
	54 Mbps	22dBm	+/- 2dBm	54 Mbps	-73dBm	+/- 2dBm
	HT20 MCS0 (joint road)	27dBm	+/- 2dBm	HT20 MCS0	-91dBm	+/- 2dBm
	HT20 MCS7 (joint road)	24dBm	+/- 2dBm	HT20 MCS7	-71dBm	+/- 2dBm
	HT40 MCS0 (joint road)	27dBm	+/- 2dBm	HT40 MCS0	-89dBm	+/- 2dBm
	HT40 MCS7 (joint road)	24dBm	+/- 2dBm	HT40 MCS7	-68dBm	+/- 2dBm
11a/n	6 Mbps	24dBm	+/- 2dBm	6 Mbps	-91dBm	+/- 2dBm
	54 Mbps	22dBm	+/- 2dBm	54 Mbps	-73dBm	+/- 2dBm
	HT20 MCS0 (joint road)	27dBm	+/- 2dBm	HT20 MCS0	-91dBm	+/- 2dBm
	HT20 MCS7 (joint road)	24dBm	+/- 2dBm	HT20 MCS7	-70dBm	+/- 2dBm
	HT40 MCS0 (joint road)	27dBm	+/- 2dBm	HT40 MCS0	-88dBm	+/- 2dBm
	HT40 MCS7 (joint road)	24dBm	+/- 2dBm	HT40 MCS7	-68dBm	+/- 2dBm
11ac	VHT20 MCS0 (joint road)	27dBm	+/- 2dBm	VHT20 MCS0	-91dBm	+/- 2dBm
	VHT20 MCS8 (joint road)	23dBm	+/- 2dBm	VHT20 MCS8	-67dBm	+/- 2dBm
	VHT40 MCS0 (joint road)	27dBm	+/- 2dBm	VHT40 MCS0	-87dBm	+/- 2dBm

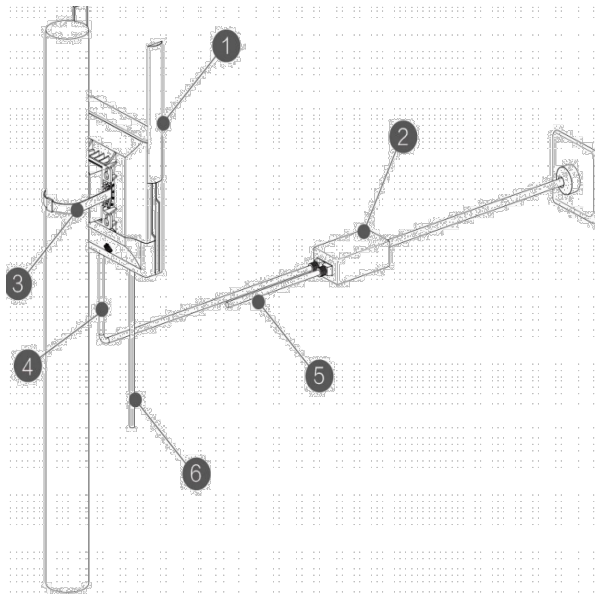
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VHT40 MCS9 (joint road)	23dBm	+/- 2dBm	VHT40 MCS9	-64dBm	+/- 2dBm
VHT80 MCS0 (joint road)	27dBm	+/- 2dBm	VHT80 MCS0	-85dBm	+/- 2dBm
VHT80 MCS9 (joint road)	23dBm	+/- 2dBm	VHT80 MCS9	-60dBm	+/- 2dBm

DIMENSIONS AND INTERFACE



INSTALLATION



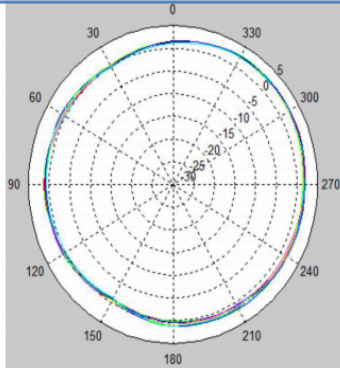
1. AP Main Device
2. POE Adaptor
3. Hoop
4. The POE port of POE adaptor should connect to the POE port on the main
5. The LAN port of POE adaptor can be connected with the other devices.
6. The LAN1 port on the main device can be connected with the other devices

*The actual installation height needs to be determined according to the transmission distance and the installation environment, and there is no obstruction between the two points.

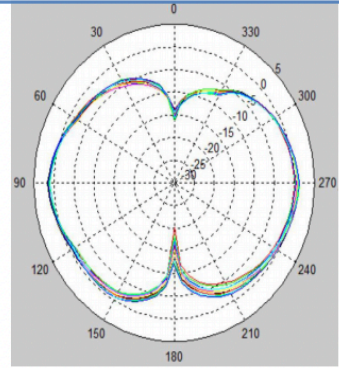
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ANTENNA POLAR PLOT

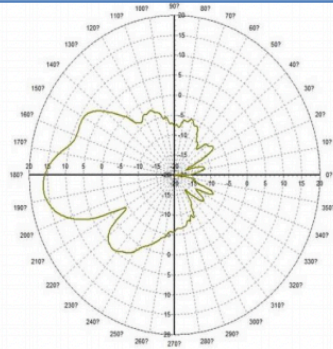
2.4G Horizontal



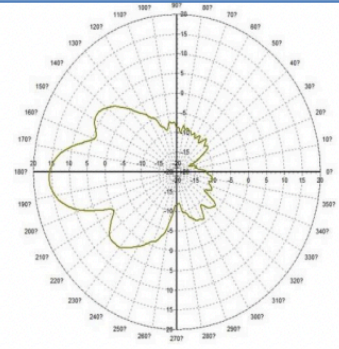
2.4G Vertical



5G Horizontal



5G Vertical



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