

## AL5KP-18I WIRELESS BRIDGE DATASHEET

# SUNWAVE

## AL5KP-18I

802.11a/n/ac 5G Industrial Grade  
5 km Long-distance Wireless Transmission Device  
867 Mbps Maximum Transmission Rate



TDMA+



Intelligent Rate  
Control



ACK Time-out  
Adjustment



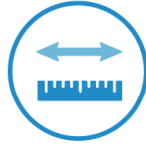
2X2 MiMo



High  
Throughput



Point-To-Point



Long Distance



Gigabit  
Ethernet



Hardware  
Watchdog



POE+

## AL5KP-18I WIRELESS BRIDGE DATASHEET

## KEY FEATURES

- Supports 802.11a/n/ac standard
- The highest transmission rate is 867 Mbps
- Outdoor coverage: 0 ~ 5 km
- 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

<b>Host Size</b>	200 mm × 200 mm x 50 mm   7.87 in × 7.87 in × 1.97 in
<b>Net Weight</b>	1.3 kg   2.14 lbs
<b>Installation Method</b>	Pole mounting diameter ≤ 48 mm   diameter ≤ 1.89 in
<b>Protection Level</b>	IP66
<b>Antenna Gain</b>	18dBi
<b>Antenna Beam Width</b>	H: 35 ° V: 17 °
<b>Power Supply</b>	48V POE+
<b>Maximum Power Consumption</b>	15W
<b>Average Power Consumption</b>	12W
<b>Processor</b>	IPQ4028
<b>RAM</b>	256MB DDR3L, 32MB Flash
<b>Network Interface</b>	2*10/100/1000Mbps
<b>Maximum Transmit Power</b>	27dBm
<b>Operating Temperature</b>	-40 °C ~ 70 °C   -40 °F ~ 158 °F
<b>Storage Temperature</b>	-40 °C ~ 85 °C   -40 °F ~ 185 °F
<b>Working Humidity</b>	5 ~ 95% RH non-condensing
<b>Surge Immunity</b>	POE / GE: common mode 4KV, differential mode 2KV
<b>Electrostatic Discharge Immunity</b>	Contact discharge: 4KV, air discharge: 6KV
<b>Wind Resistance</b>	150 km/h

## AL5KP-18I WIRELESS BRIDGE DATASHEET

SOFTWARE	
<b>Protocol</b>	802.11a/n/ac
<b>Frequency</b>	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) Non-standard channel support: 4920 ~ 6060 MHz * The above frequencies need specific version support
<b>Operating Mode</b>	AP, Station, WDS AP, WDS Station
<b>Security</b>	WPA2-PSK, Hidden SSID, IP/MAC Filtering
<b>Network Mode</b>	Bridge/ Router
<b>Management</b>	Supports Web/AC/SNMP
<b>Other</b>	Timed restart, Support VLAN, QoS, Watchdog

RF PARAMETERS						
Transmit Power				Receive Sensitivity		
	Rate	Power	Tolerance	Rate	Sensitivity	Tolerance
<b>11a/n</b>	6 Mbps	24dBm	+/- 2dBm	6 Mbps	-91dBm	+/- 2dBm
	54 Mbps	22dBm	+/- 2dBm	54 Mbps	-73dBm	+/- 2dBm
	HT20 MCS0 (joint road)	27dBm	+/- 2dBm	HT20 MCS0	-90dBm	+/- 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
<b>11ac</b>	VHT20 MCS0 (join road)	27dBm	+/- 2dBm	VHT20 MCS0	-90dBm	+/- 2dBm
	VHT20 MCS8 (joint road)	23dBm	+/- 2dBm	VHT20 MCS8	-67dBm	+/- 2dBm
	VHT40 MCS0 (joint road)	27dBm	+/- 2dBm	VHT40 MCS0	-87dBm	+/- 2dBm
	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

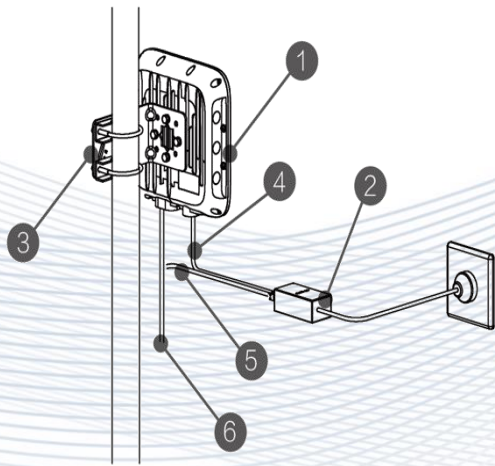


# AL5KP-18I WIRELESS BRIDGE DATASHEET

## DIMENSIONS AND INTERFACE



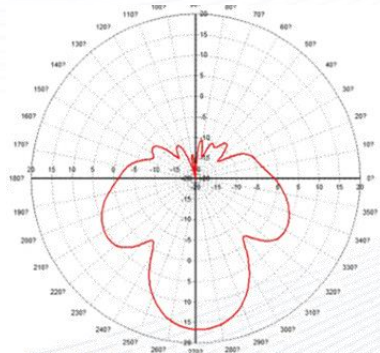
## INSTALLATION



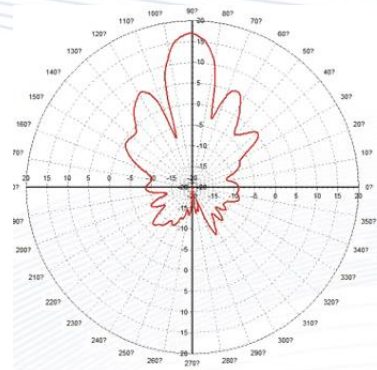
1. Wireless Transmission Device
2. POE Adaptor
3. Hoop
4. The POE port of POE adaptor should connect to the POE port on the main device
5. The LAN port of POE adaptor can be connected with the other devices
6. The LAN1 port on the main device can be connected with the other devices

\*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.

## ANTENNA POLAR PLOT



Horizontal



Vertical

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