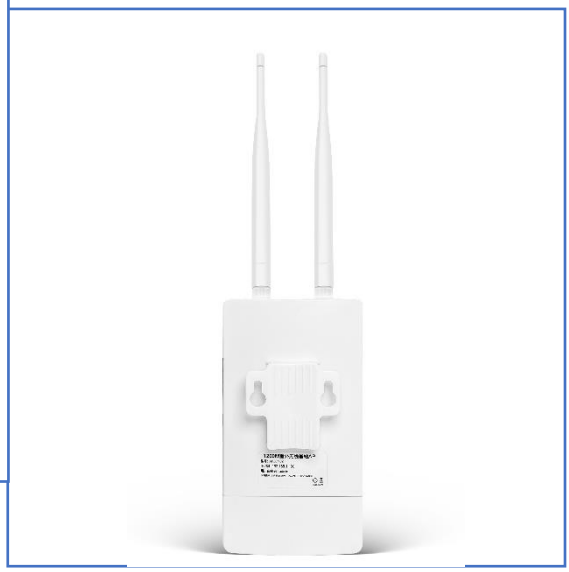
WL-AP595 SPECIFICATION V1.0

802.11AC 1200M Outdoor AP

I. Product Overview

The WL-AP595 is an outdoor wireless access point that uses the 802.11AC wireless network standard, operating in the 2.4G/5.8G ISM wireless frequency bands. It can meet the demand for high-speed wireless internet access for up to 64 concurrent users. With a 100M network interface, it supports 24V PoE remote power supply and 12V DC local power supply. In 2.4G 802.11n mode, it can support up to 300Mbps, and in 5.8G 802.11ac mode, it can support up to 867Mbps, with a total wireless speed of 1200Mbps. It features high performance, high power, high gain, high reception sensitivity, high bandwidth, and low latency, not only covering a larger range but also providing higher wireless transmission performance and stability. The IP65 windproof, rainproof, dustproof, and sunproof outdoor protective shell design allows it to easily adapt to extreme outdoor environments, whether hot or cold. It comes with two external 5dBi omnidirectional outdoor rubber antennas and supports pole/wall mounting, making it easy to deploy wireless networks in outdoor scenarios such as scenic areas, mountainous regions, and streets.

II. Product Image



III. Product Characteristics

1) Cost-effective MediaTek wireless chip with industrial-standard circuitry and high/low-temperature resistant design. Enhanced heat sinks and optimized airflow ensure no downtime due to overheating, fully guaranteeing real-time, long-term, stable, and high-performance transmission of user network data, enhancing user experience.

2) Supports 802.11a/b/g/n/ac protocols, offering wireless access speeds of 300Mbps on 2.4G and 867Mbps on 5G, providing a total wireless access speed of 1200Mbps.

3) External professional standalone WiFi RF amplification chip ensures broader signal coverage, higher rates, and longer transmission distances.

4) Supports **24V PoE remote power supply** and **12V/1A local DC power supply**, offering flexible power supply options suitable for various wireless engineering scenarios with inconvenient power supply, reducing construction costs.

5) External male threaded SMA standard connectors come with outdoor 5dBi rubber-mounted omnidirectional antennas. Users can also flexibly pair other 2.4G/5.8G dual-band antennas according to different usage environments.

6) Fashionable and elegant design supports wall/pole mounting methods, facilitating installation and significantly reducing construction difficulty and enhancing efficiency without compromising the original design.

IV. Technical Specifications

Hardware Specifications

Hardware Specification	
Main Chip	MT7628AN+MT7613BEN
Clock Speed	580MHz
Memory	128MB
Flash Storage	16MB
Wireless Technology	802.11b/g/n 2T2R MIMO (theoretical max speed: 300Mbps) 802.11a/n/ac 2T2R MIMO (theoretical max speed: 867Mbps)
Device Interfaces	WAN PoE*1/LAN*1 10/100Mbps auto-sensing DC power interface Compatible with power plugs with an outer diameter of 5.5mm, an inner diameter of 2.1mm, and a length of over 9.5mm RP-SMA male threaded connectors *2
Buttons	Reset button to restore factory settings (hold for 6 seconds)
LEDs	Power, LAN/WAN, LAN, WLAN*4
Antennas	Two external 2.4G/5.8G dual-band 5dBi outdoor omnidirectional rubber stick antennas
Power Supply	24V/0.5A PoE, DC 12V/1A
Operating/Storage Temperature	-40℃ ~ 55℃/-50℃ ~ 70℃
Operating/Storage Humidity	10% ~ 90% (non-condensing)/5% ~ 90% (non-condensing)
Dimensions	15.5CMx8.5CMx3CM (excluding antennas, antenna length: 15.5CM)
Weight	0.1KG

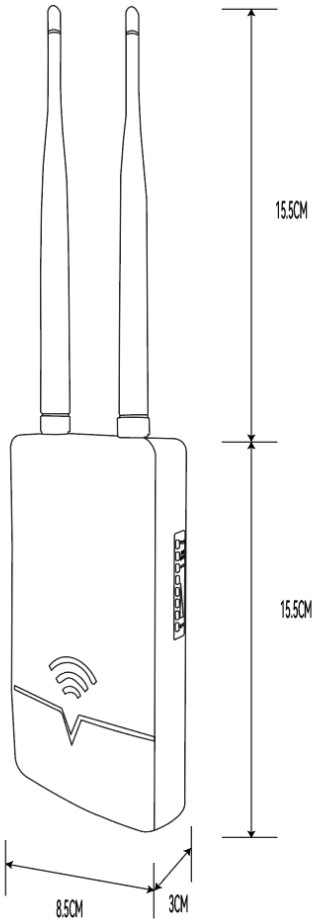
Wireless Specifications

Wireless Specifications	
Frequency Range	2.4G：2.4~2.4835GHz 5G: UNII-1: 5.15~5.35GHz UNII-2: 5.47~5.725GHz UNII-3: 5.725~5.825GHz
Channel	2.4G: 1/2/3/4/5/6/7/8/910/11/12/13 5G: 36/40/44/48/52/60/64/149/153/157/161/165
Mode	802.11b: DSSS (DQPSK, DBPSK, CCK) 802.11g: OFDM (BPSK, QPSK,16-QAM) 802.11n: OFDM (BPSK, QPSK,16-QAM, 64-QAM) 802.11ac: OFDM (BPSK, QPSK,64-QAM, 256-QAM)
Speed	11b Max.11Mbps，11g Max. 54Mbps，11n Max.300Mbps 11ac Max. 867Mbps
Reception Sensitivity	2.4G: 11b： ＜-90±1.5dBm @1Mbps， ＜-84±1.5dBm dBm@11Mbps 11g：＜-86±1.5dBm@6Mbps，＜-69±1.5dBm @54Mbps 11n 20MHz：＜-85±1.5dBm@MCS0，＜-67±1.5dBm @MCS7 11n 40MHz：＜-82±1.5dBm @MCS0，＜-64±1.5dBm @MCS7 5G: 11a： ＜-86±1.5dBm @6Mbps， ＜-69±1.5dBm @54Mbps 11n 20MHz：＜-85±1.5dBm@MCS0，＜-67±1.5dBm @MCS7 11n 40MHz：＜-82±1.5dBm @MCS0，＜-67±1.5dBm @MCS7 11ac 20MHz：＜-84±1.5dBm @MCS0，＜-59±1.5dBm @MCS8 11ac 40MHz：＜-82±1.5dBm @MCS0，＜-56±1.5dBm @MCS9 11ac 80MHz：＜-78±1.5dBm @MCS0，＜-52±1.5dBm @MCS9
Transmit Power	11b: 27dBm±1.5dBm@11Mbps 11g: 27dBm±1.5dBm@54Mbps 11n(20/40MHz): 27dBm±1.5dBm@MCS7 11ac(40/80MHz): 27dBm±1.5dBm@MCS9

Software Specifications

Software Features	
Operation Mode	AP/Routing/MESH
Max. No of Devices supported	64
Management	Chinese/English WEB Remote Management
Status	System Status, Wireless Status, Real-time Traffic
Network Configuration	DHCP/Static IP/PPPoE
Wireless Configuration	Wireless Switch, SSID, Encryption Method, Wireless Password, Wireless Multimedia, Terminal Isolation, Hide Wireless
System Management	Device Name, System Upgrade, Configuration Restore, Backup Configuration, Factory Reset, Restart Device
Advanced Configuration	RF Configuration, Multi-radio Configuration, Scheduled Power On/Off, Ping Watchdog, Scheduled Reboot, Password Change, Time Management, Diagnostics)

V. Dimension



VI. Package

1xWL-AP595，2x Antennas*2，Manual, Warranty Card