FS

AP-N303 Access Point Datasheet

1167Mbps 2x2 MIMO Dual Radios Wireless Access Point

Overview

AP-N303 is a dual-band 802.11ac Wave2 wireless access point launched by FS Network. Each radio supports two spatial stream technologies, and two built-in radios support 4 spatial streams of the whole machine. 2.4G provides a maximum access rate of 300 Mbps, and 5G provides a maximum access rate of 867 Mbps. The whole machine provides an access rate of 1.167 Gbps, and Gigabit high-speed wireless makes performance no longer a bottleneck. It is an ideal choice for higher education, government, medical, general education, finance, business and other indoor scenarios.

Benefits

- Dual Radios 1167 Mbps: 2.4 GHz (2x2), 5 GHz (2x2)
- OFDM and MU-MIMO Support
- Support Seamless Roaming with WLAN Controller
- Managed via WLAN Controller or Simply Operate Alone
- Ceiling-Mount and Wall-Mount Model
- Powered by 802.3af PoE (PoE injector sold separately)

Product Characteristics

Smart Coverage

- **802.11ac Gigabit Access Rate**

The 5GHz frequency band of AP-N303 adopts the Wi-Fi wireless standard - 802.11ac Wave2 protocol, and the maximum connection rate can reach 867 Mbps; dual-frequency is turned on at the same time, high-speed wireless up to 1.167 Gbps, compared with the traditional 802.11n wireless mode, the throughput rate is improved 94.5%, bringing a Gigabit high-speed experience.

- **Green and Environmental Protection, Lower Unit Energy Consumption**

A large number of new energy-saving technologies have been applied to the AP-N303, including single-antenna standby technology, dynamic MIMO power-saving technology, enhanced automatic power-saving transmission technology, and packet-by-packet power control technology. Under the condition of 802.3af power supply, the N303 has full-rate high-speed wireless access, ensuring greater signal coverage.

- **Intelligent Local Forwarding**

AP-N303 inherits the consistent intelligent local forwarding technology of FS Networks, breaking through the traffic bottleneck of wireless controllers. With the cooperation of FS wireless controllers, the data forwarding mode of the AP-N303 product can be flexibly pre-configured. According to the SSID name or user VLAN, it is determined whether it needs to be forwarded through the wireless controller, or directly into the wired network for data exchange. Through the local forwarding technology, the data that is sensitive to delay and requires high real-time transmission can be forwarded through the wired network, which can greatly relieve the traffic pressure of the wireless controller and better adapt to the high traffic transmission requirements of the 802.11ac network.

- **Rich Quality of Service Assurance (QoS)**

AP-N303 supports rich quality of service (QoS), supports WLAN/AP/STA multiple modes of bandwidth limitation, supports WMM (Wi-Fi multimedia) that defines priorities for different business data, etc., and realizes video and audio transmission. It can be timely, quantitative, and ensure the smooth application of multimedia. The multicast-to-unicast technology supported by the AP-N303 solves the problem of the unsmooth video caused by packet loss and large delay in multicast applications such as video-on-demand in wireless networks, and optimizes the experience of multicast video services in wireless networks.

Rich and Comprehensive Management Strategy

- **Flexible Working Mode**

AP-N303 products can support two working modes: Fat and Fit, and can be flexibly switched at any time according to the networking needs of customers in different industries. When the customer's wireless information points are few, the AP-N303 can work in the Fat mode, and can be used independently in the network; when the customer's wireless information points reach a certain scale, the AP-N303 can work in the Fit mode, and cooperate with the AC-1004, AC-7072 wireless controller products. The use of wireless products is subject to the centralized control of wireless controller products and achieves comprehensive control of network-wide integrated control, security, traffic management, QoS, and IP management. Through the natural transition of the two modes, the customer's investment is fully protected.

- **Simple Zero-Configuration Installation**

When the AP-N303 product works in Fit mode, there is no need to pre-set before installation. During the on-site installation and post-maintenance, the replacement of the product does not need to be reconfigured. It can inherit the configuration information from the wireless controller at any time to complete the configuration automatically and will implement and maintain; the workload and cost are greatly reduced.

- **Power Over Ethernet Ports for Easy Deployment and Maintenance**

The AP-N303 product supports the standard protocol of power over Ethernet (802.3af), and its Ethernet port can receive communication data and power supply on the Ethernet cable through a PoE power supply switch or a PoE power adapter device. The administrator can directly operate the device through the remote network, and at the same time, it also avoids the problem of inconvenient power supply, which greatly reduces the difficulty of deployment and installation cost.

Typical Networking

FAT AP

In the below networking, the AP-N303 works as a fat AP to complete user access, authentication, data security, service forwarding, and QoS.
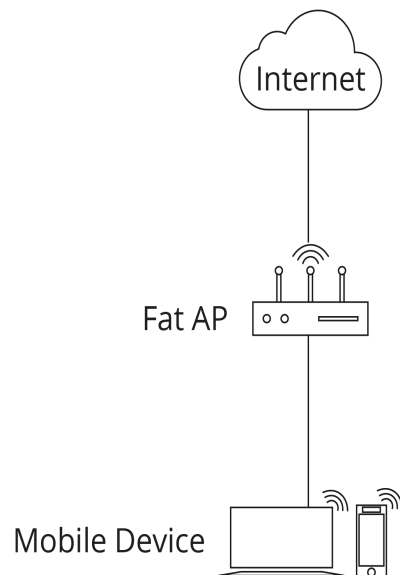
FIT AP

In the below networking, the AP-N303 works as a fit AP to bearer bridge forwarding function, and the functions of user access, AP online, authentication, routing, AP management, security protocol, and QoS are completed by the AC.
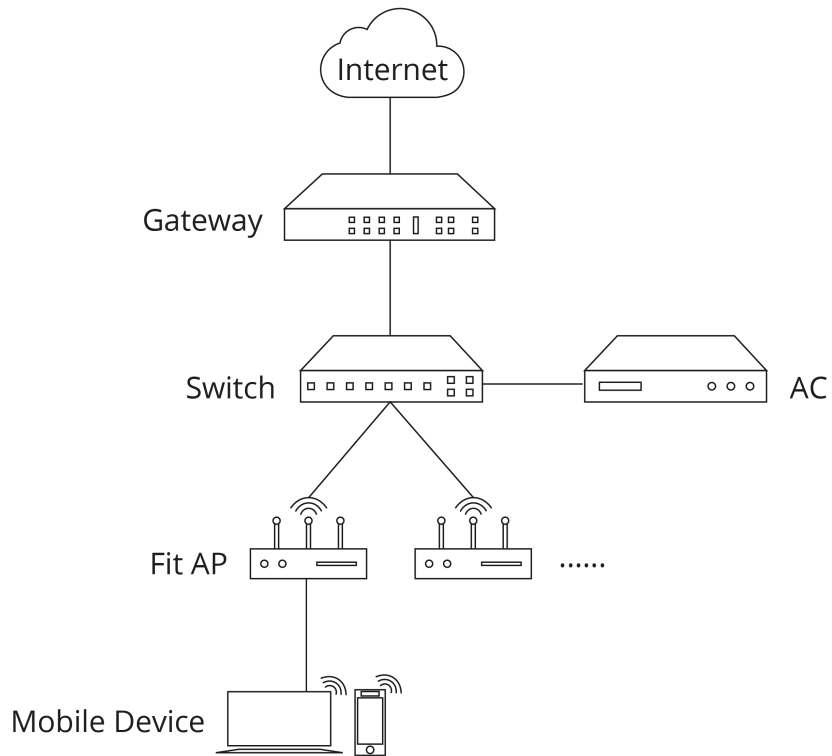
Technical Specification

Wi-Fi 5 access point comes with advanced hardware architecture design. Here's a look at the details.

CHARACTERISTICS

|	AP-N303
Ports	
Service Port	1× 10/100/1000Base-T Ethernet port (LAN1/PoE port supports PoE power supply)
Management Port	1× RJ45 Console port
Key Components	
AP Chip	Qualcomm QCA9563
DRAM	128MB
Flash Memory	32MB
Radio Specifications	
2.4GHz Operating Bands	802.11b/g/n: 2.4G to 2.483GHz
5GHz Operating Bands	802.11a/n/ac: 5.150～5.350GHz, 5.47～5.725GHz, 5.725～5.850GHz (vary depending on different countries)
MIMO	2.4G 11n: 2x2 MIMO, 5G 11ac: 2x2 MIMO
Spatial Streams	2.4 GHz/5 GHz: 2x2:2
Antenna	Built-in Smart Antenna
Antenna Gain	2.4GHz: 3dBi, 5GHz: 3dBi
Coverage Radius	8m
Power	
Power Supply	IEEE 802.3af PoE, DC 12V/1.5A
Power Consumption	<12.95W
Transmit Power	≤100mw (20dBm) (Note: the actual transmit power varies according to the regulations of different countries and regions)
Adjustable Power	1dBm

CHARACTERISTICS

	AP-N303
Physical and Environmental	
Installation Mode	Ceiling/Wall
Reset Button	Support
Dimensions (HxWxD)	7.64"x7.64"x1.46" (194×194×37mm)
Operating Temperature	-10°C to 50°C
Storage Temperature	-40°C to 70°C
Operating Humidity	5% to 95% (non-condensing)
Storage Humidity	5% to 95% (non-condensing)
Warranty	
Warranty	3 Years

FEATURES

Functionality	Description
WLAN	• Maximum number of connected users: 256 • Recommended number of connected users: 64 • Maximum number of divided virtual APs: 32 • Support SSID hiding • Support each SSID to configure separate authentication mode, encryption mechanism, vlan attributes • Supports Edge IntelliSense (RIPT) • Supports intelligent load balancing based on the number of terminals or traffic • Support SSID-based user limit • Supports user limit based on RF card • Supports bandwidth limitation based on STA/SSID/AP

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Functionality	Description
Security Features	• Support PSK, WEB, 802.1X and other authentication methods • Support WPA (TKIP), WPA-PSK, WPA2 (AES), WEP (64/128 bit) data encryption • Support non-sensing authentication (through the cooperation of FS series wireless controllers) • Data frame filtering, support whitelist, static blacklist, dynamic blacklist • Support user isolation • Support illegal AP detection and countermeasures • Support dynamic ACL delivery • Support RADIUS protocol • Support CPU Protection Policy (CPP) • Support for Basic Network Protection Policy (NFPP)
Routing Switching	• IPv4 address: support static IP address or DHCP acquisition • Support multicast
Management and Maintenance	• Managed via wireless lan controller: AC-1004/AC-7072 wireless controller • Network management: support through telnet, TFTP management • Support WEB management • Wireless positioning: support RBIS • Wireless marketing: support WMC/MCP • Support fault detection and alarm • Support information statistics and logs • Fat/Fit mode switching: when working in fit mode, you can switch to fat mode through AC-1004, AC-7072 wireless controller; when working in fat mode, you can switch to fit mode through local control port and telnet mode

Accessories
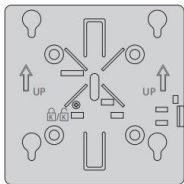
Mounting Bracket x1

Screw x4

Screw Anchor x4

Anti-theft Key x1

Ordering Information

ID	Description
149655	1167 Mbps 2x2 MU-MIMO Dual Radios Wireless Access Point
115392	1775 Mbps 2x2 MU-MIMO Dual Radios Gigabit Access Point
108705	2400 Mbps 2x2 MU-MIMO Dual Radios Gigabit Access Point
149657	2400 Mbps 2x2 MU-MIMO Dual Radios Gigabit Outdoor Access Point
149658	2400 Mbps 2x2 MU-MIMO Dual Radios Gigabit Outdoor Access Point
149656	3000 Mbps 2x2 MU-MIMO Dual Radios Gigabit Access Point
115391	3267 Mbps 2x2 MU-MIMO Three Radios Gigabit Access Point
115390	4134 Mbps 2x2 MU-MIMO Four Radios Gigabit Access Point
108707	6817 Mbps 4x4 MU-MIMO Three Radios Gigabit Access Point
115389	10 Gbps 4x4 MU-MIMO Three Radios Gigabit Access Point
141375	Wireless LAN Controller with 64 AP License
108708	Wireless LAN Controller with 224 AP License
149659	Wireless LAN Controller with 1152 AP License

Note: AC-1004/AC-7072 can manage all APs on the website, except three Wi-Fi 5 APs: FS-AP733C, FS-AP1167C, FS-AP3000C; AC-224AP can manage all Wi-Fi 6 APs on the website, except three APs: AP-T565, AP-N567 and AP-N505.

United Kingdom　Russia

Germany

United States

China

Singapore

Australia

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