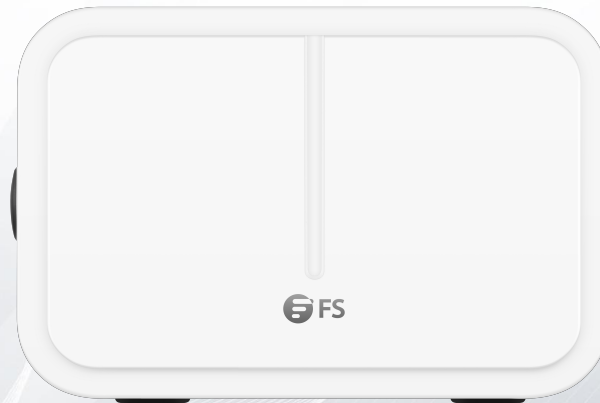


AP-T565 Access Point Datasheet

2400Mbps 2x2 MU-MIMO Dual Radios Gigabit Wi-Fi 6 Outdoor Access Point



Overview

AP-T565 supports protocols such as 802.11ax, 802.11ac Wave2, 802.11ac Wave1 and 802.11n. Using hardware independent dual-radio design, the whole machine can provide a maximum access rate of 2.402 Gbps; when working in 2.4G+5G mode, the whole machine can provide a maximum access rate of 1.775 Gbps, and high-speed wireless makes performance no longer a bottleneck. AP-T565 adopts IP68 protection grade housing design, suitable for use in harsh outdoor environment, can effectively avoid outdoor harsh weather and environmental impact, can highly adapt to the harsh requirements of cold weather and wet weather environment for equipment, reduce installation and Maintenance difficulty. This AP is very suitable for outdoor scenarios, such as general education, small and medium-sized enterprises, energy, commerce, government, medical and other outdoor scenarios.

Benefits

- Dual Radios 2400 Mbps: 2.4 GHz (2x2), 5 GHz (2x2)
- OFDMA and MU-MIMO Support
- Support Seamless Roaming with Airware Cloud/WLAN Controller
- Managed via Airware Cloud/WLAN Controller or Operate Alone
- IP68 Rated for Harsh Outdoor Environments
- Ceiling-Mount and Pole-Mount Model
- Powered by 802.3af PoE (PoE injector sold separately)

Product Characteristics

Multi-Service Port Design

AP-T565 supports dual Gigabit Ethernet ports for uplink, namely Gigabit Ethernet electrical port and Gigabit Ethernet optical port. The maximum rate of the self-adaptive Ethernet electrical port and the self-adaptive Ethernet optical port can reach 1Gbps, which ensures the high-speed transmission of business data between wireless and wired.

High-Speed Wireless, Power Saving and More Reliable

- **1024QAM High-Speed Access Rate**

AP-T565 adopts dual-channel dual-band design and adopts the new generation Wi-Fi wireless standard 802.11ax protocol; dual-radio is turned on at the same time, and the high-speed wireless rate of up to 2.402Gbps brings a high-speed and complete experience.

- **OFDMA High-Density User Access**

AP-T565 supports the OFDMA function of the 802.11ax standard, which divides the WLAN channel into multiple narrower sub-channels, and each user occupies one or more sub-channels. The AP schedules multiple users to receive and send packets at the same time, reducing competition and backoff between users, reducing network delay, and improving network efficiency. In a high-density deployment and access environment, the average rate per user can be up to four times that of 802.11ac.

- **BSS Color Spatial Multiplexing**

AP-T565 supports the BSS Color spatial multiplexing function of the 802.11ax standard, and identifies the basic service levels (BSS, Basic Service Set) of different WLANs in the network through different BSS Colors, and further divides them into internal BSS (the BSS to which the device belongs) and external BSS, and maintain different packet receiving and sending thresholds respectively.

When receiving a packet, if it is determined according to the BSS Color that it is an external BSS packet and the signal strength is lower than the receiving threshold of the external BSS, the packet will not be received, but the internal BSS packet will not be affected. BSS Color spatial multiplexing technology can realize channel multiplexing in a high-density scenario environment, and alleviate the influence of co-channel interference in actual network deployment to a greater extent.

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

A large number of new energy-saving technologies have been applied to the AP-T565, including single-antenna standby technology, dynamic MIMO power-saving technology, enhanced automatic power-saving transmission technology, and packet-by-packet power control technology. The T565 easily saves power while providing high-speed wireless access.

- **Smart Identification Function**

Support terminal intelligent identification, can identify iOS, Android and other intelligent mobile terminals and PCs.

- **Flexible WDS Networking Mode**

AP-T565 products support WDS (Wireless Distributed System) technology, which can provide AP coverage or wireless bridge. At a distance of 3KM, high-performance wireless bridging can be completed. At the same time, it also supports the point-to-multipoint (CPE application scenario) bridge function, making wireless networking more flexible. It meets the network requirements of large-scale outdoor wireless coverage and long-distance high-speed wireless interconnection and flexibly solves the problem of outdoor wireless deployment.

- **Intelligent Local Forwarding**

AP-T565 inherits the intelligent local forwarding technology of the FS network, breaking through the limitation of the traffic bottleneck of the wireless controller. Through the cooperation of the FS wireless controller, the data forwarding mode of the AP-T565 product can be flexibly pre-configured. According to the SSID name or user VLAN, it is decided whether to forward through the wireless controller or directly enter the wired network for data exchange.

Through the local forwarding technology, the data that is sensitive to delay and requires high real-time transmission is forwarded through the wired network, which greatly relieves the traffic pressure of the wireless controller and better adapts to the high traffic transmission requirements of the 802.11ax network.

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

AP-T565 supports rich quality of service (QoS), supports multiple modes of WLAN/AP/STA bandwidth limitation, supports WMM (Wi-Fi Multimedia) that defines priorities for different business data, etc., to achieve timely and quantitative audio and video transmission, thus ensuring a smoother multimedia application experience.

The multicast-to-unicast technology supported by AP-T565 solves the problem of unsmooth video caused by packet loss and large delay in multicast applications such as video-on-demand in wireless networks, and improves the experience of multicast video services in wireless networks.

Easier to Use Security Protection

- **User Level Security Access**

AP-T565 supports Web, 802.1x, MAC address, local authentication and other user access authentication methods for customers to choose. Comply with the standard network access control system, from user access, authorization, host compliance to network behavior monitoring, network attack prevention and other aspects, strictly define network access, and through this control, achieve The construction concept of "network access is authentication, network access is security".

- **Flexible Virtual AP Technology**

Through the virtual wireless access point (Virtual AP) technology, the AP-T565 can provide a maximum of 32 virtual APs; each radio card can provide a maximum of 16 virtual APs. Isolated, and can flexibly configure separate authentication methods and encryption mechanisms for each SSID.

- **Wireless Security**

With FS network wireless controller, AP-T565 has a series of wireless security protection functions such as WIDS (wireless intrusion detection), radio frequency interference location, rogue AP countermeasures, anti-ARP spoofing, DHCP security protection, etc., which fundamentally builds security for users. Reliable wireless network.

- **Multiple Ease of Use Authentication Methods**

With the FS authentication system or multi-service AC, it supports various efficient and convenient authentication methods such as non-perception, SMS and QR code visitors. Wireless users access the network through non-perceptual authentication, and only need to enter the account and password for the first time, avoiding the process of entering the account and password again after turning on the device, allowing users to easily surf the Internet after one-time authentication. After the visitor accesses the wireless network through SMS authentication, an authentication page will pop up. The visitor registers through the mobile phone number and accesses the Internet according to the account password in the SMS received by the visitor's mobile phone.

QR code authentication is another convenient way for visitors to access the Internet. After accessing the wireless network, visitors can get a QR code prompt, and they can access the network after being authorized by the respondent (employee). The behavior of the visitor is directly related to the respondent. association for better security.

Flexible Device Management Mode

- **Flexible Switching of Fat and Fit Mode**

AP-T565 supports the flexible switching of Fat/Fit mode. In Fit mode, it can realize zero-configuration installation and use, and the perfect remote management also greatly improves the efficiency of wireless network operation and maintenance management.

- **Web Interface Administration**

AP-T565 provides the web management interface of AC and AP, which not only can easily get wireless configuration, but also can operate the wireless network as a whole. Through the web interface of the wireless controller--AC-1004, AC-7072, it can not only manage APs but also manage users connected to APs, and can limit the speed and limit of users. The behavior of users connecting to the network is convenient for the operation and maintenance personnel to plan and operate the wireless.

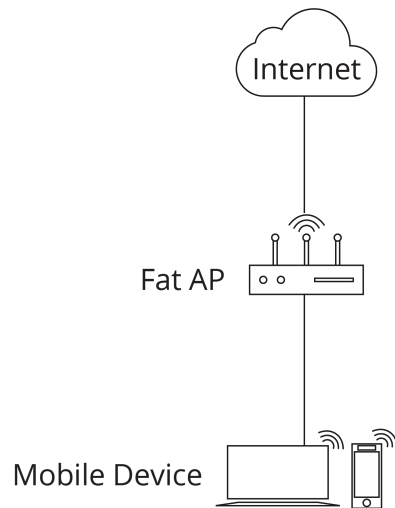
- **Airware Cloud Management**

The AP supports cloud delivery, cloud operations, cloud inspection, and cloud diagnosis.

Typical Networking

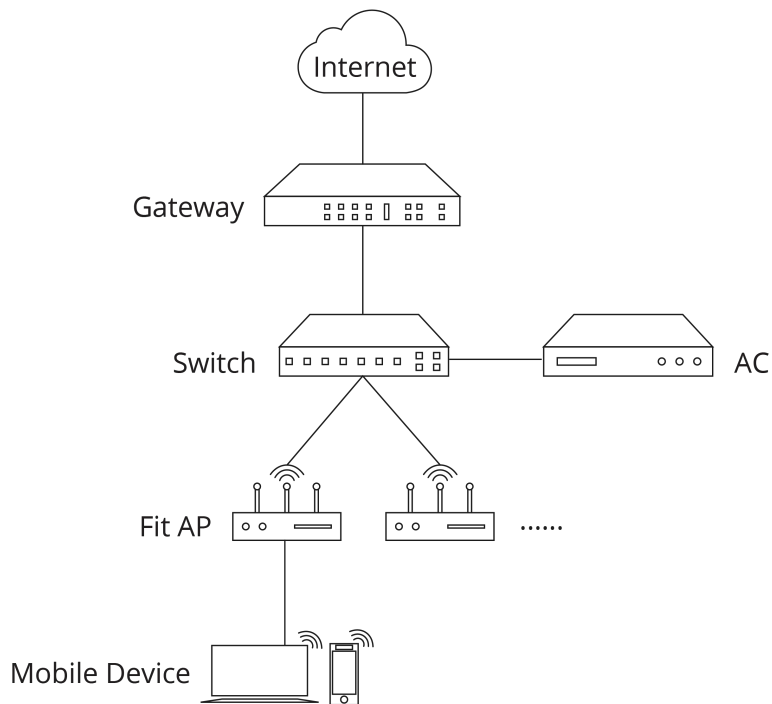
FAT AP

In the below networking, the AP-T565 works as a fat AP to complete user access, authentication, data security, service forwarding, and QoS.



FIT AP

In the below networking, the AP-T565 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 6 access point comes with advanced hardware architecture design. Here's a look at the details.

CHARACTERISTICS

AP-T565	
Ports	
Service Port	1x 10/100/1000Base-T Ethernet port, 1x1G SFP port
Management Port	1x RJ45 Console port
Key Components	
AP Chip	BROADCOM/BCM47622
DRAM	512MB
Flash Memory	128MB
Radio Specifications	
2.4GHz Operating Bands	802.11b/g/n/ax, 2.400GHz~2.484GHz, support switching to 5G frequency band
5GHz Operating Bands	802.11a/n/ac/ax: 5.150-5.350GHz, 5.47-5.725GHz, 5.725-5.850GHz
MIMO	2.4G/5G 2x2 MIMO
Spatial Streams	2.4 GHz/5 GHz: 2x2: 2, 5 GHz: 2x2:2, 5 GHz: 2x2: 2
Antenna	Built-in Omnidirectional Antenna
Antenna Gain	2.4 GHz: 2x 4 dBi 5 GHz: 2x 6 dBi The peak antenna gain is 6 dBi at 2.4GHz and 8 dBi at 5GHz
Coverage Radius	100 m Note: The actual channel coverage of the AP is related to the placement height of the AP. Take the height of the AP 3 meters above the ground as an example
Power	
Power Supply	IEEE 802.3af PoE, DC 48V/0.35A
Power Consumption	<12.95W
Maximum Transmit Power	28dBm Note: Actual transmit power may vary according to country and region regulations.
Adjustable Power	1dBm

CHARACTERISTICS

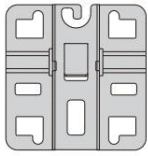
AP-T565	
Physical and Environmental	
Installation Mode	Ceiling/Pole Mounting
Bluetooth	Bluetooth 5.0
Reset Button	Support
Dimensions (HxWxD)	9.88"x6.61"x2.52" (251×168×64mm)
Operating Temperature	-40°C to 65°C
Storage Temperature	-40°C to 85°C
Operating Humidity	0%RH ~100%RH (non-condensing)
Storage Humidity	0%RH ~100%RH (non-condensing)
Dustproof and Waterproof Level	IP68
Warranty	
Warranty	3 Years

FEATURES

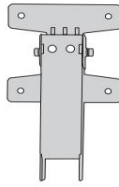
Functionality	Description
WLAN	<ul style="list-style-type: none"> • Maximum number of connected users: 1024 • Recommended number of connected users: 64 • Maximum number of divided virtual APs: 32 • Support SSID hiding • Support each SSID to configure separate authentication mode, encryption mechanism, 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

Functionality	Description
Security Features	<ul style="list-style-type: none"> • Support PSK, web and other authentication methods • Support WPA (TKIP), WPA-PSK, WPA2 (AES), WPA3, WEP (64/128 bit) data encryption • Support senseless authentication • 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	<ul style="list-style-type: none"> • IPv4 address, support static IP address or DHCP acquisition • Support multicast to unicast • Support PPPoE client • Support IPsec VPN • Support NAT (including FTP ALG/DNS ALG)
Management and Maintenance	<ul style="list-style-type: none"> • Managed via wireless lan controller: AC-224AP/ AC-1004/ AC-7072 wireless controller • Support management through telnet and TFTP • 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 switch, when working in fit mode, you can switch to fat mode through • Support Airware cloud for AP/AC centralized management to solve problems efficiently and remotely, skip going onsite <p>AC-1004, AC-7072 wireless controller; when working in fat mode, it can be switched to fit mode through the local control port or Telnet</p>

Accessories



Anchor x1



Transverse Bracket&Bottom Plate x1



Anchor Ears x2



Dust Cover x3



Waterproof Joint for PoE&Power Ports x2



Waterproof Joint for LC Fber Optic Cable x1



M6 Screw Bolts x4



M5 Screws x4



M8 Screws x2



Grounding Cable x1

Ordering Information

ID	Description
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
141375	Wireless LAN Controller with 64 AP License
108708	Wireless LAN Controller with 224 AP License
149659	Wireless LAN Controller with 1152 AP License



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