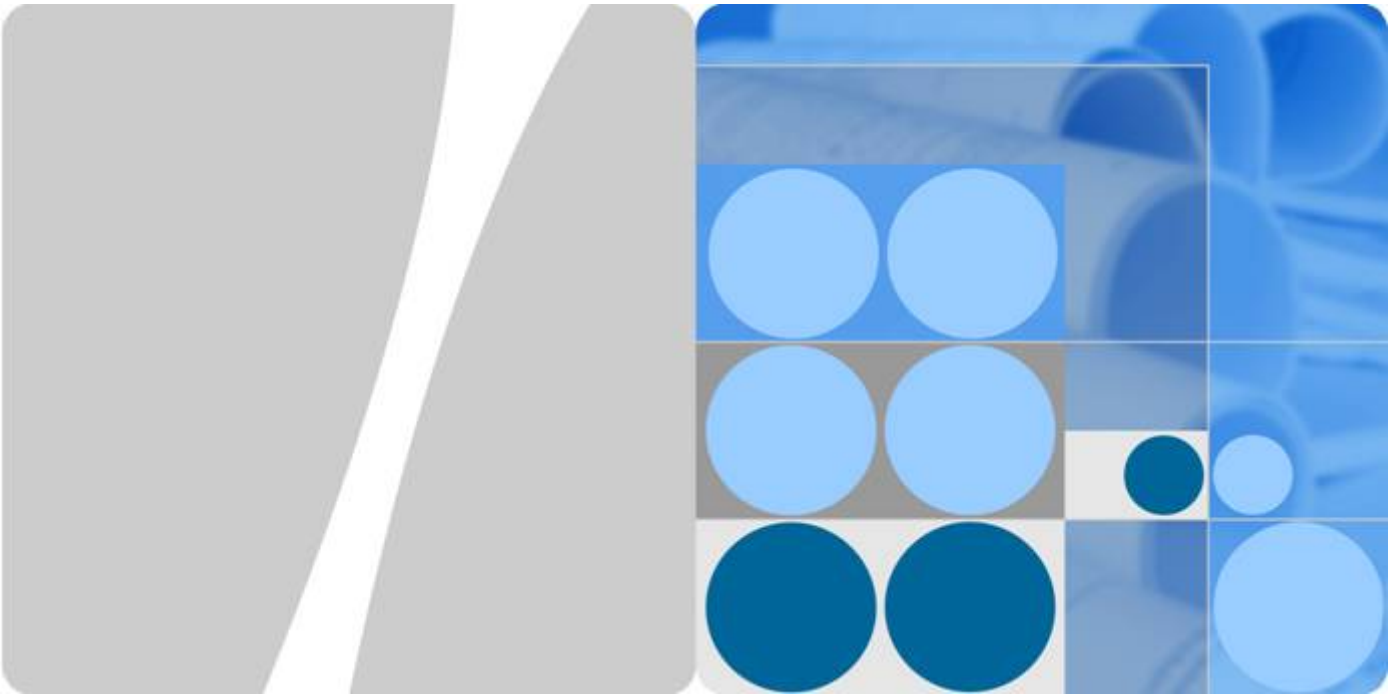

AP6010DN-AGN&6010SN-GN

Product Description

Issue 06

Date 2015-07-15

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About This Document

Purpose

This document describes the positioning, characteristics, hardware structure, product features, and technical specifications of the AP.

This document helps you understand the characteristics and features of the AP.

This document applies to V200R003C00 and a later version.

Intended Audience

This document is intended for network engineers responsible for network design and deployment. You should understand your network well, including the network topology and service requirements.

Symbol Conventions

The symbols that may be found in this document are defined as follows.

Symbol	Description
DANGER	Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
WARNING	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
CAUTION	Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.
NOTICE	Indicates a potentially hazardous situation which, if not avoided, could result in equipment damage, data loss, performance deterioration, or unanticipated results. NOTICE is used to address practices not related to personal injury.

Symbol	Description
NOTE	Calls attention to important information, best practices and tips. NOTE is used to address information not related to personal injury, equipment damage, and environment deterioration.

Change History

Changes between document issues are cumulative. The latest document issue contains all the changes made in previous issues.

Changes in Issue 06 (2015-07-15)

This version has the following updates:

The following information is modified:

- **4.2 Radio Specifications**

Changes in Issue 05 (2014-12-05)

This version has the following updates:

The following information is modified:

- **4.2 Radio Specifications**

Changes in Issue 04 (2014-07-30)

This version has the following updates:

The following information is modified:

- **4.2 Radio Specifications**

Changes in Issue 03 (2014-01-15)

This version has the following updates:

The following information is modified:

- **3.3 QoS Features**

Changes in Issue 02 (2013-09-30)

This version has the following updates:

The following information is modified:

- **4.3 Standards Compliance**

Changes in Issue 01 (2013-04-30)

This is the initial commercial release.

Contents

1 Product Positioning and Characteristics

1.1 Product Positioning

Table 1-1 Product positioning

Product Model	Frequency Band	IEEE Standards Compliance	Positioning	Usage Scenario
AP6010DN-AGN	Dual bands: ● 2.4 GHz ● 5 GHz The AP6010DN-AGN can provide services simultaneously on the 2.4 GHz and 5 GHz frequency bands to support more access users.	IEEE 802.11a/b/g/n	The AP6010DN-AGN and AP6010SN-GN are performance-enhanced APs. They support 2 x 2 MIMO and provide comprehensive service support capabilities. The AP6010DN-AGN and AP6010SN-GN are deployed indoors and feature high reliability, high security, simple network deployment, automatic AC discovery and configuration, and real-time	The AP6010DN-AGN and AP6010SN-GN provide wireless services for enterprise scenarios with medium size, dense users, and high capacity demands. The AP6010DN-AGN can be flexibly deployed and work in hybrid mode (Fit AP +bridge).

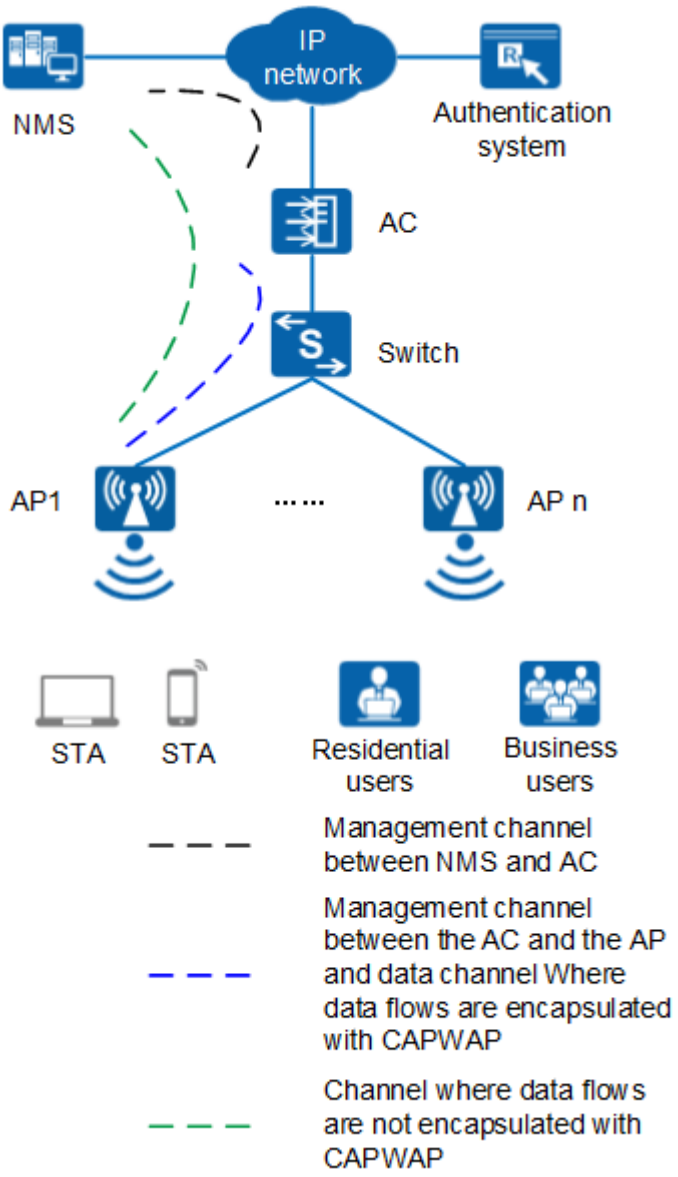
Product Model	Frequency Band	IEEE Standards Compliance	Positioning	Usage Scenario
AP6010SN-GN	Single band: 2.4 GHz	IEEE 802.11b/g/n	management and maintenance.	

The AP6010DN-AGN and AP6010SN-GN can work as a Fat AP or Fit AP and switch flexibly between the two working modes based on the network plan.

When the wireless network scale is small, customers need to purchase only AP products and set the APs to work as Fat APs. As the network scale expands, tens of or hundreds of APs exist on the network. To simplify network management, customers are advised to purchase ACs to perform centralized management on the APs and set the APs to work as Fit APs.

Typical networking modes are as follows:

Figure 1-1 Fit AP networking (AP mode)



In this networking, the AP functions as a Fit AP. The AC is responsible for user access, AP go-online, AP management, authentication, routing, security, and QoS. Huawei products that provide the AC function include the AC6605, AC6005, ACU2 (with S7700, S9700, or S12700), S5720HI, S7700 (with X series board), S9700 (with X series board), and S12700 (with X series board).

Figure 1-2 Fit AP networking (WDS mode: point-to-point)

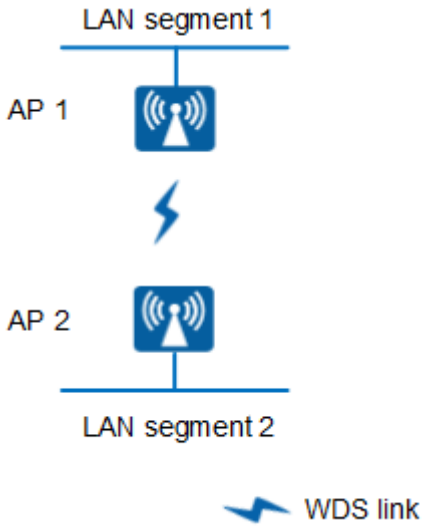
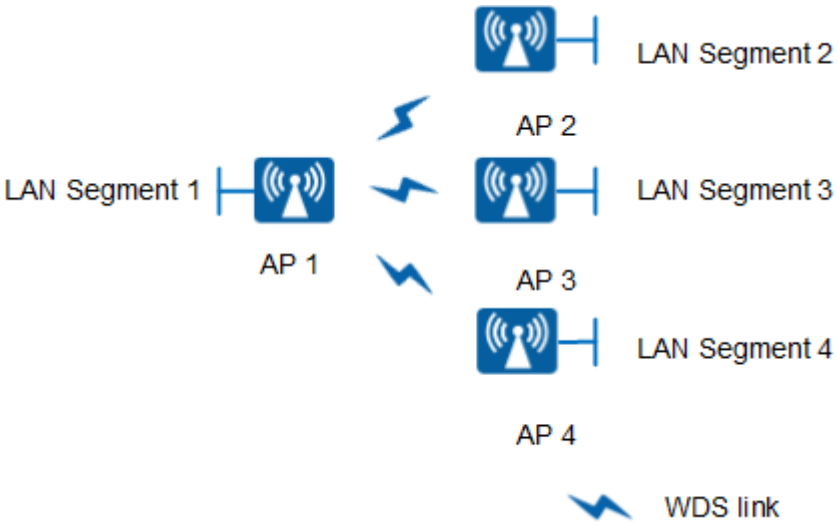
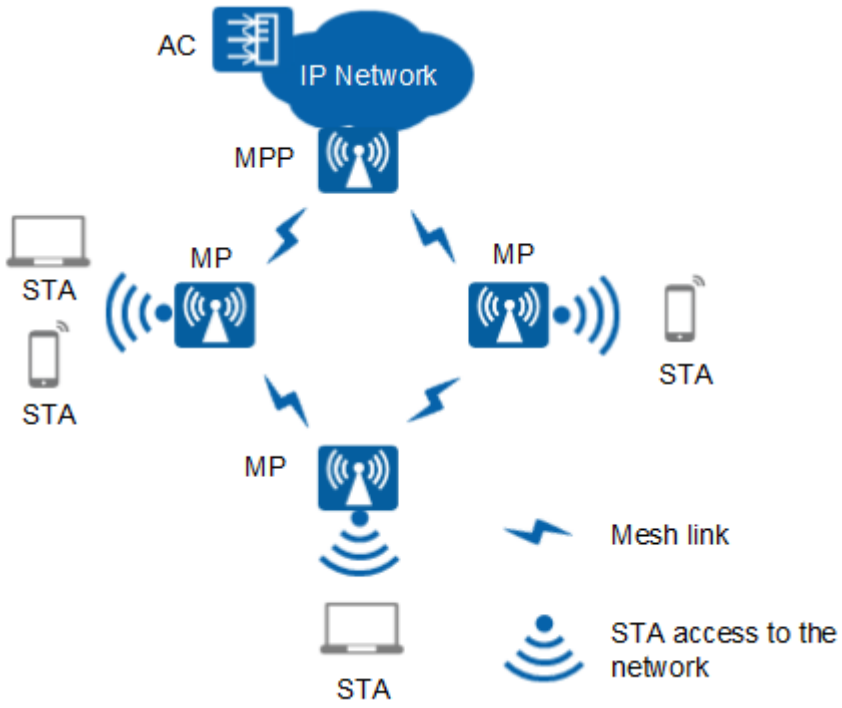


Figure 1-3 Fit AP networking (WDS mode: point-to-multipoint)



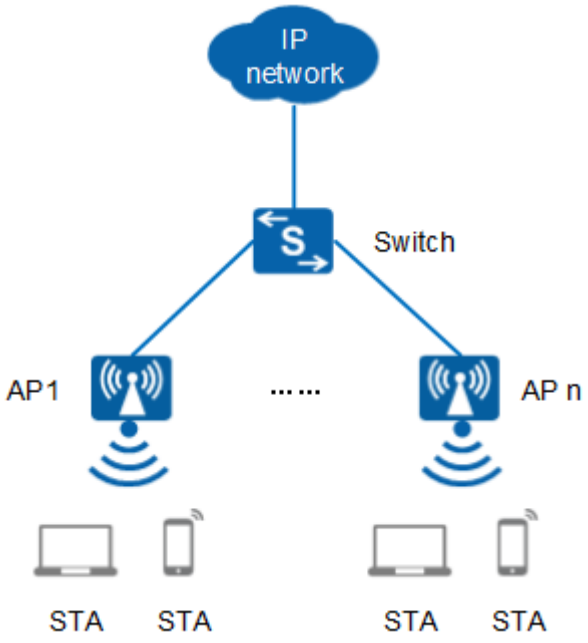
In this networking, the AP connects two or more independently wired or wireless LANs through wireless links to construct a network on which users can exchange data. In Wireless Distribution System (WDS) mode, the AP supports point-to-point (P2P) and point-to-multipoint (P2MP) networking modes. Supporting 5 GHz and 2.4 GHz frequency bands, the AP can implement wireless bridging and access functions.

Figure 1-4 Fit AP mesh networking



In this networking, APs function as mesh points (MPs) and are fully meshed to establish an auto-configured and self-healing wireless mesh network (WMN). APs with the gateway function can work as the mesh portal points (MPPs) through which the WMN can provide access to the Internet. Terminals connect to APs to access the WMN. The WMN uses dedicated mesh routing protocols to guarantee high transmission quality and is more applicable to scenarios that require high bandwidth and highly stable Internet connections.

Figure 1-5 Fat AP networking



In this networking, the device functions as a Fat AP to implement functions such as user access, authentication, data security, service forwarding, and QoS.

1.2 Product Characteristics

The AP6010DN-AGN, and AP6010SN-GN have the following advantages on a WLAN.

Product Characteristics	Description
High-speed and reliable wireless access	● AP6010DN-AGN: complies with IEEE 802.11a/b/g/n. ● AP6010SN-GN: complies with IEEE 802.11b/g/n. ● AP6010DN-AGN: supports 2 x 2 MIMO and provides a maximum rate of 600 Mbit/s. ● AP6010SN-GN: supports 2 x 2 MIMO and provides a maximum rate of 300 Mbit/s. ● Supports Wi-Fi Multimedia (WMM) and priority mapping on the air interface and wired interface. ● Supports wired link integrity check. ● Supports load balancing. ● Supports roaming without service interruption in Fit AP mode. ● Supports AC dual-link backup in Fit AP mode. ● Supports beamforming. ● Uses the latest 802.11n chip to provide higher performance and wider coverage. ● Supports airtime scheduling which ensures fairness in channel occupation time for all users. **NOTE** This function is not supported in V200R003C00.
Comprehensive user access control capability	● Supports access control lists (ACLs) and implements user access control based on the user group policy. ● Provides fine-grained bandwidth management for each user. ● Supports user isolation policies. ● Supports unified authentication on the AC in Fit AP mode. ● Identifies the device type according to the organizationally unique identifier (OUI) in the MAC address, user agent (UA) information in an HTTP packet, and DHCP options in Fit AP mode. ● The RADIUS server delivers packet forwarding, security, and QoS policies according to the device type carried in the RADIUS authentication and accounting packets in Fit AP mode.

Product Characteristics	Description
High network security	● Open system authentication ● WEP authentication/encryption ● WPA/WPA2-PSK authentication and encryption ● WPA/WPA2-802.1x authentication and encryption ● WAPI authentication and encryption ● Wireless intrusion detection system (WIDS) and wireless intrusion prevention system (WIPS), including rogue device detection and countermeasure, attack detection and dynamic blacklist, and STA/AP blacklist and whitelist
Flexible networking and environment adaptability	● Provides flexible networking capabilities and applies to various application scenarios. Mesh and WDS scenarios are supported only in Fit AP mode. ● Has strong environment adaptability. The AP can automatically select the transmission rates, channels, and transmit power to adapt to various radio environments and avoid interference in real time. ● Adjusts bandwidth allocation based on the user quantity and environment to improve user experience. ● Identifies interference sources such as baby monitors, Bluetooth devices, digital cordless phones (at 2.4 GHz frequency band only), wireless audio transmitters (at both the 2.4 GHz and 5 GHz frequency bands), wireless game controllers, and microwaves in Fit AP mode and works with eSight to display spectrums of interference sources.
Easy device management and maintenance	● Works in Fit AP mode to support automatic going-online, configuration loading, and plug-and-play (PnP). ● Supports batch upgrade. ● Works in Fat AP mode to support HTTP or HTTPS login to the web platform to achieve local management and maintenance. ● Allows real-time monitoring on the network management system (NMS) to facilitate remote configuration and fast fault location. ● Supports the Link Layer Discovery Protocol (LLDP) to implement automatic link discovery and obtain the network topology.

2 Hardware Structure

2.1 AP6010DN-AGN

Appearance

Figure 2-1 shows the appearance of the AP.

NOTE

The actual device appearance may be different from the following device appearance, but these differences will not affect device functions.

Figure 2-1 AP appearance

Interfaces

The following figure shows interfaces on the AP.

Figure 2-2 Interfaces on the AP

As shown in **Figure 2-2**, the AP has the following interfaces.

1. Console interface.
2. ETH/PoE interface: a 10/100/1000M interface, which connects to the wired Ethernet and supports PoE power supply.
3. Default button: restores factory settings if you hold down the button more than 3s.
4. Power input interface: 12 V DC.
5. Lock interface: protects the AP against theft.

NOTE

Different power adapters are delivered with the AP products according to standards in the countries or regions where the AP products are delivered. These countries and regions are identified by the barcode on an AP's nameplate, including:

- USA (the AP is sold only in the U.S)

LED Indicators

NOTE

Indicator colors may vary slightly at different temperature.

Type	Color	Status	Description
Default status after power-on	Green	Steady on	The AP is just powered on and the software is not started yet.
Software startup status	Green	Steady on after blinking once	After the system is reset and starts uploading the software, the indicator blinks green once. Until the software is uploaded and started, the indicator remains steady green.
Running status	Green	Blinking once every 2s (0.5 Hz)	● The system is running properly, the Ethernet connection is normal, and STAs are associated with the AP. ● The system enters the Uboot CLI.
		Blinking once every 5s (0.2 Hz)	The system is running properly, the Ethernet connection is normal, and no STA is associated with the AP. The system is in low power consumption state.

Type	Color	Status	Description
Alarm	Green	Blinking once every 0.25s (4 Hz)	● The software is being upgraded. ● After the software is uploaded and started, the AP working in Fit AP mode requests to go online on the AC and maintains this state until it goes online successfully on the AC (before the CAPWAP link is established). ● The AP working in Fit AP mode fails to go online on the AC (the CAPWAP link disconnects).
Fault	Red	Steady on	A fault that affects services has occurred, such as a DRAM detection failure or system software loading failure. The fault cannot be automatically rectified and must be rectified manually.

2.2 AP6010SN-GN

Appearance

Figure 2-3 shows the appearance of the AP.

NOTE

The actual device appearance may be different from the following device appearance, but these differences will not affect device functions.

Figure 2-3 AP appearance

Interfaces

The following figure shows interfaces on the AP.

Figure 2-4 Interfaces on the AP

As shown in **Figure 2-4**, the AP has the following interfaces.

1. Console interface.
2. ETH/PoE interface: a 10/100/1000M interface, which connects to the wired Ethernet and supports PoE power supply.
3. Default button: restores factory settings if you hold down the button more than 3s.
4. Power input interface: 12 V DC.
5. Lock interface: protects the AP against theft.

LED Indicators

NOTE

Indicator colors may vary slightly at different temperature.

Type	Color	Status	Description
Default status after power-on	Green	Steady on	The AP is just powered on and the software is not started yet.
Software startup status	Green	Steady on after blinking once	After the system is reset and starts uploading the software, the indicator blinks green once. Until the software is uploaded and started, the indicator remains steady green.
Running status	Green	Blinking once every 2s (0.5 Hz)	● The system is running properly, the Ethernet connection is normal, and STAs are associated with the AP. ● The system enters the Uboot CLI.
		Blinking once every 5s (0.2 Hz)	The system is running properly, the Ethernet connection is normal, and no STA is associated with the AP. The system is in low power consumption state.

Type	Color	Status	Description
Alarm	Green	Blinking once every 0.25s (4 Hz)	● The software is being upgraded. ● After the software is uploaded and started, the AP working in Fit AP mode requests to go online on the AC and maintains this state until it goes online successfully on the AC (before the CAPWAP link is established). ● The AP working in Fit AP mode fails to go online on the AC (the CAPWAP link disconnects).
Fault	Red	Steady on	A fault that affects services has occurred, such as a DRAM detection failure or system software loading failure. The fault cannot be automatically rectified and must be rectified manually.

3 Product Features

3.1 WLAN Features

WLAN features supported by the AP are as follows:

- Compliance with IEEE 802.11a/b/g/n
- AP6010DN-AGN supports 2 x 2 MIMO and provides a maximum rate of 600 Mbit/s.
- AP6010SN-GN supports 2 x 2 MIMO and provides a maximum rate of 300 Mbit/s.
- Maximum ratio combining (MRC)
- Space time block code (STBC)
- Beamforming
- Low-density parity-check (LDPC)
- Maximum-likelihood detection (MLD)
- Frame aggregation, including A-MPDU (Tx/Rx) and A-MSDU (Rx only)
- 802.11 dynamic frequency selection (DFS)
- Short guard interval (GI) in 20 MHz and 40 MHz modes
- Priority mapping and packet scheduling based on a Wi-Fi Multimedia (WMM) profile to implement priority-based data processing and forwarding
- Automatic and manual rate adjustment
- WLAN channel management and channel rate adjustment

  NOTE

  For details about WLAN channel management, see the *Country Code & Channel Compliance Table*.
- Automatic channel scanning and interference avoidance
- Service set identifier (SSID) hiding
- Signal sustain technology (SST)
- Unscheduled automatic power save delivery (U-APSD)
- Control and Provisioning of Wireless Access Points (CAPWAP) in Fit AP mode
- Automatic login in Fit AP mode
- Extended Service Set (ESS) in Fit AP mode
- Wireless distribution system (WDS) in Fit AP mode

- Mesh networking in Fit AP mode
- Multi-user CAC

3.2 Network Features

Network features supported by the AP are as follows:

- Compliance with IEEE 802.3ab
- Auto-negotiation of the rate and duplex mode and automatic switchover between the Media Dependent Interface (MDI) and Media Dependent Interface Crossover (MDI-X)
- Compliance with IEEE 802.1q
- SSID-based VLAN assignment
- VLAN trunk on uplink Ethernet ports
- Management channel of the AP uplink port in tagged and untagged mode
- DHCP client, obtaining IP addresses through DHCP
- Tunnel data forwarding and direct data forwarding
- STA isolation in the same VLAN
- Access control lists (ACLs)
- Link Layer Discovery Protocol (LLDP)
- Uninterrupted service forwarding upon CAPWAP channel disconnection in Fit AP mode
- Unified authentication on the AC in Fit AP mode
- AC dual-link backup in Fit AP mode
- Network Address Translation (NAT) in Fat AP mode
- IPv6 in Fit AP mode

3.3 QoS Features

QoS features supported by the AP are as follows:

- Priority mapping and packet scheduling based on a Wi-Fi Multimedia (WMM) profile to implement priority-based data processing and forwarding
- WMM parameter management for each radio
- WMM power saving
- Priority mapping for upstream packets and flow-based mapping for downstream packets
- Queue mapping and scheduling
- User-based bandwidth limiting
- Adaptive bandwidth management (automatic bandwidth adjustment based on the user quantity and radio environment) to improve user experience
- Airtime scheduling

3.4 Security Features

Security features supported by the AP are as follows:

- Open system authentication
- WEP authentication/encryption using a 64-bit, 128-bit, or 152-bit encryption key
- WPA/WPA2-PSK authentication and encryption (WPA/WPA2 personal edition)
- WPA/WPA2-802.1x authentication and encryption (WPA/WPA2 enterprise edition)
- WPA-WPA2 hybrid authentication
- WAPI authentication and encryption
- Wireless intrusion detection system (WIDS) and wireless intrusion prevention system (WIPS), including rogue device detection and countermeasure, attack detection and dynamic blacklist, and STA/AP blacklist and whitelist
- 802.1x authentication, MAC address authentication, and Portal authentication
- DHCP snooping
- Dynamic ARP Inspection (DAI)
- IP Source Guard (IPSG)

3.5 Maintenance Features

Maintenance features supported by the AP are as follows:

- Unified management and maintenance on the AC in Fit AP mode
- Automatic login and configuration loading, and plug-and-play (PnP) in Fit AP mode
- WDS zero-configuration deployment in Fit AP mode
- Mesh network zero-configuration deployment in Fit AP mode
- Batch upgrade in Fit AP mode
- Telnet
- STelnet using SSH v2
- SFTP using SSH v2
- Local AP management through the serial interface
- Web local AP management through HTTP or HTTPS in Fat AP mode
- Real-time configuration monitoring and fast fault location using the NMS
- SNMP v1/v2/v3 in Fat AP mode
- System status alarm
- Network Time Protocol (NTP) in Fat AP mode
- Dying Gasp

3.6 BYOD

NOTE

The AP supports bring your own device (BYOD) only in Fit AP mode.

BYOD features supported by the AP are as follows:

- Identifies the device type according to the organizationally unique identifier (OUI) in the MAC address.
- Identifies the device type according to the user agent (UA) information in an HTTP packet.

- Identifies the device type according to DHCP options.
- The RADIUS server delivers packet forwarding, security, and QoS policies according to the device type carried in the RADIUS authentication and accounting packets.

3.7 Locating Service

NOTE

The AP supports the locating service only in Fit AP mode.

Locating service features supported by the AP are as follows:

- Locates tags manufactured by AeroScout or Ekahau.
- Locates Wi-Fi terminals.
- Works with eSight to locate rogue devices.

3.8 Spectrum Analysis

NOTE

The AP supports spectrum analysis only in Fit AP mode.

Spectrum analysis features supported by the AP are as follows:

- Identifies interference sources such as baby monitors, Bluetooth devices, digital cordless phones (at 2.4 GHz frequency band only), wireless audio transmitters (at both the 2.4 GHz and 5 GHz frequency bands), wireless game controllers, and microwaves.
- Works with eSight to perform spectrum analysis on interference sources.

4 Technical Specifications

4.1 Basic Specifications

Table 4-1 Basic specifications

Item		Description
Technical specifications	Dimensions (H x W x D)	50 mm x 180 mm x 180 mm
	Weight	0.4 kg
	System memory	● 128 MB DDR2 ● 32 MB flash memory
Power specifications	Power input	● DC: 12 V ± 10% ● PoE power: -48 V DC (in compliance with IEEE 802.3af and 802.3at) **NOTE** PoE power supply and power supply from an adapter cannot be used together on the AP6010DN-AGN, and AP6010SN-GN.
	Maximum power consumption	● AP6010DN-AGN: 10.2 W ● AP6010SN-GN: 6.5 W **NOTE** The maximum power consumption depends on local laws.
Environment specifications	Operating temperature and altitude	-60 m to +1800 m: -10°C to +50°C +1800 m to +5000 m: Temperature decreases by 1°C every time the altitude increases 300 m.
	Storage temperature	-40°C to +70°C

Item		Description
	Operating humidity	5% to 95% (non-condensing)
	IP rating	IP31

4.2 Radio Specifications

Table 4-2 Radio specifications

Item	Description		
Antenna type	Built-in omnidirectional antenna		
Antenna gain	● AP6010DN-AGN – 2.4 GHz: 4 dBi – 5 GHz: 5 dBi ● AP6010SN-GN: 4 dBi		
Maximum number of users	● Fit AP: ≤ 128 ● Fat AP: ≤ 64		
Maximum number of VAPs for each radio	16		
Maximum transmit power for each radio	● 2.4G: 23 dBm (combined power) ● 5G: 23 dBm (combined power) **NOTE** The 2.4 GHz radio does not support the 40M bandwidth in FCC regions (including America). The actual transmit power depends on local laws and regulations.		
Maximum number of non-overlapping channels for AP6010DN-AGN	2.4 GHz 802.11b/g ● 20 MHz: 3 802.11n ● 20 MHz: 3 ● 40 MHz: 1	5 GHz 802.11a ● 20 MHz: 13 802.11n ● 20 MHz: 13 ● 40 MHz: 6	**NOTE** The table uses the number of non-overlapping channels supported by China as an example. The number of non-overlapping channels varies in different countries. For details, see the *Country Codes & Channels Compliance*.

<table>
<tr><th>Item</th><th colspan="4">Description</th></tr>
<tr><td>Maximum number of non-overlapping channels for AP6010SN-GN</td><td colspan="2">802.11b/g
● 20 MHz: 3
802.11n
● 20 MHz: 3
● 40 MHz: 1</td><td colspan="2">NOTICE
If the AP is delivered to the USA, pay attention to the following on channel and frequency band usage.
1. The country code of the AP is fixed.
2. High power radars working at frequencies in the range of 5.25 GHz to 5.35 GHz, 5.47 GHz to 5.6 GHz, and 5.65 GHz to 5.725 GHz can interfere with or even damage APs working at the same frequency.</td></tr>
<tr><td>Channel rate</td><td colspan="4">● 802.11b: 1, 2, 5.5, and 11 Mbit/s
● 802.11a/g: 6, 9, 12, 18, 24, 36, 48, and 54 Mbit/s
● 802.11n: 6.5 to 300 Mbit/s</td></tr>
<tr><td>Receiver sensitivity of the AP6010SN-GN (Typical values)</td><td>802.11b (CCK):
● -97 dBm @ 1 Mbit/s
● -92 dBm @ 2 Mbit/s
● -92 dBm @ 5.5 Mbit/s
● -90 dBm @ 11 Mbit/s</td><td>802.11g (non-HT20):
● -92 dBm @ 6 Mbit/s
● -91 dBm @ 9 Mbit/s
● -90 dBm @ 12 Mbit/s
● -87 dBm @ 18 Mbit/s
● -83 dBm @ 24 Mbit/s
● -80 dBm @ 36 Mbit/s
● -76 dBm @ 48 Mbit/s
● -74 dBm @ 54 Mbit/s</td><td>802.11n (HT20):
● -92 dBm @ MCS0/8
● -89 dBm @ MCS1/9
● -86 dBm @ MCS2/10
● -82 dBm @ MCS3/11
● -79 dBm @ MCS4/12
● -74 dBm @ MCS5/13
● -73 dBm @ MCS6/14
● -71 dBm @ MCS7/15</td><td>802.11n (HT40):
● -89 dBm @ MCS0/8
● -86 dBm @ MCS1/9
● -83 dBm @ MCS2/10
● -79 dBm @ MCS3/11
● -76 dBm @ MCS4/12
● -72 dBm @ MCS5/13
● -70 dBm @ MCS6/14
● -68 dBm @ MCS7/15</td></tr>
</table>

Item	Description			
Receiver sensitivity of the AP6010DN-AGN (Typical values)	2.4 GHz 802.11b (CCK) ● -97 dBm @ 1 Mbit/s ● -92 dBm @ 2 Mbit/s ● -92 dBm @ 5.5 Mbit/s ● -90 dBm @ 11 Mbit/s	2.4 GHz 802.11g (non-HT20) ● -92 dBm @ 6 Mbit/s ● -91 dBm @ 9 Mbit/s ● -90 dBm @ 12 Mbit/s ● -87 dBm @ 18 Mbit/s ● -83 dBm @ 24 Mbit/s ● -80 dBm @ 36 Mbit/s ● -76 dBm @ 48 Mbit/s ● -74 dBm @ 54 Mbit/s	2.4 GHz 802.11n (HT20) ● -92 dBm @ MCS0/8 ● -89 dBm @ MCS1/9 ● -86 dBm @ MCS2/10 ● -82 dBm @ MCS3/11 ● -79 dBm @ MCS4/12 ● -74 dBm @ MCS5/13 ● -73 dBm @ MCS6/14 ● -71 dBm @ MCS7/15	2.4 GHz 802.11n (HT40) ● -89 dBm @ MCS0/8 ● -86 dBm @ MCS1/9 ● -83 dBm @ MCS2/10 ● -79 dBm @ MCS3/11 ● -76 dBm @ MCS4/12 ● -72 dBm @ MCS5/13 ● -70 dBm @ MCS6/14 ● -68 dBm @ MCS7/15
	5 GHz 802.11a (non-HT20) ● -89 dBm @ 6 Mbit/s ● -88 dBm @ 9 Mbit/s ● -85 dBm @ 12 Mbit/s ● -83 dBm @ 18 Mbit/s ● -80 dBm @ 24 Mbit/s ● -76 dBm @ 36 Mbit/s ● -71 dBm @ 48 Mbit/s ● -70 dBm @ 54 Mbit/s	5 GHz 802.11n (HT20) ● -88 dBm @ MCS0/8 ● -85 dBm @ MCS1/9 ● -84 dBm @ MCS2/10 ● -77 dBm @ MCS3/11 ● -74 dBm @ MCS4/12 ● -70 dBm @ MCS5/13 ● -68 dBm @ MCS6/14 ● -67 dBm @ MCS7/15	5 GHz 802.11n (HT40) ● -85 dBm @ MCS0/8 ● -80 dBm @ MCS1/9 ● -78 dBm @ MCS2/10 ● -74 dBm @ MCS3/11 ● -71 dBm @ MCS4/12 ● -67 dBm @ MCS5/13 ● -65 dBm @ MCS6/14 ● -63 dBm @ MCS7/15	-

4.3 Standards Compliance

Safety Standards

- UL 60950 - 1
- CAN/CSA 22.2 No.60950-1
- IEC 60950 - 1
- EN 60950 - 1
- GB 4943

Radio standards

AP6010DN-AGN:

- ETSI EN 300 328
- ETSI EN 301 893
- FCC Part 15C: 15.247
- FCC Part 15C: 15.407
- RSS-210
- AS/NZS 4268

AP6010SN-GN:

- ETSI EN 300 328
- FCC Part 15C: 15.247
- RSS-210
- AS/NZS 4268

EMC Standards

- EN 301 489 - 1
- EN 301 489 - 17
- ETSI EN 60601-1-2
- FCC Part 15
- ICES-003
- YD/T 1312.2-2004
- ITU k.20
- GB 9254
- GB 17625.1
- AS/NZS CISPR22
- EN 55022
- EN 55024
- CISPR 22
- CISPR 24

- IEC61000-4-6
- IEC61000-4-2

IEEE standards

AP6010DN-AGN:

- IEEE 802.11a/b/g
- IEEE 802.11n
- IEEE 802.11h
- IEEE 802.11d
- IEEE 802.11e

AP6010SN-GN:

- IEEE 802.11b/g
- IEEE 802.11n
- IEEE 802.11h
- IEEE 802.11d
- IEEE 802.11e

Security Standards

- 802.11i, Wi-Fi Protected Access 2 (WPA2), and WPA
- 802.1X
- Advanced Encryption Standards (AES) and Temporal Key Integrity Protocol (TKIP)
- EAP Type (s)

Environment Standards

- ETSI 300 019-2-1
- ETSI 300 019-2-2
- ETSI 300 019-2-3
- ETSI 300 019-1-1
- ETSI 300 019-1-2
- ETSI 300 019-1-3

EMF

- CENELEC EN 62311
- CENELEC EN 50385
- OET65
- RSS-102
- FCC Part1&2
- FCC KDB series

RoHS

- Directive 2002/95/EC & 2011/65/EU

Reach

- Regulation 1907/2006/EC

WEEE

- Directive 2002/96/EC & 2012/19/EU