Huawei AP6310SN-GN
Brochure-Detailed

HUAWEI TECHNOLOGIES CO., LTD.

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Huawei AP6310SN-GN is a cost-effective indoor distributed single-band Access Point (AP) with high power and reliability. It supports the 2.4 GHz frequency band, complies with IEEE 802.11b/g/n, and works in Fit AP mode. It provides comprehensive service support capabilities and features high reliability, high security, simple network deployment, automatic AC discovery and configuration, and real-time management and maintenance, which meets indoor distributed network requirements.

Wi Fi CERTIFIED

Huawei AP6310SN-GN Access Point:

- 2.4 GHz frequency band
- Compatibility with IEEE 802.11b/g/n

Huawei AP6310SN-GN advantages:

- High speed and reliable wireless access services: uses the latest 802.11n chip to achieve higher performance
- Comprehensive user access control capability: implements fine-grained management.
- Solid network security: supports multiple authentication and encryption modes, as well as rogue AP and STA detection.
- Flexible networking and strong environment adaptability: automatically adjusts working channel, transmit power, and bandwidth to adapt to various environments, and supports identification of non-Wi-Fi interference sources.
- Easy management and maintenance: supports Plug-and-Play (PnP).

Product Features

- With its high power, the AP6310SN-GN can work on a 2G/3G/CATV indoor distribution system and share the lines of 2G/3G/CATV signals. The AP is also recommended for use in indoor distributed wide coverage applications where signal attenuation is large and user density is high.
- Maximum transmit power: 500 mW (27 dBm)
- Spectrum analysis
- Wireless Intrusion Detection System (WIDS)/Wireless Intrusion Prevention System (WIPS)
- Auto Radio
- High Density Boost
- User Awareness
- Beamforming
- IPv6
- PoE power supply in compliance with IEEE 802.3af/at, simplifying installation
- Working frequency: 2.4 GHz
- Maximum wireless link rate: 150 Mbit/s

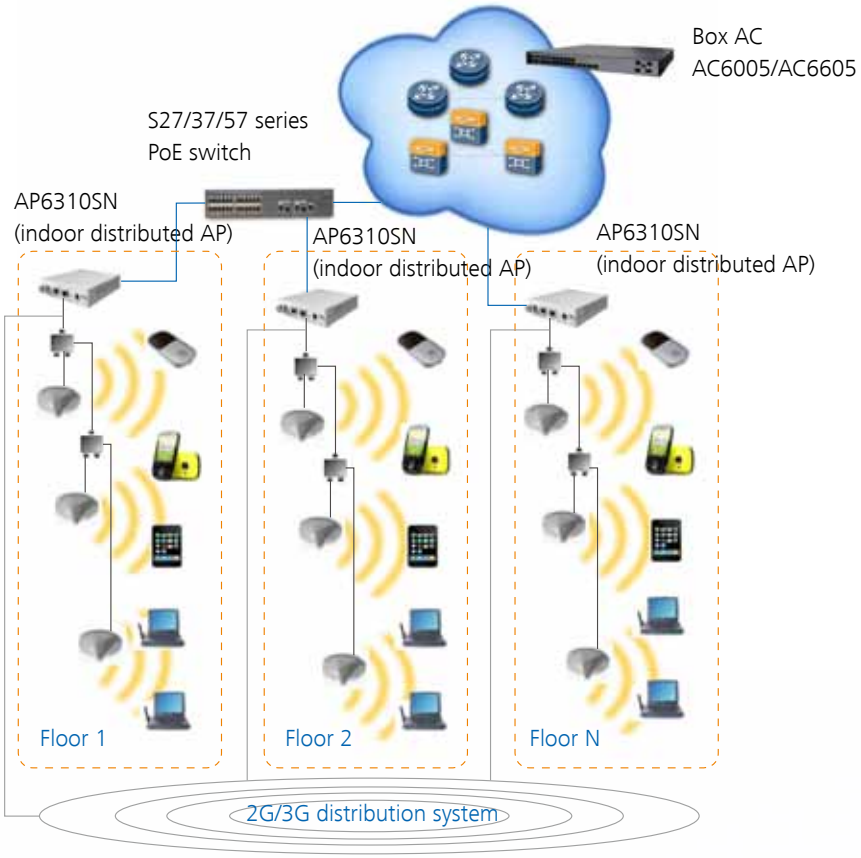
Scalability

When coupled with ACs and Network Management Systems (NMSs), Huawei 802.11n APs can implement real-time monitoring, intelligent Radio Frequency (RF) management, spectrum analysis, load balancing, roaming, security policy control, wired/wireless network integration, as well as Bring Your Own Device (BYOD) network security control and a smart access strategy. The AC + Fit AP architecture is highly scalable and supports centralized management of multiple Fit APs on a single AC. Software upgrade technologies allow users to seamlessly add and upgrade APs without incurring additional administrative or equipment expense.

Typical Networking

The AP6310SN-GN can be deployed in indoor distributed mode.

Fit AP networking



In this networking, the AP6310SN-GN functions as a Fit AP to provide bridging and data forwarding functions. An AC is required for user access, AP management, authentication, routing, security, and QoS.

Basic Specifications

Item		Description
Technical specifications	Dimensions (W x D x H)	150 mm x 130 mm x 35 mm
	Weight	0.6 kg
	System memory	• 128 MB DDR2 • 32 MB flash memory
Power specifications	Power input	• 12 V DC ± 10% • PoE power supply: -48 V DC (in compliance with IEEE 802.3af/at) NOTE The AP6310SN-GN cannot use PoE power supply and adapter power supply simultaneously.
	Maximum power consumption	8.3W NOTE The actual maximum power consumption depends on local laws and regulations.
Environmental specifications	Operating temperature	-10°C to +50°C
	Storage temperature	-40°C to +70°C
	Operating humidity	5% to 95% (non-condensing)
	Waterproof and dustproof grade	IP31
	Altitude	-60 m to 5,000 m

Radio Specifications

Item	Description
Antenna type	External antenna with a type-N female connector
Antenna gain	Depends on antennas used
Maximum number of users	≤ 128
Maximum transmit power	27 dBm for the radio port NOTE The actual transmit power depends on local laws and regulations.
Power increment	1 dBm
Receiver sensitivity	802.11b (CCK): -97 dBm @ 1 Mb/s; -90 dBm @ 11 Mb/s
	802.11g (non-HT20): -92 dBm @ 6 Mb/s; -74 dBm @ 54 Mb/s
	802.11n (HT20): -92 dBm @ MCS0; -71 dBm @ MCS15
	802.11n (HT40): -89 dBm @ MCS0; -68 dBm @ MCS15

Product Features

WLAN	AP6310SN-GN: complies with IEEE 802.11b/g/n AP6310SN-GN: maximum rate of 150 Mbit/s Maximum Ratio Combining (MRC) Cyclic Shift Diversity (CSD) Maximum Likelihood Detection (MLD) Data unit aggregation including MAC Protocol Data Unit Aggregation (A-MPDU — Tx/Rx) and MAC Service Data Unit Aggregation (A-MSDU — Rx only) Short Guard Interval (GI) 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 (the rate is adjusted automatically by default) WLAN channel management and channel rate adjustment Automatic channel scanning and interference avoidance Service Set Identifier (SSID) hiding, support for SSIDs in Chinese Signal Sustain Technology (SST) Unscheduled Automatic Power Save Delivery (U-APSD) Control and Provisioning of Wireless Access Points (CAPWAP) in Fit AP mode Automatically going online in Fit AP mode Hotspot2.0 in Fit AP mode 802.11k and 802.11v smart roaming in Fit AP mode
Network	Compliance with IEEE 802.3u Auto-negotiation of the rate and duplex mode and automatic switchover between the Media Dependent Interface (MDI) and Media Dependent Interface Crossover (MDI-X) SSID-based VLAN assignment 4,094 VLAN IDs (1 to 4,094) and a maximum of 16 Virtual APs (VAPs) for each radio AP control channel in tagged and untagged mixed mode DHCP client, obtaining IP addresses through DHCP Tunnel forwarding and direct forwarding STA isolation in the same VLAN Multicast Domain Name Service (mDNS) gateway protocol: supports AirPlay and AirPrint service sharing between users of different VLANs Access Control Lists (ACLs) Link Layer Discovery Protocol (LLDP) Service holding upon CAPWAP link disconnection in Fit AP mode Unified authentication on the AC in Fit AP mode AC dual-link backup in Fit AP mode Soft GRE
QoS	Priority mapping and packet scheduling based on a WMM profile to implement priority-based data processing and forwarding WMM parameter management for the 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 (the system dynamically adjusts bandwidth allocation based on the user quantity and environment to improve user experience) Airtime scheduling

Security	Open system authentication WEP authentication/encryption WPA/WPA2-PSK authentication and encryption WPA/WPA2-802.1x authentication and encryption WAPI authentication and encryption WIDS, including rogue AP and STA detection, attack detection, STA/AP blacklist and whitelist 802.11w Protected Management Frames (PMFs)
Maintenance	Unified management and maintenance on the AC in Fit AP mode Plug-and-Play (PnP) in Fit AP mode: automatically going online and loading configurations Batch upgrade Local AP management using Telnet or through the serial port Real-time configuration monitoring and fast fault location using the NMS System status alarm
BYOD	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.
Spectrum analysis	Identifies interference sources such as baby monitors, Bluetooth devices, digital cordless phones (at 2.4 GHz frequency band only), wireless audio transmitters (at both 2.4 GHz and 5 GHz frequency bands), wireless game controllers, and microwave ovens. Works with eSight to locate and perform spectrum analysis on interference sources.

Standards Compliance

Safety standards	UL 60950-1 CAN/CSA 22.2 No.60950-1 IEC 60950-1	EN 60950-1 GB 4943
Radio standards	ETSI EN 300 328 ETSI EN 301 893 FCC Part 15C: 15.247	FCC Part 15C: 15.407 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.21 GB 9254	GB 17625.1 AS/NZS CIPSR22 EN 55022 EN 55024 CISPR 22 CISPR 24 IEC61000-4-6 IEC61000-4-2

IEEE standards	IEEE 802.11b/g IEEE 802.11n IEEE 802.11h IEEE 802.11d IEEE 802.11e	IEEE 802.11k IEEE 802.11u IEEE 802.11v IEEE 802.11w
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)	
Environmental 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 Parts 1 & 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	

Professional Service and Support

Huawei WLAN planning tools deliver expert network design and optimization services using the most professional simulation platform in the industry. Backed by fifteen years of continuous investment in wireless technologies, extensive network planning and optimization experience, as well as rich expert resources, Huawei helps customers:

- Design, deploy, and operate a high-performance network that is reliable and secure.
- Maximize return on investment and reduce operating expenses.

More Information

For more information, please visit http://e.huawei.com or contact your local Huawei office.

Enterprise Services

Product Overview

Marketing Documentation

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