Huawei AP2010DN
Brochure-Detailed

HUAWEI TECHNOLOGIES CO., LTD.

Huawei AP2010DN Brochure-Detailed

Huawei wall plate AP2010DN uses a standard 86-mm plate and can be easily installed in a junction box, without affecting interior room space or appearance. It is well designed with built-in antennas, a hidden indicator, and a sliding panel.
The AP2010DN provides comprehensive service support capabilities and features high security, simple network deployment, automatic AC discovery and configuration, and real-time management and maintenance.

Wi Fi CERTIFIED

Huawei AP2010DN Access Point

- 2.4 GHz or 5 GHz frequency bands
- Compatibility with IEEE 802.11a/b/g/n

Huawei AP2010DN offers the following advantages:

- Various types of ports, including one uplink GE port, two downlink 100M ports, and a phone port, particularly applicable to hotels, apartments, and offices.
- High-speed and reliable wireless access services: supports 802.11n Beamforming and uses the latest 802.11n chip to achieve higher performance and wider coverage.
- Comprehensive user access control capability: implements user access control based on user group policies and supports a maximum of 128 users.
- High network security: supports multiple authentication and encryption modes, as well as rogue AP and STA detection.
- Flexible networking and strong environment adaptability: automatically adjusts transmission rate, channel, transmit power, and bandwidth to adapt to various environments, and supports identification, location, and display of interference sources of more than eight types.
- Easy management and maintenance: supports plug-and-play (PnP) and works with NMS to implement remote configuration and fast fault location.

Product Features

- Recommended for environments with densely distributed small rooms, such as hotels, dormitories, hospitals, and offices
- 2 x 2 Multiple-Input Multiple-Output (MIMO) technology with a maximum rate of 300 Mbit/s for each radio
- Spectrum analysis
- Wireless Intrusion Detection System (WIDS)/Wireless Intrusion Prevention System (WIPS)
- Auto Radio
- High Density Boost
- User Awareness
- Fast roaming without service interruption
- Beamforming
- IPv6 support
- Batch upgrade
- Pass-through wired port: users can connect to a wired port to access the Internet when wireless connections are unavailable

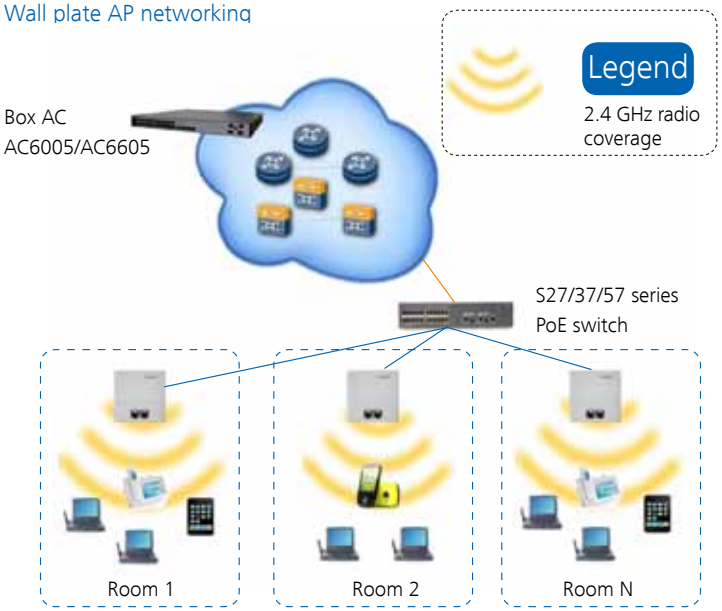
Scalability

When coupled with access controllers (ACs) and Network Management Systems (NMSs), Huawei 802.11n APs can implement real-time monitoring, intelligent Radio Frequency (RF) management, spectrum analysis, wireless positioning, 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 following figure shows typical AP2010DN networking.

Wall plate AP networking



The wall plate AP2010DN functions as a Fit AP on the network and provides data forwarding functions. An AC implements user access, AP management, authentication, routing, security, and Quality of Service (QoS).

Basic Specifications

Item		Specifications
Technical specifications	Dimensions (W x D x H)	86 mm x 86 mm x 45 mm
	Weight	≤ 0.2 kg
	System memory	128 MB
Power specifications	Power input	PoE power supply in compliance with IEEE 802.3af/at
	Maximum power consumption	5.5W
Environmental specifications	Operating temperature	0°C to +40°C
	Storage temperature	–40°C to +70°C
	Operating humidity	5% to 95% (non-condensing)
	Altitude	–60 m to 5,000 m
	Atmospheric pressure	70 kPa to 106 kPa

Radio Specifications

Item	Description
Antenna type	Built-in antennas
Antenna gain	2.4 GHz: 2 dBi 5 GHz: 2.5 dBi
Maximum number of users	≤ 128
Maximum transmit power	16 dBm NOTE The actual transmit power depends on local laws and regulations.
Power increment	1 dBm
Receiver sensitivity	802.11b (CCK): -96 dBm @ 1 Mb/s; -88 dBm @ 11Mb/s
	802.11g (non-HT20): -91 dBm @ 6 Mb/s; -74 dBm @ 54 Mb/s
	802.11n (HT20): -91 dBm @ MCS0; -71 dBm @ MCS15
	802.11n (HT40): -88 dBm @ MCS0; -68 dBm @ MCS15

Product Features

WLAN features	Compliance with IEEE 802.11a/b/g/n Maximum rate: 300 Mbit/s Maximum ratio combining (MRC) Cyclic Shift Diversity (CSD) Maximum likelihood detection (MLD) Data unit aggregation, including A-MPDU (Tx/Rx) and A-MSDU (Rx only) 802.11 dynamic frequency selection (DFS) 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) Automatic access in Fit AP mode Hotspot2.0 in Fit AP mode 802.11k and 802.11v smart roaming in Fit AP mode

Network features	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 4094 VLAN IDs (1-4094) and a maximum of 8 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 direct forwarding Unified authentication on the AC AC dual-link backup Soft GRE
QoS Features	Priority mapping and packet scheduling based on a 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 (the system dynamically adjusts bandwidth allocation based on the user quantity and environment to improve user experience)
Security features	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 features	Unified management and maintenance on the AC Plug-and-Play (PnP) in Fit AP mode: automatic access and configuration loading Batch upgrade Local AP management using Telnet 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 Bluetooth devices, microwave ovens, cordless phones, ZigBee devices, wireless game controllers, 2.4 GHz/5 GHz wireless video and audio devices, and baby monitors. Works with the Huawei eSight system 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.20 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 802.11a/b/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 Part1&2 FCC KDB series
RoHS	Directive 2002/95/EC & 2011/65/EU	
Reach	Directive 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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