

Huawei AP7030DE Brochure-Detailed



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Huawei AP7030DE is a technology-leading access point (AP) that works in Fit AP mode on Wireless Local Area Networks (WLANs). It provides comprehensive service support capabilities and features high reliability, high security, simple network deployment, automatic Access Controller (AC) discovery and configuration, and real-time management and maintenance. The AP7030DE complies with IEEE 802.11ac and provides gigabit access for wireless users. This high capacity greatly improves user experience on wireless networks.



Huawei AP7030DE Access Point

- Smart antenna arrays
- 2.4 GHz and 5 GHz frequency bands
- Compatibility with IEEE 802.11a/b/g/n/ac

Huawei AP7030DE advantages:

- Flexible smart antenna array: supports targeted and accurate coverage; provides ubiquitous signals; suppresses interference; improves signal gain.
- High-speed, reliable wireless access services: uses the latest 802.11ac chip for higher performance and wider coverage.
- Comprehensive user access control: implements user access control based on user group policies; supports a maximum of 256 users.
- Solid network security: supports multiple authentication and encryption modes, as well as rogue AP detection.
- Easy management and maintenance: supports Plug-and-Play (PnP).

Product Features

- Industry-leading AP recommended for use in mid- and large-sized scenarios with high user density and bandwidth requirements, such as educational institutions, government offices, airports, bus stations, and retail stores
- 3 x 3 Multiple-Input Multiple-Output (MIMO), three spatial streams, 600 Mbit/s at 2.4 GHz radio, 1.3 Gbit/s at 5 GHz radio, and 1.9 Gbit/s system rate for the AP7030DE
- Industry-level design with high waterproof and dustproof protection grades: applicable to challenging environments
- PoE power supply in compliance with IEEE 802.3at, simplifying AP installation
- Smart antenna array suppresses interference signals and improves signal gain
- Value-added services such as spectrum analysis and locating service
- Wireless Intrusion Detection System (WIDS)/Wireless Intrusion Prevention System (WIPS)
- Auto Radio
- High Density Boost
- User Awareness
- Link Following
- Beamforming
- IPv6 support

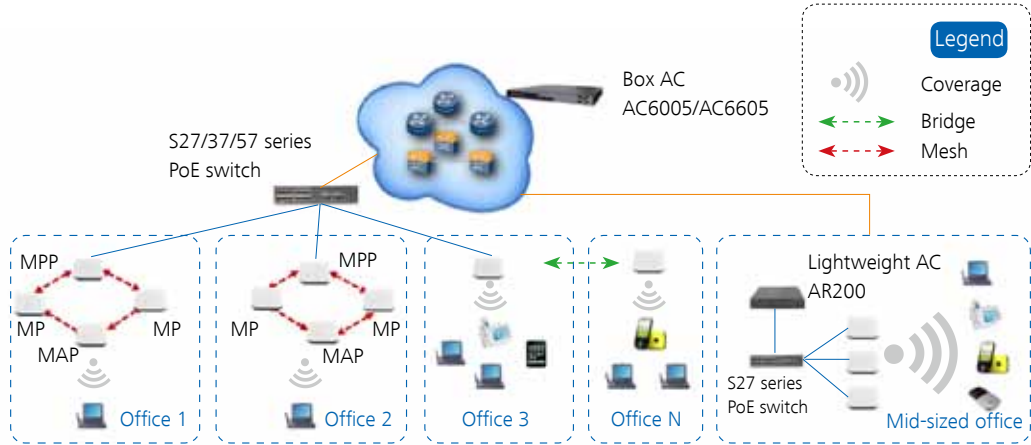
Scalability

When coupled with ACs and Network Management Systems (NMSs), Huawei 802.11ac 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 AP7030DE networking.

Fit AP networking




When working as a Fit AP, the AP7030DE provides 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 (H x W x D)	220 mm x 220 mm x 53 mm
	Weight	1.1 kg
	System memory	<ul style="list-style-type: none"> 256 MB DDR3 64 MB flash memory
Power specifications	Power input	<ul style="list-style-type: none"> 12 V DC \pm 10% PoE power supply: -48 V DC (in compliance with IEEE 802.3at)
	Maximum power consumption	<ul style="list-style-type: none"> 19 W <p> NOTE The actual maximum power consumption depends on local laws and regulations.</p>
Environment specifications	Operating temperature	-20°C to +50°C
	Storage temperature	-40°C to +70°C
	Operating humidity	5% to 95% (non-condensing)
	Dustproof and waterproof grade	IP41
	Altitude	-60 m to 4,000 m
	Atmospheric pressure	70 kPa to 106 kPa

Radio Specifications

Item	Description
Antenna type	Built-in dual-band smart antenna (up to 12 antennas)
Antenna gain	<ul style="list-style-type: none"> • 2.4 GHz: 5 dBi • 5 GHz: 5 dBi
Maximum number of users	≤ 256
Maximum transmit power	2.4 GHz: 20 dBm per radio port 5 GHz: 16 dBm per radio port  NOTE The actual transmit power depends on local laws and regulations.
Power increment	1 dBm

Product Features

WLAN features	Compliance with IEEE 802.11a/b/g/n/ac Maximum rate: 1.9 Gbit/s Maximum Ratio Combining (MRC) 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) in 20 MHz, 40 MHz, and 80 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 (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 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
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Network features	<p>Compliance with IEEE 802.3u</p> <p>Auto-negotiation of the rate and duplex mode and automatic switchover between the Media Dependent Interface (MDI) and Media Dependent Interface Crossover (MDI-X)</p> <p>SSID-based VLAN assignment</p> <p>VLAN trunk on uplink Ethernet ports</p> <p>4,094 VLAN IDs (1-4,094) and a maximum of 16 Virtual APs (VAPs) for each radio</p> <p>AP control channel in tagged and untagged mixed mode</p> <p>DHCP client, obtaining IP addresses through DHCP</p> <p>Tunnel forwarding and direct forwarding</p> <p>STA isolation in the same VLAN</p> <p>Access Control Lists (ACLs)</p> <p>Link Layer Discovery Protocol (LLDP)</p> <p>Service holding upon CAPWAP link disconnection in direct forwarding</p> <p>Unified authentication on the AC</p> <p>AC dual-link backup</p>
QoS features	<p>Priority mapping and packet scheduling based on a WMM profile to implement priority-based data processing and forwarding</p> <p>WMM parameter management for each radio</p> <p>WMM power saving</p> <p>Priority mapping for upstream packets and flow-based mapping for downstream packets</p> <p>Queue mapping and scheduling</p> <p>User-based bandwidth limiting</p> <p>Adaptive bandwidth management (the system dynamically adjusts bandwidth allocation based on the user quantity and environment to improve user experience)</p>
Security features	<p>Open system authentication</p> <p>WEP authentication/encryption</p> <p>WPA/WPA2-PSK authentication and encryption</p> <p>WPA/WPA2-802.1x authentication and encryption</p> <p>WIDS including rogue AP and STA detection, attack detection, STA/AP blacklist and whitelist</p>
Maintenance features	<p>Unified management and maintenance on the AC</p> <p>PnP: automatically going online and loading configurations.</p> <p>Batch upgrade</p> <p>Local AP management using Telnet or through the serial port</p> <p>Real-time configuration monitoring and fast fault location using the NMS</p> <p>System status alarm</p>

BYOD	<p>Identifies the device type according to the Organizationally Unique Identifier (OUI) in the MAC address.</p> <p>Identifies the device type according to the User Agent (UA) information in an HTTP packet.</p> <p>Identifies the device type according to DHCP options.</p> <p>The RADIUS server delivers packet forwarding, security, and QoS policies according to the device type carried in the RADIUS authentication and accounting packets.</p>
Locating service	<p>Locates tags manufactured by AeroScout or Ekahau.</p> <p>Locates Wi-Fi terminals.</p>
Spectrum analysis	<p>Identifies interference sources such as Bluetooth devices, microwave ovens, cordless phones, ZigBee devices, game controllers, 2.4 GHz/5 GHz wireless video and audio devices, and baby monitors.</p> <p>Works with eSight to locate and perform spectrum analysis on interference sources.</p>

Standards Compliance

Safety standards	<p>UL 60950-1</p> <p>CAN/CSA 22.2 No.60950-1</p> <p>IEC 60950-1</p> <p>EN 60950-1</p> <p>GB 4943</p>
Radio standards	<p>ETSI EN 300 328</p> <p>ETSI EN 301 893</p> <p>FCC Part 15C: 15.247</p> <p>FCC Part 15C: 15.407</p> <p>RSS-210</p>
EMC standards	<p>EN 301.489-1</p> <p>EN 301.489-17</p> <p>FCC Part 15</p> <p>ICES-003</p> <p>YD/T 1312.2-2004</p> <p>ITU k.21</p> <p>GB 9254</p> <p>GB 17625.1</p>
IEEE standards	<p>IEEE 802.11a/b/g</p> <p>IEEE 802.11n</p> <p>IEEE 802.11ac</p> <p>IEEE 802.11h</p> <p>IEEE 802.11d</p> <p>IEEE 802.11e</p>
Security standards	<p>802.11i, Wi-Fi Protected Access 2 (WPA2), and WPA</p> <p>802.1X</p> <p>Advanced Encryption Standards (AES) and Temporal Key Integrity Protocol (TKIP)</p> <p>EAP Type (s)</p>
Environment standards	<p>ETSI 300 019-2-2</p> <p>ETSI 300 019-2-3</p>

EMF	CENELEC EN 62311 CENELEC EN 50385 OET65 RSS-102
RoHS	Directive 2002/95/EC
Reach	Regulation 1907/2006/EC
WEEE	Directive 2002/96/EC

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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HUAWEI TECHNOLOGIES CO.,LTD.
Huawei Industrial Base
Bantian Longgang
Shenzhen 518129,P.R.China
Tel: +86 755 28780808

www.huawei.com