

DPtech AP1000 Series based on 802.11n Wireless Access Device



Overview

A high-speed wireless access device based on 802.11n technology, the AP1000 Series can provide more than 6 times the wireless access rate of traditional 802.11a/b/g networks with a greater wireless coverage. The Series provides Fat and Fit modes to facilitate a smooth upgrade of the user's wireless network, protecting user's investment. In Fit mode, it needs to work with DPtech ACS6000 Series wireless controller to build a network. In Fat mode, it can work independently.

AP1000 Series wireless access device can be widely used in various wireless scenarios, such as office buildings, schools, hotels, hospitals, and wireless cities, with multiple installation methods available: ceiling mounted, wall mounted, desktop placement and crane structures.

Product Features

■ High-speed wireless access

In compliance with the 802.11n protocol, the AP1000 Series is provided with a modular design. With a 300Mbps wireless access rate at single radio frequency, and a 600Mbps wireless access rate at dual radio frequency, it outperforms traditional 802.11a/b/g products by about 6 times of rate. It can provide higher performance wireless access services in terms of coverage, access intensity, and operational stability and help bring down users' investment.

■ Green and energy efficient design

Integrating a series of energy-saving technologies, the AP1000 Series avoids unwanted energy consumption by using the Green AP technology to ensure a single antenna transceiver in standby mode and using the packet-by-packet power control technology to dynamically adjust the packet sending power based on user's position. In addition, AP can enable the scheduled shutdown of RF module with the help of a wireless controller, thus further reducing the overall energy consumption.

■ Fat/Fit AP Integration

AP1000 Series support flexible switching between the Fat and Fit modes based on network planning. With a relatively small size of initial wireless network, AP1000 Series wireless devices in Fat mode will do. With the continuous scalability in the user's network, ACS6000 Series wireless controllers help reduce management complexity of a network consisting of dozens or even hundreds of AP1000 Series wireless devices, making it possible to manage all AP1000 devices from a centralized location. Fat/Fit AP integration is conducive to successful transformation from wireless network to large network, which serves as powerful protection for users' investments while facilitating the smooth expansion and upgrade of carrier-grade large wireless network

■ Local forwarding

When deployed in WAN environment in Fit mode, AP1000 Series has its wireless devices deployed in branches and the controllers in the headquarters. User data is forwarded through wireless controllers

in a centralized manner, resulting in low forwarding efficiency. AP1000 Series can convert data packets into a standard Ethernet format message, which greatly improves forwarding efficiency.

- **Support wireless intrusion detection/defense (WIDS/WIPS)**

In Fat mode, AP1000 Series provides access control features such as blacklist and whitelist of wireless users. In Fit mode, AP1000 Series can work with DPtech ACS6000 Series wireless controllers, enabling Rogue detection, intrusion detection, blacklist and whitelist, and other WIDS/WIPS features.

- **Induced roaming**

AP1000 Series provides induced roaming function, which actively guides a sticky terminal, if found, to the best connection point. It helps effectively improve roaming sensitivity of the sticky terminal, reduce network delay, and maximize wireless network capacity.

- **Support SSID in Chinese**

AP1000 Series supports Chinese SSID to cater to the using habits of various users. Users can specify an SSID with a maximum of 32 Chinese characters, or an SSID consisting of a combination of Chinese and English characters.

- **Integrated wired and wireless management**

Based on the UMC platform, DPtech' s full range of wireless products realizes integrated management of wired, wireless, security and application delivery across the network. With a simple and friendly user interface for wireless service managers, UMC provides comprehensive management of wireless equipment regarding interfaces, faults, performances, software versions, profiles, accessing users, etc.

Product Series



AP1000-1W



AP1000-1C

Indoor wireless AP

Attributes	AP1000-1C	AP1000-1W
Positioning	Ceiling/wall-mounted AP	Panel/recessed AP
Working frequency	2.4GHz	2.4GHz
Transmission protocol	802.11b/g/n	802.11b/g/n
Transmission rate	300Mbps	300Mbps

Type of antenna	Built-in antenna	Built-in antenna
Service Port	2*RJ45 ports	2*RJ45 ports
Transmitting power	22dBm	17dBm
POE	802.3af/at	802.3af/at
Local power	Supported	- -
Power Consumption	≤7.5W	≤7.5W
Dimension (length * width * height)(in mm)	200mm*200mm*35.4mm	86mm*86mm*31mm
Ambient Temperature	Operating Temperature: 0 °C ~ 40 °C Storage Temperature: -20°C ~ 70°C	
Ambient Humidity	5%~95% (non-condensing)	
MTBF	>250000H	
Modulation technology	OFDM : BPSK@6/9Mbps, QPSK@12/18Mbps, 16-QAM@24Mbps, 64-QAM@48/54Mbps DSSS : DBPSK@1Mbps, DQPSK@2Mbps, CCK@5.5/11Mbps MIMO-OFDM : BPSK, QPSK, 16QAM, 64QAM	

Software Specification

Attributes		AP1000-1C	AP1000-1W
Virtual AP		32 pieces	16 pieces
Security policy	Access authentication	Support MAC, 802.1x, Portal, PSK and other authentication modes	
		Support SMS authentication	
		Support non-sending authentication	
	Encryption	Support 64/128-bit WEP, TKIP, WAPI, CCMP and other encryption methods	
	User isolation	Support layer 2 isolation of wireless users	
		Support SSID-based wireless user isolation	
Support user isolation under the same SSID			
Data frame filtering	Support whitelist and blacklist		
Hide SSID	Supported		
Smart switch	Basis: signal intensity, bit error rate, whether neighboring APs work properly, etc.		
Functions of Layers 2 and 3	IP address settings	Support static IP address or DHCP acquisition of IP address	
	Routing Protocols	Support static routing	
	Forwarding modes	Support centralized and local forwarding	

	Roaming	Support Layers 2 and 3 roaming
	Multicast	Supported
Service Quality	802.11e	Support WMM
	Traffic Limitations	Traffic limitations are available based on SSID uplink and downlink traffic
	QoS policy mapping	Support mapping SSID/VLAN to QoS policy
Signal quality	Transmitting power adjustment	Support manual power adjustment
		Support automatic power adjustment; AP may adjust power according to nearby wireless network conditions
	Channel settings	Support manual channel settings
		Support automatic channel adjustment; AP may adjust channel according to nearby wireless network conditions
Spectrum protection	Support spectrum protection	
Management and Maintenance	Network management	Support management through SSH, Telnet, and FTP/TFTP
		Support Web management
	Switch between Fat/Fit	Support local switching of modes
	Watch Dog	Support real-time monitoring of running status to avoid downtime
	Logs	Supported
	Alerts	Supported
	Fault detection	Supported
	Statistics	Supported
Security functions	Terminal whitelist	Only terminals in the whitelist are allowed to access the wireless network
	AP Self-Secure	Anti-hijacking
	Security protection	Anti-DDoS attacks

Hangzhou DPtech Technologies Co., Ltd.

Address: 6th Floor, Zhongcai Building, No. 68 Tonghe Road, Binjiang District, Hangzhou City, Zhejiang Province

Postcode: 310051

Official Website: www.dpotech.com

Service Hotline: 400-6100-598