DPtech AP1000 Wireless Access Point Series

Hangzhou DPtech Technologies Co., Ltd.

Overview

DPtech AP1000 series is high-speed wireless access point which based on IEEE 802.11n technology, provide six times greater wireless rates and coverage compare to traditional IEEE 802.11a/b/g wireless network.

AP1000 series wireless access point support both FAT and FIT modes, provide flexibility and scalability for wireless network upgrade with good Return of Investment (ROI) to users. When using FIT mode, AP1000 series of wireless access point need work together with ACS6000 series wireless controllers. While under FAT mode, AP1000 series can work independently.

AP1000 Series Access equipment includes: AP1000-2C ceiling mount AP, meet ceiling and wall mount requirements which can widely used in offices, schools, hotels, hospitals and other types of wireless coverage environments.

Series

AP1000-2C

Features

High-Speed Wireless Access

- AP1000 series comply with IEEE 802.11n protocol standards with professional modular design. Single-radio provides 300Mbps wireless access rates and dual-radio support up 600Mbps wireless access rate, provide six times greater bandwidth compare to traditional IEEE 802.11a/b/g wireless access point, provide higher performance wireless access services in terms of coverage, access density, operating stability.

Green and Energy Saving Design

- AP1000 Series supports variety of energy-saving technologies, Green AP technology ensure AP only use single antenna transceiver under standby mode, per-packet power control techniques dynamically adjust power based on user distance , avoid unnecessary power consumption.

- With ACS6000 series wireless controller, AP can set the timing to open and close the RF module, reducing overall energy consumption.

FIT and FAT AP Integration

- AP1000 series supports FAT and FIT AP modes, provide flexible deployment mode based on network planning and environment.
- AP1000 series FAT mode can deploy under smaller scale wireless network. With the continuous expansion of network size user, AP1000 series can upgrade to FIT mode and work together with ACS6000 series wireless controller, reduce complexity of network management and provide centralized management of all AP1000 series wireless access point.
- FAT/ FIT AP integrated design facilitates user's upgrade their wireless network from small network to large networks, protect user's investment and ideal for smooth upgrade and expansion of large-scale carrier-class wireless networks.

Local Forwarding

- Local forwarding help reduce traffic load at ACS6000 series wireless controller when AP1000 series under FIT mode.
- Centralized forwarding will redirect all wireless traffic back to ACS6000 series wireless controller and reduce ACS6000 series performance. Local forwarding ensure AP1000 series direct send data packets to Ethernet switches instead tunnel back to ACS6000 series wireless controller, greatly improve the forwarding efficiency.

IPv4 and IPv6 Dual Stack

- AP1000 series fully support IPv6 features, allow IPv4/IPv6 dual stack implementation.
- By establishing IPv6 tunnel with ACS6000 series wireless controller, AP1000 series can freely communicate with ACS6000 series controller regardless of the existing wired network is using IPv4 or IPv6 network.

Intelligent Load Balancing

- AP1000 series supports intelligent load balancing technology, ensure load balancing for wireless users that within the overlap coverage, effectively prevent load balance error, thereby maximize the wireless network capacity.

Wireless Intrusion Detection and Prevention (WIDS/WIPS)

- AP1000 series in FAT mode supports blacklist and whitelist wireless user access control features.
- AP1000 series in FIT mode with integration of ACS6000 series wireless controller support WIDS/WIPS functions such as rogue detection, intrusion detection and blacklist and white list.

TR-069 Management

- AP1000 series supports TR-069 features provide centralized management for wireless access point deploy across the network.

Wired and Wireless Unified Management

- DPtech full range of wireless products can be mange by DPtech Unified Management Center (UMC), provide unified management for wired, wireless, security and application delivery platform.
- DPtech UMC provides simple, user-friendly interface, fault management, performance monitoring, software version management, configuration file management and user management to wireless networks.

Hardware Specification

Item	AP1000-2C
Deployment	• Ceiling/ Wall Mount AP
Operating Frequency	• 2.4 GHz and 5.8 GHz
Wireless Standard	• IEEE 802.11 b/g/n • IEEE 802.11 a/n
Transfer Rate	• 600Mbps
Antenna Type	• Built-in 5dBi Omni Directional Antenna
Service Port	• 1-port RJ45 10/100/1000 Base-T
Transmit Power	• 20 dBm
PoE	• Compatible with IEEE 802.3af/ IEEE 802.3at
Local Power	• 48V DC
Rated Power	• ≤16W
Dimensions (W x D x H)	• 200 x 200 x 38 (mm)
Operating Temperature	• -10℃～55℃
Storage Temperature	• -40℃～70℃
Environment Humidity	• 5%～95% (Non-condensing)
MTBF	• > 250000 H
Data Rates	• 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

Item		AP1000-2S
Virtual AP		• 32
Security Policy	Access Authentication	• Support MAC, 802.1X, Portal, PSK and other authentication methods
	Encryption	• Supports 64/ 128 bit WEP, TKIP, WAPI, CCMP encryption
	User Isolation	• Support layer 2 wireless user isolation • Support SSID based wireless user isolation • Support wireless user isolation within same SSID
	Filtering	• Support Whitelist and Blacklist
	Hidden SSID	• Support
Intelligent Roaming	Roaming between AP	• Support
	Roaming based on	• Signal strength, error rate and neighboring AP operation mode
Layer 2 and Layer 3 Features	Management IP Address	• Support static IP address • Support dynamic IP address
	Routing	• Support static routing
	Forwarding Mode	• Centralized forwarding • Local forwarding
	Roaming	• Support L2/L3 roaming
	IPv6	• Support
	Access Control List (ACL)	• Support
	Multicast	• Support
Quality of Service (QoS)	IEEE 802.11e	• Support WMM
	Priority	• Support 802.1p identification and marking • Support priority queues and mapping
	Traffic Limit	• Support SSID / STA upload and download traffic limit
	Traffic Classification	• Support
	QoS Policy Map	• Support different SSID / VLAN mapping to different QoS policies
	Load Balancing	• Support based on user traffic load balancing

Item		AP1000-2S
RF Management	Transmit Power	• Support manual power adjustment • Support automatic power adjustment, AP automatically adjust the power based on nearby wireless network environment
	Channel	• Support manual channel setting • Support automatic channel adjustment, AP automatically adjust the channel based on nearby wireless network environment
Management and Maintenance	Network Management	• Support SNMP v1/ v2C/ v3 • Support SSH, Telnet, FTP and TFTP • Support WEB management
	FIT/ FAT Mode Switching	• Support for local or switch operating modes by ACS6000 series wireless controller
	Watchdog	• Support real-time monitoring of equipment status
	Logging	• Support
	Alarm	• Support
	Fault Detection	• Support
	Statistics	• Support

Ordering Information

Part Number	Model Description	Remarks
02050353	DPtech AP1000-2C Dual-Band Concurrent (2.4 GHz & 5 GHz) (2x2MIMO) 11a/b/g/n Ceiling Mount Access Point	Required

Note:

“Required” indicates that the item described is provided directly with the ordered host. The user does not need to purchase it specially.

“Optional” indicates the item described should be purchased by the user if it is needed.