

Cipherium A300



A300

is an industrial-grade Wi-Fi access point, delivering superior features and performance that are demanded by growing number of WLAN users.

As part of Cipherium wireless network management solution, A300 is positioned at the edge of network and centrally managed by backend Cipherium M-Series products.

Key Features –

IEEE 802.11 b/g + WDS (Bridge & Repeater, Point-to-Point, Point-to-Multiple-Point)

Dual IEEE 802.3af (PoE) compliant with Link Failover

Multiple ESSIDs capability

QoS & WMM supported

Business-class security

Central management by Cipherium Gateway

IP50 compliance

Features & Benefits –

High Speed IEEE 802.11g and Backward Compatible with 802.11b

- Equipped with a high-speed IEEE 802.11g wireless network interface based on Atheros™ chipset, transmission rates up to 54Mbps

WDS for Extending Wireless Coverage

- Create structural WDS (Bridge or Repeater) links connecting to other WDS-capable APs
- WDS links can serve as A300's LAN connections to replace Ethernet ports, or simply bridge the wired side and the wireless side as a single network

Supporting QoS & 802.11e WMM

- Supports IEEE 802.1p/IEEE 802.1Q Quality of Service (QoS) tagging features
- Supports IEEE 802.11e Wireless Multi-Media (WMM) to fulfill bandwidth thirsty multimedia applications like voice, audio and video

Multiple Virtual APs & Capability of Client Isolation

- Multiple-SSID capability is to use one AP to simultaneously emulate up to 8 APs with different ESSIDs by utilizing the Atheros™'s virtual AP (VAP) technology and the traffics are separated by using different VLAN IDs
- Supports client isolation, isolated with each other under one AP

Business-class WLAN Security & Client Authentications

- Advanced security options: 64/128/152 bits WEP, WPA/WPA2 with IEEE 802.1X or PSK (Pre-Shared Key)
- Wireless LAN segmentation, Disable SSID Broadcast and the option of station-isolation
- Ability to be configurable to filter out unauthorized wireless clients with build-in MAC-based access control list or via a back-end RADIUS server by sending an authentication request

Multiple Administration Interfaces for Network Management

- Provides friendly web-based management interface and SNMP for configuration and wireless network deployment

Dual-PoE with Link Failover

- The IEEE 802.3af Power over Ethernet (PoE) compliant design eliminates the need for power sockets, allows installation of this device in areas where power outlets are not readily available to improve deployment flexibility, and provides standard based compatibility with other device
- Provides dual-PoE 10/100 Fast Ethernet ports with failover function for redundant connectivity

Antenna Diversity & Field Replaceable Antenna

- The antenna diversity design enhances the connection reliability to improve data transmission capability
- Two detachable high-gain antennas for optimal wireless coverage and field replaceable to meet customer demands for specific environment

IP50 Compliant

- Enclosed in an IP50 compliant metal chassis, durable in industrial environment

Wireless Access Point

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Standard Conformance

- Wireless:
 - (a) IEEE 802.11g (up to 54Mbps)
 - (b) IEEE 802.11b (up to 11Mbps)
- Ethernet:
 - (a) 802.3
 - (b) 802.3u

Wireless Radio

- Frequency band: 2.4 GHz
- Wireless architecture:
 - (a) AP mode
 - (b) WDS mode (Repeater / Bridge)
- Modulation:
 - (a) 802.11b : DSSS (CCK, DBPK, DQPSK)
 - (b) 802.11g: OFDM (64-QAM, 16-QAM, QPSK, BPSK)
- Channels:
 - (a) USA (Channel 1~11)
 - (b) Japan (Channel 1~14)
 - (c) Europe (Channel 1~13)
- Antenna: 2 x 5dBi detachable antenna (SMA Connectors)
- Transmit Power:
 - (a) 802.11g: Up to 16dBm
 - (b) 802.11b: Up to 18dBm
- Receiver Sensitivity: -68dBm@54Mbps, -87dBm@11Mbps
- RF output power: 100mW

Wireless Signal Management

- Number of ESSID (Virtual AP): 8
- Number of associated clients per AP: 32
- Setting for maximum number of associated clients
- Network policy based on ESSID

Handover & Roaming

- IEEE 802.11f IAPP
- IEEE 802.11i pre-auth (PMKSA cache)
- L2 Roaming

QoS & WMM

- DiffServ /TOS
- IEEE 802.1p /COS
- IEEE 802.1Q Tag VLAN priority Control
- IEEE 802.11e WMM

System Management

- Web-based administration
- SNMP v1/v2c
- Provides Event Log
- Syslog information support
- Statistics
- Configuration backup and restore
- One-button-click to restore factory default setting
- Firmware upgrade
- Capable of performing RADIUS Accounting and Accounting Update

Security

- WEP (64/128/152 bits)
- EAP-TLS + Dynamic WEP
- EAP-TTLS + Dynamic WEP
- PEAP / MS-PEAP + Dynamic WEP
- WPA (PSK + TKIP)
- WPA (802.1X certification + TKIP)
- 802.11i WPA2 (PSK + CCMP / AES)
- 802.11i WPA2 (802.1X certification + CCMP / AES)
- Setting for TKIP / CCMP / AES key's refreshing period
- Hidden ESSID support
- MAC Address filtering (MAC ACL)
- MAC authentication with RADIUS servers
- Maximum number of registered RADIUS servers: 2

Built-in Servers & Client Interfaces to Other Service

- DHCP client
- DNS client
- Syslog client
- RADIUS client
- SNMP v1/v2c read & write client

Hardware Specifications

- Wireless chipset: Atheros 2317
- Flash: 4 MB
- SDRAM Memory: 16 MB

Physical and Power

- AC Input: 110~220 VAC, 50/60 Hz
- DC Output: 12V, 1.5A
- Form factor: Wall Mountable
- Dimensions (WxDxH): 8.0" x 5.3" x 1.4" (204mm×134mm×35mm)
- Weight: 1.4 lbs (0.62 kg)

Connectors and Display

- LAN Port: 2 x 10/100Base-T Ethernet With IEEE 802.3af PoE
- Console Port: 1 x DB9
- LED Indicators: 1 x Power, 2 x LAN, 1 x WLAN

Environment

- Operation Temperature: 0 ~ 40 °C
- Storage Temperature: -20 ~ 60 °C
- Operation Humidity: 10% ~ 80% Non-condensing
- Storage Humidity: 5% ~ 90% Non-condensing

Certifications

- FCC, CE
- RoHS compliant
- Metal case compliant with IP50 Standard



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