AP300 SERIES

MERU **AP 300 ACCESS POINT**

The AP300 series are Meru's most flexible high-performance access point. Equally at home on the trading floor of a stock exchange as it is in the halls of a hospital, enjoy the benefits of full-speed 802.11n, anywhere, anytime.

DUAL RADIO 802.11N ACCESS POINT

Features and flexibility to overcome virtually any obstacle, Performance to blow past virtually all expectations

PRODUCT OVERVIEW

With the AP300 Series, enterprises and businesses can reap the benefits of 802.11n wireless technology now with 802.11n services option enabled as conditions permit for the ultimate in deployment flexibility.

Ideally suited for bandwidth intensive applications, flexible scalability and high speed data transmissions, the AP300 series allows enterprises and businesses to rely on their wireless networks for mission critical applications.

• Air Traffic Control™ technology provides high performance full-speed 802.11n while supporting legacy a/b/g devices, allowing the WLAN to effectively meet bandwidth demands and support the highest possible wireless client density.

• No complex channel planning when combined with a Meru Controller – enjoy plug-and-play installation for simple deployment.

• Antenna options deliver 3x3 MIMO (Multiple Input, Multiple Output) and up to 300 Mbps data rates.
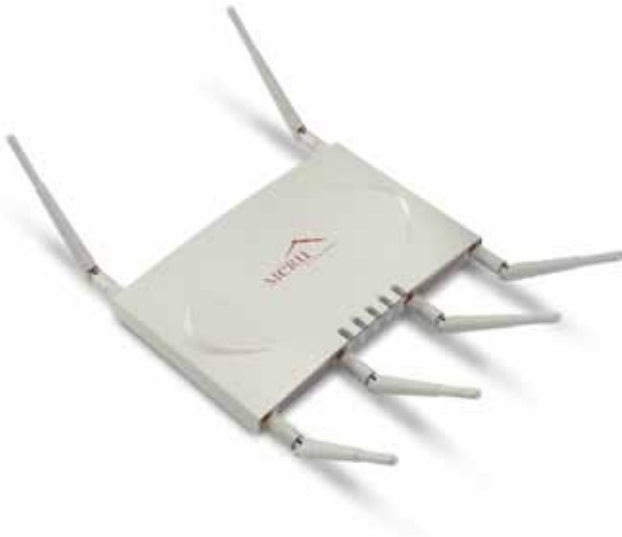
The AP300 Series Access Point provides the incomparable user experience of Meru's Virtual Cell architecture while delivering speed and reliability.

Product Benefits

:: Flexible deployment options – activate 802.11n radios as conditions permit

:: Ideal for Meru's 99.99% wireless availability and toll-quality voice service assurance programs

:: Plug and Play deployment using centralized Meru Controller

:: Powered by a standard 802.3af power source

:: Supports all 802.11a/b/g/n devices

:: 802.11n support in both 2.4GHz and 5GHz frequency bands using 40MHz channel bonding

:: Increase scalability and efficiency with virtualization

TECHNICAL SPECIFICATIONS

APPLICATION SUPPORT AND OVER-THE-AIR QoS

SIP and H.323 support
Dynamic out of the box support for SIP and H.323v1 applications and codecs

QoS
Configurable dynamic QoS rules Over-the-air resource reservation
Automatic, stateful flow detectors for SIP, H.323, Cisco SCCP, SpectraLink SVP and Vocera
User-configurable static and dynamic QoS rules per application (user-defined) and per user (stations, users, and port numbers)
Call Admissions Control and Call Load Balancing
WMM Support

SECURITY

Authentication
Combination of captive portal, 802.1x and open authentication
Advanced security using WPA2
802.1X with EAP-Transport Layer Security (EAP-TLS), Tunneled TLS (EAP-TTLS), Protected EAP (PEAP) MS-CHAPv2, Smartcard/Certificate, Lightweight EAP (LEAP), EAP-FAST and EAP- MD5, with mutual authentication and dynamic, per user, per session unicast and broadcast keys
Secure HTTPS w/customizable Captive Portal utilizing RADIUS

Encryption support
Static and dynamic 40-bit and 128-bit WEP keys, TKIP with MIC, AES

Security Policy
Radius Assisted, Per User and Per ESSID Access control via MAC Filtering
Multiple ESSID/BSSID each with flexibility of separate and shared Security Policy

Rogue Detection and Suppression
All radios capable of scanning 802.11n, 802.11a and 802.11b/g for rogue devices

MOBILITY

Zero-loss Handoffs Infrastructure-controlled zero-loss handoff mechanism for standard Wi-Fi clients

CENTRALIZED MANAGEMENT

Zero-Configuration
Automatically selects power and channel settings
Automatically discovers controllers and download configuration settings
Zero touch, plug and play deployments

System Management
Centralized and remote management and software upgrades via System Director web- based GUI, SNMP, Command-Line Interface (CLI) via serial port, SSH, Telnet, centrally managed via EzRF Management Suite
Centralized Security Policy for WLAN, Multiple ESSIDs and VLANs with their own administrative/security policies

Intelligent RF Management
Coordination of access points with load-balancing for predictable performance
Centralized auto-discovery, auto-channel configuration, and auto-power selection for APs
Co-channel interference management

WIRELESS SPECIFICATIONS

Wireless Standards
IEEE 802.11 a/b/g/n, IEEE 802.11i support (AES, WEP, WPA, WPA2), IEEE 802.11e, WMM

Power Management
Optimal power control in 1 dBm increments
Ability to disable unused radios via software to lower power consumption

Antenna
Standard multiband, omni-directional white antennas (included); Standard Antenna Gain~ 2.2 dBi for 2.4 GHz and 3 dBi for 5 GHz. Antenna gain not included in Average Transmit Power specified; RP SMA connectors for external antenna options

Client Support
Support for clients that perform active scanning and passive scanning
Support for clients that pre-authenticate
Support for clients that change to and from power save mode rapidly
Power Save Mode for clients in both QoS mode and non-QoS mode

IEEE802.11n (Upgradeable)

Frequency Band
2.402 to 2.485 GHz, 5.15 to 5.25 GHz, 5.725 to 5.825 GHz

Operating Channels
1 through 11 for 2.4 GHz band
32 through 160 for 5 GHz band

Data Rates (Mbps)
20 MHz: 130, 117, 104, 78, 65, 58.5, 54, 52, 48, 39, 36, 26, 24, 19.5, 18, 13, 12, 11, 9, 6.5, 5.5, 2, 1 Mbps
40 MHz: 300, 270, 243, 216, 162, 135, 121.5, 108, 81.5, 81, 54, 48, 40.5, 36, 27.5, 27, 24, 18, 13.5, 12, 11, 9, 6, 5.5, 2, 1 Mbps with automatic rate adaption

Average Transmit Power
2.4n (20 HT): 17 dBm, 2.4n (40 HT): 16 dBm
5.0n (20 HT): 18 dBm, 5.0n (40 HT): 16 dBm

Receive Sensitivity (for max data rates)
11a: -77 dBm, 11n (5 GHz): –72 dBm, 11g: -77 dBm, 11n (2.4 GHz): -74 dBm

IEEE802.11a

Frequency Band
5.180 – 5.240 GHz; 8 Channels (34, 36, 38, 40, 42, 44, 46, 48), 5.280 – 5.320 GHz; 4 Channels (52, 56, 60 and 64), 5.745 -5.825 GHz; 5 Channels (149, 153, 157, 161, and 165), 5500-5700: 11 channels (100, 104, 108, 112, 116, 120, 124, 128, 132, 136, 140)

Operating Channels Configurable based on country regulations

Data Rates 54, 48, 36, 24, 18, 12, 9 and 6 Mbps with automatic rate adaptation

Average Transmit Power 17 dBm

Receive Sensitivity -77 dBm at 54 Mbps and -89 dBm at 6 Mbps

IEEE802.11b/g

Frequency Band
Hardware supports 2.40-2.50 GHz: 2.4 GHz – 2.4835 GHz (US, Europe), 2.4 GHz – 2.497 GHz (Japan only)

Operating Channels
1-11 US/Canada, 1-13 Europe and 1-14 Japan
3 non-overlapping channels

Average Transmit Power 17 dBm

802.11b Data Rates
11, 5.5, 2 and 1 Mbps with automatic rate adaptation

802.11g Data Rates
54, 48, 36, 24, 18, 12, 11, 9, 6, 5.5, 2, 1 Mbps with automatic rate adaptation

802.11b/g Receive Sensitivity
-73 dBm at 54 Mbps and -84 dBm at 1 Mbps

PHYSICAL SPECIFICATIONS

Dimensions
9 7/8"width x 6 7/8"height x 1 1/16"depth
(25 cm width x 17.5 cm height x 2.7 cm depth)

Weight 3lbs 0 oz. (1.36 kgs)

Power
802.3af PoE, 802.3 at 5V DC input
Draws 11.5W to 17W depending on configuration

Environmental
Operating Temperature: 0° to 50° C (32° F to 122° F)
Operating Humidity: 90% (non-condensing)
Storage Temperature: -10° to +70° C ambient
Storage Humidity: 95% (non-condensing)

Interfaces
1 Auto sensing 10/100/1000 Base-TX Ethernet (RJ-45)
Dual-band Radios support any combination of 802.11n, 802.11a, 802.11b, 802.11g
3-6 External antenna interfaces (reverse polarity SMA)
Kensington MicroSaver Lock compatible
1 RJ45 console port (reserved for future use)
5 LEDs for monitoring power, Ethernet activity, 802.11 activity and 802.11 receive

Standard Warranty
Limited lifetime warranty

AP300 Series Part Numbers

AP320 Dual radio 802.11a/b/g/n AP, includes six dual band 802.11a/b/g/n omni-directional antennas

AP311 Dual radio 802.11a/b/g/n AP with one a/b/g radio, includes six dual band 802.11a/b/g/n omni-directional antennas*

AP310 Single radio 802.11a/b/g/n AP, includes three dual band 802.11 a/b/g/n omnidirectional antennas

AP302 Dual radio 802.11a/b/g AP with two 802.11a/b/g radios, includes six dual band 802.11a/b/g omnidirectional antennas*

AP301 Single radio 802.11a/b/g AP with one 802.11a/b/g radio, includes three dual band 802.11a/b/g omnidirectional antennas*

* a/b/g radios are software upgradable to a/b/g/n in the future

Certifications

Wi-Fi Certified a/b/g/n

Standards Safety
UL 60950-1
CAN/CSA-C22.2 No. 60950-1
IEC 60950-1

For radio approvals, please contact your local Meru representative for U.S., Canada, Japan, and Europe regulatory codes.

Meru Networks | develops and markets wireless infrastructure solutions that enable the All-Wireless Enterprise. Its industry-leading innovations deliver pervasive, wireless service fidelity for business-critical applications to major Fortune 500 enterprises, universities, healthcare organizations and local, state and federal government agencies. Meru's award-winning Air Traffic Control technology brings the benefits of the cellular world to the wireless LAN environment, and its WLAN System is the only solution on the market that delivers predictable bandwidth and over-the-air quality of service with the reliability, scalability and security necessary to deliver converged voice and data services over a single WLAN infrastructure.

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