Data Sheet

Dual Radio Access Point

High-Performance Access Point for Converged Voice and Data Wireless LANs

AP200

Key Product Benefits:

- Zero configuration setup using plug and play architecture
- Tri-mode 802.11b/g and 802.11a
- Best 802.11g performance Zin mixed 802.11b/g environments
- Exceptional wireless VOIP performance using Air Traffic Control technology
- Highest user density environment support
- Multi-layered security including standard WPA; 802.11i security such as automatic rogue access point prevention and traffic inspection

Wi-Fi Certified Tri-mode Access Point Delivers Exceptional Performance

A key component of the Meru Wireless LAN System, the Meru Access Point delivers unsurpassed Wi-Fi performance in conjunction with Meru Wireless LAN Controllers. Representing a shift to the fourth generation WLAN architecture using coordinated intelligent APs at the edge, the Meru WLAN System delivers:

- Toll quality voice over Wi-Fi
- Ten-fold increase in client density
- Automatic AP discovery, configuration
- Intelligent load balancing
- E(z)RF installation and self-healing

The Only Solution to Deliver a 10-Fold Increase in Client Density

Embedded Wi-Fi in laptops are almost ubiquitous. And with emerging dual mode Wi-Fi/cellular phones, the number of clients in your enterprise is going to increase exponentially in only a few short years. Deploy a system that is designed to deal with high densities of voice and data clients, without sacrificing performance.

- Supports voice clients simultaneously with heavy data traffic with no quality degradation
- Quality of Service ensures thorough deterministic scheduling of client transmissions and zero hand off between wireless cells
- Air Traffic Control™ delivers ten-fold increase in client density
- Virtual cell technology eliminates complex channel planning and allows zero handoff

A Multi-Layered Security Approach

Security is the key consideration for network administrators planning a wireless LAN. Meru goes beyond the basic over-the-air protections with a multi-layered security policy.

- Wi-Fi Alliance Certified™ for WPA and 802.1x
- No security information within access point
- Only operates with Meru Controller
- Automatic rogue access point detection and prevention without degradation of client traffic
- Multiple ESSIDs with individual security policies to ensure separation of different user groups

Tri-mode Access Point Provides Investment Protection

Enterprise applications and user density continue to increase. Tri-mode 802.11a/b/g clients are now commonplace in laptops. Ensure your network supports the full breadth of wireless LAN clients with a Meru access point.

- Dual 802.11b/g and 802.11a radios
- Simultaneously support 802.11b, 802.11g and 802.11a clients
- Dramatically improve 802.11g performance in mixed 802.11b/g environments using Air Traffic Control™ technology

Dual Functionality Delivers Exceptional ROI

An important component of any enterprise wireless LAN solution is the ability to monitor the airwaves for performance changes and malicious RF activity. Meru Access Points uniquely provide both capabilities without the performance degradation to client traffic that is common with other solutions.

- Continuously monitor all channels in 2.4 and 5 GHz spectrum
- Serve client traffic and perform RF monitoring simultaneously
- Eliminate the need for expensive overlay solutions

Ready for Enterprise Deployment

Broad scale deployment of a wireless LAN requires the access point to work with the existing environment. Meru Access Points and the wireless LAN System architecture are designed with the enterprise in mind.

- Layer 2 or 3 connectivity for flexible deployment options
- Plenum rated for installation above ceiling
- Locking mechanism secures access point when mounted in public areas

About Meru Networks

Meru Networks is a global leader in Wireless Voice over IP (VoIP) infrastructure solutions. With its innovative, award-winning Air Traffic Control technology that brings the benefits of the cellular world to the wireless LAN environment, Meru's WLAN System is the only solution on the market that offers the reliability, scalability, and security necessary to deliver converged voice and data services over a single WLAN infrastructure.

AP200

Technical Specifications

APPLICATION SUPPORT AND QoS	
SIP and H.323 support	Support for SIP and H.323v1 applications and codecs
QoS Rules	Configurable Dynamic QoS rules
	Over-the-air upstream and downstream resource reservation
	Automatic, stateful flow detectors for SIP, H.323, Cisco SCCP, SpectraLink SVP and Vocera
SECURITY	
Security Policy	Multiple ESSID/BSSID each with its own 8-Layer Security Policy
Encryption support	40-bit/ 64-bit/ 128-bit, TKIP, AES
Rogue Detection and Suppression	Any radio can scan both 802.11a and 802.11b/g for rogues
MANAGEMENT	
Zero-Configuration	Automatically selects power and channel settings
System Management	Centralized and remote management of APs by System Director's web-based GUI, SNMP, and Cisco-like CLI
MOBILITY	
Zero-Loss Handoffs	Supports zero-loss handoff over Layer 2/3 infrastructure
Multi-vendor	Interoperates with non-Meru AP's for handoffs
WIRELESS SPECIFICATIONS	
Wireless Standards	IEEE 802.11 a/b/g
	IEEE 802.11i support (AES, WEP and WPA2)
	IEEE draft 802.11e support (QOS)
	IEEE 802.3af Power over Ethernet
Power Management	Optimal power control in 1 dBm increments
Antenna	RP F SMA jacks on housing for external antennas for specific coverage requirements, or standard antenna (included)
	Antenna receive diversity via hardware switching for 802.11b
	External Antenna options for custom installations
	Standard Antenna Gain~ 2 dBi for 2.4 GHz, and 3 dBi for 5 GHz
Wireless Medium Access	Wi-Fi Compliant 802.11 MAC standard
Frame Size	Peak frame size of > 2250 bytes
	Fragmentation and Reassembly of 802.11/Ethernet frames supported
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
	Sleep Mode drivers for Wi-Fi voice handsets
802.11a	
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) NOTE: FCC certification methods still pending, these channels may not be legally available in US at FCS
	5.745 – 5.825 GHz; 5 channels (149, 153, 157, 161, and 165)
Operating Channels	Configurable based on country regulations
Data Rates	54, 48, 36, 24, 18, 12, 9 and 6 Mbps with automatic rate adaptation
Transmit Power	~ +16 dBm (40 mW) nominal; transmit power, indoor/outdoor usage, antenna type and gain are country regulations dependent
Receive Sensitivity	-70 dBm at 54 Mbps, -86 dBm at 6 Mbps
802.11b/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
Transmit Power	~+20 dBm (100 mW) nominal, country regulations dependent
802.11 b 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
802.11b Receive Sensitivity	-84 dBm at 11 Mbps, -90 dBm at 1 Mbps with BER $10E^{-5}$
802.11g Receive Sensitivity	-70 dBm at 54 Mbps, -85 dBm at 6 Mbps
PHYSICAL SPECIFICATIONS	
Dimensions	1.5in (H) x 6.25in (W) x 8.25in (D)
Power	Power over Ethernet (PoE), IEEE 802.3af compliant
	Power draw 12 W
Environmental	Indoor Operating Temperature: 32ºF to 122ºF (0ºC to 50ºC)
	Indoor Operating Humidity: 0% to 95% humidity (non-condensing)
	Indoor Storage and Transit Temperature: -40ºF to 185ºF (-40ºC to 85ºC)
	Indoor Storage and Transit Humidity: 0% to 95% relative humidity (non-condensing)
Interfaces	1 Auto-sensing 10/100 Base-TX Ethernet (RJ-45)
	Dual Radios support any combination of 802.11a, 802.11b, 802.11g
	External antenna interfaces (Reverse Polarity, SMA, F)
	Kensington MicroSaver Lock compatible
Indicators	4 LEDs for monitoring power, Ethernet activity, 802.11 activity, and 802.11 receive
Compliance	Radio: FCC Part 15.247; Safety: UL 1950; Plenum-rating (UL 2545); EMI: FCC Part 15.107, 15.109; Applicable per-country certifications; Wi-Fi Certified
Warranty	Hardware: 1 year
	Software: 90 days
	Red Carpet Service options

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