

# AP320i



## MERU AP 320i ACCESS POINT

i-Series access points, Meru's most technologically advanced, combine an elegant design with rich rewards and the refined wireless experience provided by Meru's virtualized wireless LAN solution.



## DUAL RADIO 802.11N ACCESS POINT

Features and styling to meet your needs, performance to blow past your expectations

## PRODUCT OVERVIEW

Part of the Meru i-Series, the AP320i Access Point is an update to the award-winning, high-performance AP300 series platform, the industry's first enterprise-class 802.11n access point. Complementing the incomparable user experience of Meru's Virtual Cell architecture, it delivers all the speed and reliability of the AP300 series in an elegant, low-profile design. With form as unparalleled as function, the AP320i pushes the envelope further and provides extended coverage for 802.11n while simultaneously supporting legacy 802.11a/b/g devices without compromising either performance or network capacity.

- 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.
- Integrated Orthogonal Array Beam Forming™ (OABF) antenna system delivers 3x3 MIMO (Multiple Input, Multiple Output) and up to 300 Mbps data rates.
- When combined with a Meru Controller, there is no need for complex channel planning, enjoy plug-and-play installation for simple deployment.



The AP320i Access Point provides the incomparable user experience of Meru's Virtual Cell architecture while delivering all the speed and reliability of the AP300 series in an elegant, low-profile design.

## Product Benefits

- ❑ Integrated Orthogonal Array Beam Forming (OABF) antenna system maximizes gain, and lowers interference
- ❑ Tool free, tamper proof installation
- ❑ Ideal for Meru's 99.99% wireless availability and toll-quality voice service assurance programs
- ❑ Supports all 802.11 devices
- ❑ Plug and Play deployment using centralized Meru Controller
- ❑ Powered by a standard 802.3af power source
- ❑ 802.11n support in both 2.4GHz and 5GHz frequency bands using 40MHz channel bonding
- ❑ Limited Lifetime Warranty

# AP320i 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

Two integrated Orthogonal Array Beam Forming™ antenna systems Standard Antenna Gain~ 2 dBi for 2.4 GHz, and 3 dBi for 5 GHz Antenna gain not included in Average Transmit Power specified

### 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

### 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 adaptation

### 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 (with wall bracket)

10 15/16" width x 6 11/16" height x 2 7/8" depth (27.2 cm width x 16.8 cm height x 7.2 cm depth)

### Weight

3lbs 9 oz. (1.62 kgs) without wall bracket 3lbs 14 oz. (1.76 kgs) with wall bracket

### 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 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

## AP320i Part Numbers

### AP320i

Dual radio 802.11a/b/g/n AP, includes six dual band 802.11a/b/g/n integrated antennas

## Certifications

Wi-Fi Certified a/b/g/n

### Standards Safety

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

### Radio approvals

FCC Part 15.247, 15.407, 15.107 and 15.109  
EN 300.328, EN 301.893 (Europe)  
EMI and susceptibility (Class B)  
ICES-003 (Canada)  
VCCI (Japan)  
EN 301.489-1 and -17 (Europe)  
GITEKI (Japan)

For other countries and regions, please contact your local Meru representative for more specific regulatory information.

**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.

DS\_AP320i\_0410\_v3



Corporate Headquarters  
894 Ross Drive  
Sunnyvale, CA 94089  
T +1 (408) 215-5300  
F +1 (408) 215-5301  
E info@merunetworks.com

For more information about Meru AP320i visit | [www.merunetworks.com](http://www.merunetworks.com) | Or email your questions to: [info@merunetworks.com](mailto:info@merunetworks.com)

Meru Networks | Copyright © 2010 Meru Networks, Inc. All rights reserved worldwide. Meru Networks is a registered trademark of Meru Networks, Inc. in the US and worldwide. All other trademarks, trade names or service marks mentioned in this document are the property of their respective owners.