AP320                                    AP320i

# AP320

## Dual-radio, Dual-stream 802.11n Wireless Access Point

### High-performance wireless connectivity

With the AP320, enterprises and businesses can reap the benefits of 802.11n wireless technology, with deployment options to fit any site requirement. Leveraging Meru's Virtualized Wireless LAN architecture, the AP320 delivers WLAN speed and reliability, supporting 802.11n and legacy 802.11a/b/g devices without compromising performance or network capacity.

Designed for bandwidth-intensive applications and high-speed data transmission, with flexible scalability, it 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, internal (AP320i) or external (AP320), support 3x3:2 MIMO design and up to 300 Mbps data rate per radio.

The AP320 access point provides the incomparable user experience of Meru's Virtualized Wireless LAN architecture while delivering speed and reliability.

### Benefits

- Increased scalability and reliability through Meru's Virtualized Wireless LAN architecture and channel layering
- Support for all 802.11a/b/g/n devices
- 802.11n support in both 2.4 GHz and 5 GHz frequency bands
- Deployment choices of internal or external antennas

# AP320
## TECHNICAL SPECIFICATIONS

### APPLICATION SUPPORT AND OVER-THE-AIR QoS
**SIP Support**
Dynamic out-of-the-box support for SIP applications and codecs

**QoS**
Configurable dynamic QoS rules
Over-the-air resource reservation
Automatic, stateful flow detectors for SIP, Cisco SCCP, Polycom's SVP, Ascom, ShoreTel, 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, EAP-MD5, EAP-SIM, and EAP-AKA, with mutual authentication and dynamic, per-user, per-session unicast and broadcast keys
Secure HTTPS with 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 E(z)RF® Network Manager
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 access points
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**
For internal antenna models, two Orthogonal Array Beam Forming™ antenna systems
For external antenna models, standard multiband, omnidirectional white antennas (included)
Standard Antenna Gain -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
**Frequency Band**
2.4 to 2.497 GHz, 5.15 to 5.25 GHz, 5.725 to 5.825 GHz
Country-specific restrictions apply; adjusted by controller upon approval

**Operating Channels**
Channels 1 through 11 for 2.4 GHz band
Channels 36 to 48 and channels 149 to 165 for 5 GHz band
Country-specific restrictions apply; adjusted by controller upon approval

**Data Rates (Mbps)**
6.5 to 300 (MCS0 to MCS15) 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
5.745–5.825 GHz
Country-specific restrictions apply; adjusted by controller upon approval

**Operating Channels**
Channels 36-48 and channels 149-161
Country-specific restrictions apply; adjusted by controller upon approval

**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**
2.4–2.4835 GHz (US, Europe), 2.4–2.497 GHz (Japan only)
Country-specific restrictions apply; adjusted by controller upon approval

**Operating Channels**
Channels 1-11 for US/Canada, channels 1-13 for Europe, and channels 1-14 for Japan
3 non-overlapping channels
Country-specific restrictions apply; adjusted by controller upon approval

**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, 9, and 6 Mbps with automatic rate adaptation

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

### PHYSICAL DIMENSIONS
**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**
3 lbs 9 oz (1.62 kgs) without wall bracket
3 lbs 14 oz (1.76 kgs) with wall bracket

**Power**
802.3af PoE
5V DC input (AP320 only)
Draws 11.5W to 17W, depending on configuration

**Environmental**
Operating temperature: 0°C to 50°C (32°F to 122°F)
Operating humidity: 90% (non-condensing)
Storage temperature: -10°C 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
6 external antenna interfaces (reverse polarity SMA) for AP320
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

### Part Numbers
**AP320i**
Dual-band, dual-radio 802.11a/b/g/n access point; includes six dual-band 802.11a/b/g/n integrated antennas

**AP320**
Dual-band, dual-radio 802.11a/b/g/n access point; includes six dual-band 802.11a/b/g/n omnidirectional external antennas

### Certifications
Wi-Fi Certified a/b/g/n

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

**Meru** delivers an all-wireless network that fully supports the enterprise, delivering a consistent, interactive experience for all users. No matter what applications they are running. No matter how many other users are on the network.