

# OAP180



## MERU OAP 180 RUGGED ACCESS POINT

The Meru OAP180 Rugged Access Point delivers the tight security and high performance of Meru's virtualized wireless LAN solution to enterprise deployments to even the most challenging locations.



### DUAL RADIO RUGGED ACCESS POINT

Robust wireless engineered to overcome any obstacle,  
Packaged for the harshest environments

## PRODUCT OVERVIEW

The Meru OAP180 Rugged Access Point delivers secure, high performance wireless connectivity to extend enterprise deployments to outside locations like campuses, parking lots, and pole tops; or harsh indoor environments including breweries, food processing plants and warehouses.

Comprising of an 802.11a and an 802.11b/g radio, this compact, rugged access point is designed to perform flawlessly, regardless of exposure, whether to extreme heat, bitter cold, or torrential rain.

- Air Traffic Control™ provides high performance, high quality 802.11a/b/g for voice and data clients, allowing the WLAN to effectively meet bandwidth demands and support the demands of all mission critical applications.
- No complex channel planning when combined with a Meru Controller – enjoy plug-and-play installation for simple deployment.



The OAP180 Rugged Access Point provides the incomparable user experience of Meru's Virtual Cell architecture while delivering speed and reliability in a rugged package.

## Product Benefits

- ❑ Continue wireless coverage outside, whether for voice or data, or both
- ❑ Ideal for Meru's 99.99% wireless availability and toll-quality voice service
- ❑ Plug and Play deployment using centralized Meru Controller
- ❑ Powered by a standard 802.3af power source
- ❑ Improve scalability through channel layering
- ❑ Eliminate complex RF channel planning with virtualization

# OAP180 TECHNICAL SPECIFICATIONS

## SECURITY

### MAC Filtering

Local MAC database; RADIUS MAC authentication

### Layer 2 Security

802.11 Security: WEP-64, WEP-128, 802.1x with PEAP, WPA, WPA2

### Encryption support

WEP keys of 40 bits, 64 bits, and 128 bits (in hardware); TKIP (in hardware); AES (in hardware)

### RADIUS Interoperability

Microsoft IAS, Steel-Belted RADIUS, FreeRADIUS, Cisco ACS

### Layer 3 Security

VPN Passthrough; Captive Portal for guest access

## MANAGEMENT

### Administrative Access

SSH, Telnet, GUI - through controller

### Configuration

Automatically downloaded from controller; All configuration changes performed on the controller

### Troubleshooting and Local Access

Advanced troubleshooting through controller; Historical reports and alerts through E(z)RF

### Remote/Central Management

E(z)RF Management Station for: Monitoring, Alerts, Reports, RF Visualization, RF Locationing

### SNMP Support

SNMP v1/v2c Agent & Monitoring through controller MIBs

### Remote Logging

Syslog v1 and v2 - failure alerts and change notifications through controller and E(z)RF

### Software Upgrade

Automatic software upgrades, originated by controller

## WIRELESS SPECIFICATIONS

### Wireless Interfaces

Two radios - IEEE 802.11a and IEEE 802.11b/g

### Power Management

Optimal power control in 1 dBm increments

### Antenna

4 N-Type external antenna connectors

### Frame Size

Peak frame size of <2250 bytes; Fragmentation and Reassembly of 802.11/Ethernet frames supported

### Client Support

All Wi-Fi compatible clients; Power Save clients; Clients that perform active and passive scanning

## NETWORK SPECIFICATIONS

### Forwarding

IP Tunnel to Controller in Coordinated Mode 802.3/802.11 bridging in Bridge Mode

### Network Interfaces

1 Auto-sensing 10/100 Base-TX Ethernet (RJ-45)

### Addressing

DHCP or Manual Assignment

### VLAN

802.1Q Tagging Support through controller

## 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

## 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 Receive Sensitivity** -84 dBm at 1 Mbps

**802.11g Receive Sensitivity** -73 dBm at 54 Mbps

## PHYSICAL SPECIFICATIONS

### Dimensions

7 1/2" width x 7 11/16" height x 2 15/16" depth  
(19.0 cm width x 19.5 cm height x 7.4 cm depth)

**Weight** 3lbs 4 oz. (1.54 kgs)

### Power

802.3af PoE, 802.3 at 5V DC input  
Draws 11.5W to 40W depending on configuration  
60 W High Power - Power Injector provided

### Environmental

Operating Temperature: ETS 300 019-2-4; Class 4.1E modified -40 to 140 degrees fahrenheit; Vibration class 4m3  
Transportation Environment: ETS 300 019-2-2; Class 2.3 Public Transportation  
Storage Environment Shock: IEC 68-2-29  
Drop: IEC 68-2-32  
Wind (operational): 100 MPH; Wind (survival): 150 MPH  
Lightning: The unit should withstand a +4KV of Input surge

### Interfaces

1 10/100/1000 Base-TX Ethernet (RJ-45)  
4 N-Type connectors for external antennas  
4 LEDs for monitoring power, Ethernet activity, 802.11a activity and 802.11b/g activity

### Standard Warranty

1 year

## OAP180 Part Numbers

### OAP180

Dual radio 802.11a/b/g Rugged AP

## Certifications

Wi-Fi Certified a/b/g

### Standards Safety

cUL 60950-1

UL 50; Enclosures for Electrical Equipment

IEC/EN 60950-1

### Radio approvals

FCC Part 15

RSS210 (Canada)

Japan Technical Regulations

EN 300 328 V1.6.1

EN 301 893 V1.3.1

### EMC

FCC Part 15

EN 301 893 V1.2.1

Japan VCCI

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.

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

For information about Meru OAP180 visit | [www.merunetworks.com](http://www.merunetworks.com) | Or email your questions to: [info@merunetworks.com](mailto:info@merunetworks.com)

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