

Azalea Networks™ MSR4000 Wireless Mesh Router



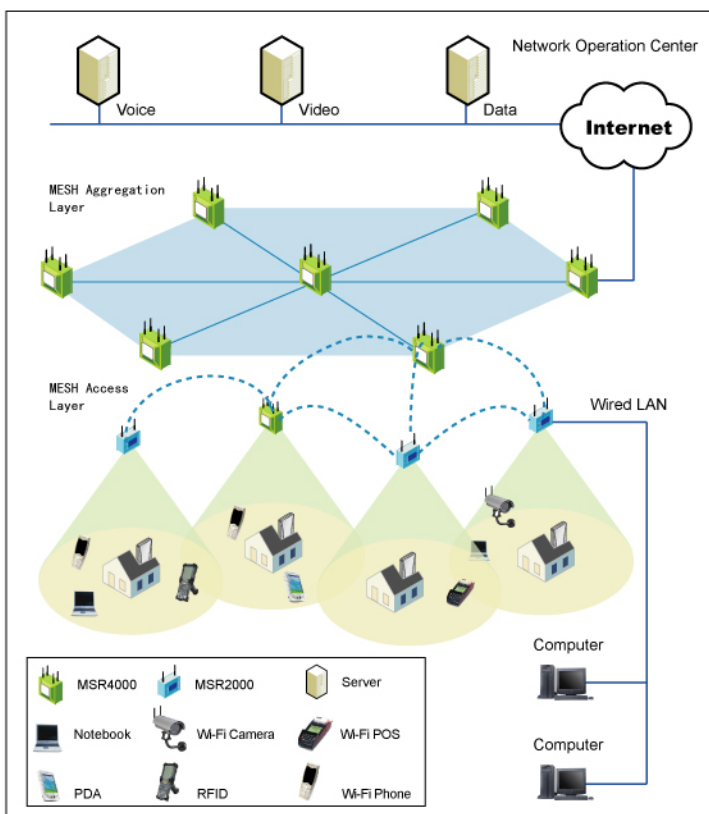
Azalea MSR4000 is the world-leading outdoor mesh router. It brings unprecedented bandwidth and scalability that enable large-scale metro mesh networking, and excellent flexibility and extensibility even suitable for medium mesh networks.

Azalea MSR4000 is built on top of many Azalea patented technologies, including AWR wireless routing, Motrix cross-net roaming, intelligent radio-frequency management (RFM), and fine-grained quality of service (QoS). It significantly advances the state of the art and realizes broadband wireless anywhere anytime.

Highlights of Azalea MSR4000:

- Up to four radios that scale the bandwidth to multiple hops
- Extended outdoor wireless coverage that enables seamless mobile Wi-Fi access
- Multiple sectors that lift the system capacity
- Redundant virtual inter-router connections that improves network reliability and robustness
- Advanced AWR routing protocol that achieves fast, optimal route selection under high network dynamics
- Fully automated neighbor discovery, topology formulation, router configuration, and failure recovery. Significant savings on network maintenance and service.
- World-leading high-speed cross-network roaming that preserves all open network connections
- Fully 802.11e compatible, over the air QoS support for voice and video transport
- Fully 802.11i compatible security, including WEP, WPA/WPA2 and 802.1x
- User-friendly network management
- Automated on-site software upgrades, and many more ...

Example of wireless mesh network with Azalea MSR4000:



MSR4000 Technical Specifications

Network

- AWR Mesh Routing
- NAT Support
- DHCP Server and Relay
- 802.11a/b/g compatibility
- Multiple BSSID
- Motrix Cross IP subset roaming
- VLAN

Wireless

- IEEE 802.11a/b/g
- High capacity, up to 4 radios
- Frequency band: 2400-2483.5 MHz
5150-5850 MHz
- TX Power: 100mW (20dBm), 400mW (26dBm)
- Rx Sensitivity:
 - 90dBm@6Mbps, -88dBm@12Mbps,
 - 83dBm@24Mbps, -80dBm@36Mbps,
 - 75dBm@48Mbps, -73dBm@54Mbps
- Media Access Protocol: CSMA/CA with ACK
- Modulation: DSSS, CCK, OFDM
- Multiple country support

Security

- Secure routing
- MAC address filtering
- BSSID suppression
- 128/64 bit WEP
- WPA/WPA-2
- 802.1x
- VPN compatibility

Management

- SNMP v2c/v3
- HTTP based router management system
- Router monitoring and statistics
- Simple mesh-wide image upgrade

Protection Circuits

- Antenna Protection: < 0.5uJ for 6kV/3kA
- Electrical Protection:
 - ANSI/IEEE C62.41, UL 1449-2 ed., 10kA
 - @ 8/20 uS Waveform, 36kA per phase
 - EN61000-4-5 Level 4 AC Surge Immunity
 - EN61000-4-4 Level 4 EMC Field Immunity

Hardware Specifications

- Auto sensing 10/100 BaseT Ethernet
- Power input: 110/240 VAC 50/60Hz
- AC power consumption: 10W typical
- Dimension: 325mmX290mmX135mm
(w/o mounting brackets or antennas)
- Weight: 7kg max, w/o mounting bracket

Environmental Specifications

- Operating temperature range: -40°C to 55°C
- Storage temperature range: -40°C to 80°C
- Humidity(non-condensing): 10% to 90%
- Weather rating: IP66 weather tight
- Wind survivability: no less than 165 mph
- Shock & Vibration: ETSI 300-19-2-4 spec T41.E class 4M3
- Transportation: ISTA 2A

Package Contents

- Azalea MSR4000 Mesh Router
- Mounting bracket and Solar Shield
- Hardware Installation Flyer
- Quick Start Guide
- Configuration Guide (CD)

Antennas

- Extended antenna with N male connector
- Impedance 50 ohms