MSR4000

High Performance Outdoor Wireless Network Router

Azalea's MSR4000 **Advantages**

Lower Operating Expenses

Reduces cost of deployment by simplifying installation and eliminating backhaul wiring.

Intelligent Wireless Routing

Maximizes user throughput and maintains network integrity through Adaptive Wireless Routing (AWR) technology that adapts flexibly to topological and radio link quality changes.

Self-Configuring

Creates a self-organizing, self-healing wireless mesh, and intelligently selects the most optimum data path through the mesh.

Network Reliability

Ensures optimal network performance and maximum throughput through automatic topology and channel optimization.

End-to-End Security

Secures communications between clients and access points through WEP, WPA and WPA2.

Delivering Network Intelligence to the World of Broadband Wireless

Superior Outdoor Coverage at the Core of the Network

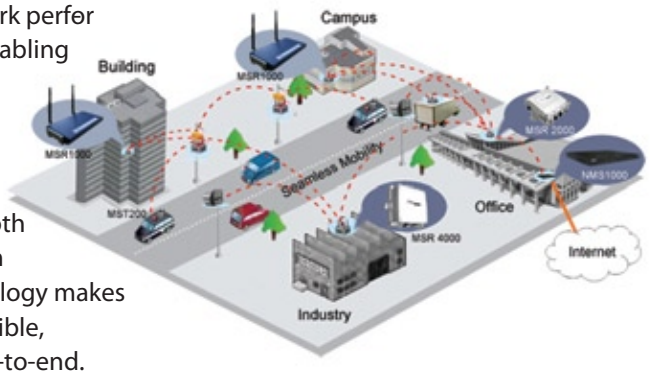
The Azalea MSR4000 is a high-end broadband wireless solution designed to deliver routing, roaming, and video transport. The MSR4000 offers outstanding four-radio performance as a gateway to the wired network or a key-node in a mesh network. Azalea's MSR4000 is ideal for bandwidth intensive voice, video and data transmission, especially in harsh outdoor environments.

Layer-3 Network Operations

Azalea's broadband wireless network solutions interoperate with your existing network infrastructure. Combining Motrix™ distributed cross IP subnet roaming with Layer-3 AWR™ routing technology, the MSR4000 supports a broad range of voice, video and data applications delivering high performance and seamless mobility.

Adaptive Wireless Routing ™ (AWR) Technology

The AWR technology dynamically optimizes traffic routes between nodes for high network performance and system capacity, enabling the MSR4000 to deliver high throughput and low latency performance. Designed specifically for wireless mesh technology, it works well for both mobile and fixed wireless mesh networks. Azalea's AWR technology makes the wireless mesh network flexible, scalable and resilient from end-to-end.



Four-Radio Architecture

The MSR4000 supports four independent radios each configurable to ensure maximum throughput and optimum network performance. The four-radio architecture separates the mesh backbone traffic from the edge access traffic. The four radios enable coordinated management of the radio resources for both transit and access links to significantly improve throughput and latency.

Network Management

The Azalea Network Management System (NMS) provides integrated real-time management and monitoring of Azalea mesh products using a java applet based GUI. Network managers readily realize real-time network capability surveillance and network failure alarms.

Applications

Carrier Grade Broadband Wireless Infrastructure

Versatile deployment options — an all-wireless mesh network or a broadband wireless access network with hybrid wired/wireless backhaul.

Wireless Mobility

Offers high-speed roaming in a Layer-3 implementation, allowing uninterrupted Internet access while on the move.

Scalable Wi-Fi

Delivers seamless mobility,reliability and security with scalable Wi-Fi infrastructure across indoor and outdoor networks.

Video Surveillance

Transmits high-definition video using Active Video Transport™ (AVT) tech - nology for mission-critical video applications, video surveillance cameras and monitors.

VoIP communications

Provides cross-IP subnet roaming and maintains a continuous connection for VoIP applications.

About Azalea

Azalea Networks delivers network intelligence to broad-band wireless infrastructure through an innovative wireless routing technology that sets new standards in price and performance.

Contact an NVR-PRO.com Sales Representative for more information

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DS04E-1-0908

Technical Specifications

Wireless

Up to 4 radios that can each work in either AP mode or Backhaul mode

Supports 802.11a/b/g and 4.9GHz

Up to 4 BSSID for each radio

Up to 16 SSID for each radio

Frequency bands

2.400 — 2.483GHz, 5.15 — 5.35Ghz, 5.47 — 5.725Ghz, 5.725 — 5.85Ghz, 4.94 — 4.99GHz

Transmit Power

Access: 100mW (20dBm), 400mW (26dBm)

Backhaul: 100mW (20dBm)

Receiver Sensitivity

802.11a: -92 dBm @ 6 Mbps

802.11b: -96 dBm @ 1 Mbps

802.11g: -96 dBm @ 1 Mbps

Modulation: OFDM,DSSS, CCK

Software

Network Address Translation (NAT)

DHCP service and relay

Adaptive Wireless Routing (AWR)

For more see the Azalea AOS Data Sheet.

Hardware

2 Autosensing 10/100M Base-T Ethernet interfaces (Optional support 802.3af-compliant PoE out)

4 N type antenna connectors (50Ω)

Management

Remote manager via web browser

CLI

SNMP v1/v2/v3c

Remote software upgrade

Web-based router management interface

DHCP IP addressing

For more see to the Azalea NMS Data Sheet.

Power Supply

Power: 100~240 VAC 50/60Hz

Power consumption: Voltage 12V

Quad 100mW Radios

Typical: 7.5W, Maximum: 10W

Quad 400mW Radios

Typical: 17.5W, Maximum: 23W

Physical

Dimensions: 13" x 11.5" x 5" (325mm x 290mm x 135mm)

Weight: 11.5 pounds (5.25 kgs)

Shipping weight: 24 pounds (11 kgs)

Shipping dimensions: 14.5" x 14.4"x 16" (370mm x 365mm x 405mm)

Environmental

Operating temperature: -40 to 55° C (-40 to 131° F)

Storage Temperature: -40 to 88° C (-40 to 190.4° F)

Humidity: 5% to 95%

Weather rating: IP66

Wind survivability: up to 165 mph

Shock & Vibration: ETSI 300-19-2-4 spec T41.E class 4M3

Transportation: ISTA 2A

Approvals

Safety: EN 60950-1, IEC60950-1, UL 60950-1, CAN/CSA-C22.2 No.60950-1

EMC: EN301 489,EN55022, EN61000, FCC Part 15, RSS-Gen

RF: CFR47 FCC Part 15, RSS-210, EN 300 328, EN 301 893

Certification: FCC, IC, CE, CB, cTUVus, RoHS,SRRC(China)

Ordering Information

Standard Components

- Azalea MSR4000 Outdoor Wireless Router
- One mounting kit with sun shield
- 4.5m US power cord

MSR4K4SS-XX

- Standard Components
- Four 802.11 a/b/g 100mW radios (2.4GHz, 5GHz, 4.9GHz)

MSR4K44S-XX

- Standard Components
- Three 802.11a/b/g 100mW radio (2.4GHz, 5GHz, 4.9GHz)
- One 802.11b/g 400mW radio (2.4GHz)

MSR4K4SS-XX- P

- Standard Components
- Four 802.11 a/b/g 100mW radios (2.4GHz, 5GHz, 4.9GHz)
- PoE on one Ethernet port (PSE mode)

MSR4K44S-XX- P

- Standard Components
- Three 802.11a/b/g 100mW radio (2.4GHz, 5GHz, 4.9GHz)
- One 802.11b/g 400mW radio (2.4GHz)
- PoE on one ethernet port (PSE mode)

Accessories

A variety of accessories are available for use with the Azalea routers. These include onmi-directional antennas (for access), directional antennas (for backhaul), ethernet cables, power cables and console cables. Please see your local Azalea representative for additional details.

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