

DATA SHEET

AIRMESH MST200 OUTDOOR WIRELESS MESH ACCESS ROUTER

Delivers High-Performance Outdoor Wireless Mesh Connectivity



The Aruba AirMesh MST200 outdoor wireless mesh access router delivers high-performance outdoor wireless mesh connectivity for remote locations and devices such as IP video surveillance cameras and digital signage.

Ruggedized and hardened to withstand extreme environmental conditions, the MST200 is ideal for providing 802.11n connectivity in metropolitan and industrial areas, oilfields, mines, shipping ports, traffic corridors and large public areas. Supporting data rates up to 300 Mbps, the MST200 a reliable and cost-effective alternative to cabling or fiber.

Running the Aruba MeshOS operating system, the MST200 features a single 5-GHz 2x2 MIMO radio with dual spatial streams and patented Adaptive Wireless Routing™ (AWR™) technology. Together, these features offer unparalleled speed, reliability, and low latency for voice, video and other real-time multimedia-grade applications.

OPTIMIZED FOR LONG-DISTANCE TRANSMISSION

With an integrated directional antenna, the MST200 provides a long-range backhaul link that connects to the AirMesh network or another MST200 up to 7.5 km away. Radio optimization enables the MST200 to preserve the integrity of applications over long distances.

TRAFFIC PRIORITIZATION AND QUALITY OF SERVICE

As part of the AirMesh wireless network, the MST200 enforces prioritization and quality of service (QoS) for latency-sensitive video and voice traffic. When multiple data streams enter the AirMesh network, the MST200 can automatically identify and tag specific latency-sensitive traffic to guarantee priority treatment across the mesh.

VIDEO OPTIMIZATION TECHNOLOGY

The MST200 also ensures the delivery HD-quality video from surveillance cameras, monitors and recording systems using Active Video Transport™ (AVT™) technology. Inherent in the Aruba MeshOS, AVT uses deep packet-inspection, MAC protocol optimization, in-network retransmission protocol and adaptive video jitter removal to provide enhanced video at up to 30 frames per second across the distributed wireless mesh.

APPLICATION

- Single radio outdoor wireless mesh access router

OPERATING MODE

- 802.11a/n mesh router for backhaul

RADIOS

- Single 5-GHz radio
- Radio implements 2x2 MIMO with two spatial streams, providing up to 300 Mbps data rate
- Maximum aggregate transmit power per radio: up to 25 dBm
- Dual receiver chain maximal ratio combining (MRC) for improved receiver performance

RF MANAGEMENT

- RF interference detection and avoidance

WIRELESS RADIO SPECIFICATIONS

- AP type: outdoor, single radio, 802.11a/n 5 GHz
- Supported frequency bands (country-specific restrictions apply)
 - 5.470 to 5.725 GHz
 - 5.725 to 5.850 GHz

- Available channels: Dependent on configured regulatory domain
- Maximum transmit power: 25 dBm (325 mW) limited by local regulatory requirements
- Supported radio technologies:
 - 802.11a/n: Orthogonal frequency division multiplexing (OFDM)
 - 802.11n: 2x2 MIMO with two spatial streams
- Supported modulation types:
 - 802.11a/n: BPSK, QPSK, 16-QAM, 64-QAM
- Association Rates
 - 802.11a: 6, 9, 12, 18, 24, 36, 48, 54
 - 802.11n: MCS0 – MCS15 (6.5 Mbps to 300 Mbps)
 - 802.11n high-throughput (HT) support: HT 20/40
 - 802.11n packet aggregation: A-MPDU, A-MSDU

ANTENNA

- Built in antenna
- Frequency range and max gain:
 - 5.470 to 5.700 GHz: >11.5 dBi
 - 5.700 to 5.900 GHz: 13 dBi
- Beamwidth:
 - E-plane: 13 degrees
 - H-plane: 55 degrees

ARUBA MESHOS

Aruba MeshOS is a feature-rich operating system that is used across all MSR wireless mesh routers

ROUTING FEATURES

- Adaptive Wireless Routing (AWR)
 - Layer 3 optimal route selection
 - Fast convergence and failover
 - Multiple concurrent gateways
- OSPF enables integration with existing routing topologies

NETWORKING

- NAT/PAT
- DHCP server, relay, client
- 4,000 VLANs
- Support for HTTP, HTTPS, SSH, Telnet, SNMP, NTP and ICMP

SECURITY

- End-to-end WPA/WPA2, TKIP (128 bit), PSK, AES (128 bit)
- Authentication: 802.1X (RADIUS), EAP methods
- MAC and IP address filtering
- Access Control List (ACL)
- Digital certificates

TRAFFIC MANAGEMENT

- Wi-Fi Multimedia (WMM), 802.11e
- IEEE 802.1p prioritization
- DSCP/DiffServ
- Bandwidth control

RF MANAGEMENT

- Automatic channel selection
- RF interference detection and avoidance
- 16 BSSIDs
- Adaptive baud rate control

ADVANCED FEATURES

- Virtual Private LAN over Mesh (VPLN) provides native Layer 2 over Layer 3 interface to external networks
- Active Video Transport (AVT) technology performs deep packet inspection, adaptive jitter removal and corrects transmission packet loss
- MobileMatrix technology allows users to roam between mesh routers while maintaining their application sessions

POWER

- Power
 - 802.3af PoE input (MST2HP)
 - 100-240 VAC 50/60 Hz (MST2HAC)
 - AC unit support 802.3at power out on ethernet port
- Power consumption: 12.5 watts max (excludes power consumed by any PoE device connected to and powered by the MST200 AC versions)

INTERFACES

- Network:
 - 1 x 10/100/1000BASE-T Ethernet (RJ45), auto-sensing link speed and MDI/MDX
- Power:
 - 1 x AC power connector (MST2HAC model only)
- Other:
 - 1 x USB console interface

MOUNTING

- Mounting kit:
 - Pole/mast mounting
 - Wall mounting

MECHANICAL

- Dimensions/weight (unit)
 - 255 mm x 180 mm x 82 mm (10" x 7" x 3.3")
 - 1.8 kg (4.0 lb)
- Dimensions/weight (shipping)
 - 425 mm x 335 mm x 225 mm (16.7" x 13.2" x 8.8")
 - 4.5 kg (9.9 lb)

ENVIRONMENTAL

- Operating:
 - Temperature: -40° C to 60° C (-40° F to 140° F) for PoE powered models; -40° C to 60° C (-40° F to 140° F) for AC powered models
 - Humidity: 5% to 95% non-condensing
- Storage and transportation temperature range:
 - -40° C to 70° C (-40° F to 158° F)
- Weather rating: IP66
- Wind survivability: Up to 165 mph
- Shock and vibration: ETSI 300-19-2-4 spec T41.E class 4M3
- Transportation: ISTA 2A

REGULATORY

- Regulatory Model Numbers
 - MST200 AC Powered: MST2H13N1
 - MST200 PoE Powered: MST2H13N0
- Safety
 - EN 60950-1
 - IEC60950-1
 - UL 60950-1
 - CAN/CSA-C22.2 No.60950-1
 - ANSI/IEEE C62.41
 - UL1449-2
- EMC
 - EN310 489
 - EN55022
 - EN61000
 - FCC Part 15
 - RSS-Gen

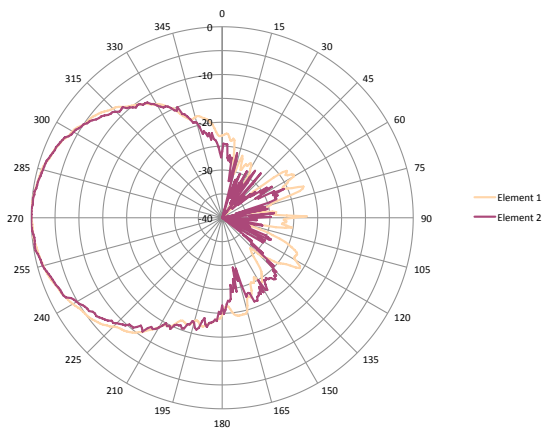
- RF
 - CFR47 FCC Part 15
 - RSS-210
 - EN 300 328
 - EN 301 893
- Certification
 - FCC
 - IC
 - CE
 - CB
 - cTUVus
 - RoHS
 - SRRC (China)

WARRANTY

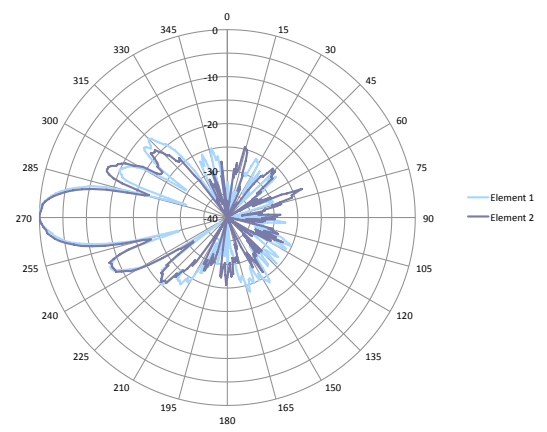
- 1 year parts/labor

ANTENNA PATTERN PLOTS (NORMALISED)

5.500 GHz

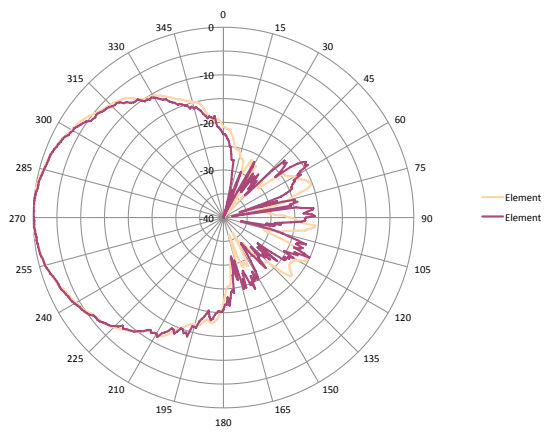


H-plane

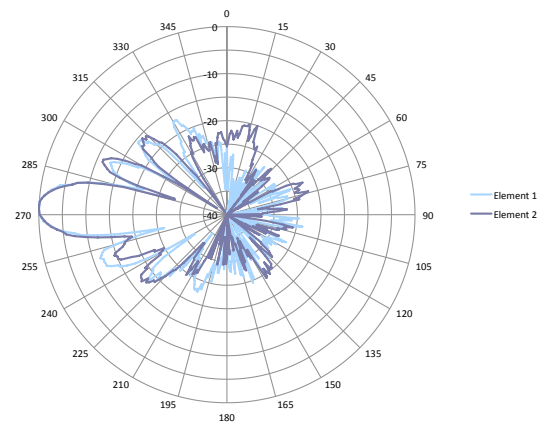


E-plane

5.875 GHz



H-plane



E-plane

ORDERING INFORMATION

Part Number	Description
MST2HP-US (U.S. only) MST2HP-JP (Japan only) MST2HP (rest of world)	<ul style="list-style-type: none"> • MST200 Wireless Mesh Access Router • Single 802.11a/n 320 mW radio (5 GHz) • 10/100/1000BASE-T Ethernet interface (RJ45) • Power input via (802.3af PoE) Ethernet interface
MST2HAC-US (U.S. only) MST2HAC-JP (Japan only) MST2HAC (rest of world)	<ul style="list-style-type: none"> • MST200 Wireless Mesh Access Router • Single 802.11a/n 320 mW radio (5 GHz) • 10/100/1000BASE-T Ethernet interface (RJ45) with 802.3at capability • 100-240Vac power input



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DATA SHEET

AIRMESH MSR2000 OUTDOOR WIRELESS MESH ROUTER

Delivers High-Performance Wireless Mesh Routing

The Aruba® AirMesh MSR2000 delivers high-performance wireless mesh routing to outdoor environments where wired connectivity is impractical or unavailable.

Ruggedized and hardened to withstand extreme environmental conditions, the MSR2000 is ideal for deployment in metropolitan and industrial areas, oilfields, mines, and shipping ports.

A multi-radio, multi-frequency architecture and adaptive Layer 3 routing using the Aruba MeshOS™ operating system make the MSR2000 unique. Together, they provide unparalleled capacity, reliability, low latency and seamless handoffs for voice, HD-quality video and other real-time applications.

FLEXIBLE, HIGH-CAPACITY ARCHITECTURE

The MSR2000 consists of two independent 802.11n radios for flexible outdoor wireless mesh deployments using the 2.4-GHz, 5-GHz and 4.9-GHz band.

Each radio may be configured to operate as a Wi-Fi access point (AP) or as a point-to-point, point-to-multipoint and full mesh backhaul. This dual-radio architecture separates client access and mesh backbone data while optimizing radio resources for both types of traffic to ensure high throughput and low latency.

INTELLIGENT WIRELESS MESH ROUTING

Integrated with Aruba MeshOS, Adaptive Wireless Routing™ (AWR™) technology automatically optimizes traffic routes between wireless mesh routers and creates a truly adaptive mesh infrastructure.

With AWR, the mesh infrastructure adjusts dynamically to traffic levels and RF signal strength to ensure high availability and optimal performance across multiple network hops.



Aruba’s MobileMatrix™, another key MeshOS Layer 3 technology, allows Wi-Fi clients to move between wireless mesh routers in less than 50 milliseconds, maintaining a seamless connection for latency-sensitive applications, such as video and voice.

HD-QUALITY VIDEO

For HD-quality video from mobile and fixed surveillance cameras, monitors and recording systems, the Active Video Transport™ (AVT™) technology in MeshOS provides traffic management and load balancing across the mesh.

AVT uses deep packet inspection, MAC protocol optimization, in-network retransmission protocol and adaptive video jitter removal to deliver enhanced video at up to 30 frames per second.

REDUCED CAPITAL AND OPERATING COSTS

In addition to reducing capital and operating expenses by simplifying deployment, the MSR2000 eliminates the high cost of installing copper or fiber-optic cabling, as well as monthly fees for leased lines, digital subscriber line (DSL) and metro Ethernet services.

APPLICATION

- Dual-radio outdoor wireless mesh router designed for high-performance, latency-sensitive applications

OPERATING MODE

- Each radio may be configured to operate in the following modes:
 - 802.11 a/b/g/n access point for client access
 - 802.11 a/b/g/n mesh router for backhaul

RADIOS

- Two multifunction radios capable of 2.4-GHz, 5-GHz or 4.9-GHz operation
- Radios implement 2x2 MIMO with two spatial streams, providing up to 300 Mbps data rate per radio
- Dual receiver chain maximal ratio combining (MRC) for improved receiver performance

WIRELESS RADIO SPECIFICATIONS

- AP Type: outdoor, two radio, dual band plus 4.9-GHz public safety band
- Supported frequency bands (country-specific restrictions apply)
 - 2.400 to 2.483 GHz
 - 4.900 to 5.100 GHz
 - 5.150 to 5.250 GHz
 - 5.250 to 5.350 GHz
 - 5.470 to 5.725 GHz
 - 5.725 to 5.850 GHz
- Available channels: Dependent on configured regulatory domain
- Maximum transmit power: 25 dBm (325 mW) limited by local regulatory requirements
- Supported radio technologies:
- Supported modulation types:
- Association Rates

ANTENNA

- Four N-type interfaces for external antenna support
- Feeder cable may be used for external antenna deployments

ARUBA MESHOS

Aruba MeshOS is a feature-rich operating system that is used across all MSR wireless mesh routers

Routing Features

- Adaptive Wireless Routing (AWR)
- Fast convergence and failover
- OSPF enables integration with existing routing topologies

Networking

- NAT/PAT
- DHCP server, relay, client
- 4,000 VLANs
- Support for HTTP, HTTPS, SSH, Telnet, SNMP, NTP and ICMP

Security

- End-to-end WPA/WPA2, TKIP (128 bit), PSK, AES (128 bit)
- Authentication: 802.1X (RADIUS), EAP methods
- MAC and IP address filtering
- Access Control List (ACL)
- Digital certificates

Traffic Management

- Wi-Fi Multimedia (WMM), 802.11e
- IEEE 802.1p prioritization
- DSCP/DiffServ
- Bandwidth control

RF Management

- Automatic channel selection
- RF interference detection and avoidance
- 16 BSSIDs
- Adaptive baud rate control

ADVANCED FEATURES

- Virtual Private LAN over Mesh (VPLN) provides native Layer 2 over Layer 3 interface to external networks
- Active Video Transport (AVT) technology performs deep packet inspection, adaptive jitter removal and corrects transmission packet loss
- MobileMatrix technology allows users to roam between mesh routers while maintaining their application sessions

POWER

- Power consumption: 15 watts

INTERFACES

- One 10/100/1000BASE-T Ethernet interfaces (RJ45)
- 802.3af PoE (MSR2KAC)
- USB console interface
- Four N-type antenna connectors

MOUNTING

- Mounting kit

MECHANICAL

- Dimensions: 225 mm x 225 mm x 105 mm (8.9" x 8.9" x 4.1"), excluding connectors
- Weight (MSR2KP): 3.5 kg (7.7 lb)
- Weight (MSR2KAC): 4.25 kg (9.4 lb)

ENVIRONMENTAL

- Operating:
- Storage and transportation temperature range: -30° C to 70° C (-22° F to 158° F)
- Weather rating: IP66
- Wind survivability: Up to 165 mph
- Shock and vibration: ETSI 300-19-2-4 spec T41.E class 4M3
- Transportation: ISTA 2A

REGULATORY

- Regulatory Model Numbers
 - MSR2000 PoE Powered: MSR2K23N0
 - MSR2000 AC Powered: MSR2K23N1
- Safety
- EMC
- RF
- Certification
 - FCC
 - IC
 - CE
 - CB
 - cTUVus
 - RoHS
 - SRRC (China)

CERTIFICATIONS

- Wi-Fi certified: 802.11a/b/g/n

RF PERFORMANCE TABLE				
	Maximum TX power per active TX chain (dBm)	RX sensitivity (dBm)	Maximum TX power per active TX chain (dBm)	RX sensitivity (dBm)
	2.4 GHz		5 GHz	
802.11b				
1 Mbps	20	-96	-	-
2 Mbps	20	-96	-	-
5.5 Mbps	20	-94	-	-
11 Mbps	20	-93	-	-
802.11a/g				
6 Mbps	20	-96	22	-97
9 Mbps	20	-96	22	-96
12 Mbps	20	-96	22	-96
18 Mbps	20	-95	22	-94
24 Mbps	19	-92	22	-88
36 Mbps	18	-89	20	-86
48 Mbps	17	-85	19	-82
54 Mbps	17	-83	18	-80
802.11n HT20				
MCS0	22	-94	21	-97
MCS1	22	-93	20	-94
MCS2	22	-92	19	-91
MCS3	22	-89	18	-87
MCS4	21	-85	17	-86
MCS5	20	-81	16	-81
MCS6	19	-80	15	-79
MCS7	18	-78	15	-77
MCS8	22	-94	21	-97
MCS9	22	-93	20	-94
MCS10	22	-92	19	-91
MCS11	22	-89	18	-87
MCS12	21	-85	17	-86
MCS13	20	-81	16	-81
MCS14	19	-80	15	-79
MCS15	18	-78	15	-77

RF PERFORMANCE TABLE				
	Maximum TX power per active TX chain (dBm)	RX sensitivity (dBm)	Maximum TX power per active TX chain (dBm)	RX sensitivity (dBm)
	2.4 GHz		5 GHz	
802.11n HT40				
MCS0	21	-92	19	-92
MCS1	21	-91	19	-90
MCS2	21	-89	18	-88
MCS3	20	-86	17	-85
MCS4	19	-83	16	-83
MCS5	18	-79	15	-79
MCS6	18	-77	14	-77
MCS7	17	-75	14	-73
MCS8	21	-92	19	-92
MCS9	21	-91	19	-90
MCS10	21	-89	18	-88
MCS11	20	-86	17	-85
MCS12	19	-83	16	-83
MCS13	18	-79	15	-79
MCS14	18	-77	14	-77
MCS15	17	-75	14	-73

Maximum capability of the hardware provided. Maximum transmit power will be limited by local regulatory settings.

ORDERING INFORMATION

Part Number	Description
MSR2KP-US (U.S. only) MSR2KP-JP (Japan only) MSR2KP-IL (Israel only) MSR2KP (rest of world)	<ul style="list-style-type: none"> • Aruba MSR2000 Outdoor Wireless Mesh Router • Two 802.11a/b/g/n 320 mW radios (2.4 GHz, 5 GHz, 4.9 GHz) • Power input via 802.3at (PoE+) Ethernet interface • One mounting kit with sun shield
MSR2KAC-US (U.S. only) MSR2KAC-JP (Japan only) MSR2KAC-IL (Israel only) MSR2KAC (rest of world)	<ul style="list-style-type: none"> • Aruba MSR2000 Outdoor Wireless Mesh Router • Two 802.11a/b/g/n 320 mW radios (2.4 GHz, 5 GHz, 4.9 GHz) • 100-240 VAC power input • 10/100/1000BASE-T Ethernet interface with 802.3af PoE power sourcing capability • One mounting kit with sun shield
802.11n HT40	
AINS2KKIT-00	MSR2K installation kit
ACONGESTD-00	Indoor USB console cable (1.5m)
PD-9001G-AC	PoE power injector, 802.3 at 30W
PD-9001GO	Outdoor single port GbE 802.3at POE Midspan Injector
CKIT-RJ45-P	Spare: weatherproof connector kit for (plastic) RJ45 connector (MSR2KP)
CBL-USB-P	Weatherproof USB cable assembly (5m) for plastic USB interface (MSR2KP)
ANT-2x2-STAGE	Kit of two indoor staging antennas



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DATA SHEET

AIRMESH MSR4000 OUTDOOR WIRELESS MESH ROUTER

Delivers High-Performance Wireless Mesh Routing

The Aruba® AirMesh MSR4000 delivers high-performance wireless mesh routing with the high capacity of the wired enterprise network infrastructure to outdoor environments.



Ruggedized and hardened to withstand extreme environmental conditions, the MSR4000 is ideal for deployment in metropolitan and industrial areas, oilfields, mines, and shipping ports.

A multi-radio, multi-frequency architecture and adaptive Layer 3 routing using the Aruba MeshOS™ operating system make the MSR4000 unique. Together, they provide unparalleled capacity, reliability, low latency and seamless handoffs for voice, HD-quality video and other real-time applications across long-distance outdoor wireless mesh networks.

FLEXIBLE, HIGH-CAPACITY ARCHITECTURE

The MSR4000 consists of four independent 802.11a/b/g/n radios for flexible outdoor wireless mesh deployments using the 2.4-GHz, 5-GHz and 4.9-GHz band. Each radio is capable of providing a maximum aggregate transmit power of 25 dBm and a data rate of up to 300 Mbps.

Each radio may be configured to operate as a Wi-Fi access point (AP) or as a point-to-point, point-to-multipoint or full mesh backhaul. A quad-radio architecture separates client access and mesh backbone data while optimizing radio resources for both types of traffic to ensure high throughput and low latency.

INTELLIGENT WIRELESS MESH ROUTING

Integrated with Aruba MeshOS, Adaptive Wireless Routing™ (AWR™) technology automatically optimizes traffic routes between wireless mesh routers and creates a truly adaptive mesh infrastructure.

With AWR, the mesh infrastructure adjusts dynamically to traffic levels and RF signal strength to ensure high availability and optimal performance across multiple network hops.

Aruba's MobileMatrix™, another key MeshOS Layer 3 technology, allows Wi-Fi clients to move between wireless mesh routers in less than 50 milliseconds, maintaining a seamless connection for latency-sensitive applications, such as video and voice.

HD-QUALITY VIDEO

For HD-quality video from mobile and fixed surveillance cameras, monitors and recording systems, the Active Video Transport™ (AVT™) technology in MeshOS provides traffic management and load balancing across the mesh.

AVT uses deep packet inspection, MAC protocol optimization, in-network retransmission protocol and adaptive video jitter removal to deliver enhanced video at up to 30 frames per second.

REDUCED CAPITAL AND OPERATING COSTS

In addition to reducing capital and operating expenses by simplifying deployment, the MSR4000 eliminates the high cost of installing copper or fiber-optic cabling, as well as monthly fees for leased lines, digital subscriber line (DSL) and metro Ethernet services.

APPLICATION

- Four-radio outdoor wireless mesh router designed for high-performance, latency-sensitive applications

NETWORK MANAGEMENT

- Managed via CLI, Web GUI, MeshConfig or AirWave* (*available second half of 2011)

OPERATING MODE

- Each radio may be configured to operate in the following modes:
 - 802.11a/b/g/n access point for client access
 - 802.11a/b/g/n mesh router for backhaul

RADIOS

- Four multifunction radios capable of 2.4-GHz, 5-GHz or 4.9-GHz operation
- Radios implement 2x2 MIMO with two spatial streams, providing up to 300 Mbps data rate per radio
- Dual receiver chain maximal ratio combining (MRC) for improved receiver performance

WIRELESS RADIO SPECIFICATIONS

- AP type: outdoor, four radio, dual band plus 4.9-GHz public safety band
- Supported frequency bands (country-specific restrictions apply)
 - 2.400 to 2.483 GHz
 - 4.900 to 5.100 GHz
 - 5.150 to 5.250 GHz
 - 5.250 to 5.350 GHz
 - 5.470 to 5.725 GHz
 - 5.725 to 5.850 GHz
- Maximum aggregate transmit power per radio: Up to 25 dBm
- Available channels: Dependent on configured regulatory domain
- Maximum transmit power: 25 dBm (325 mW) limited by local regulatory requirements
- Supported radio technologies:
 - 802.11b: Direct-sequence spread-spectrum (DSSS)
 - 802.11a/g/n: Orthogonal frequency division multiplexing (OFDM)
 - 802.11n: 2x2 MIMO with two spatial streams
- Supported modulation types:
 - 802.11b: BPSK, QPSK, CCK
 - 802.11a/g/n: BPSK, QPSK, 16-QAM, 64-QAM

- Association Rates
 - 802.11b: 1, 2, 5.5, 11
 - 802.11a/g: 6, 9, 12, 18, 24, 36, 48, 54
 - 802.11n: MCS0 - MCS15 (6.5 Mbps to 300 Mbps)
 - 802.11n high-throughput (HT) support: HT 20/40
 - 802.11n packet aggregation: A-MPDU, A-MSDU

ANTENNA

- Eight N-type (female) interfaces for external antenna support
- Feeder cable may be used for external antenna deployments

ARUBA MESHOS

Aruba MeshOS is a feature-rich operating system that is used across all MSR wireless mesh routers

Routing Features

- Adaptive Wireless Routing (AWR)
 - Layer 3 optimal route selection
 - Fast convergence and failover
 - Multiple concurrent gateways
- OSPF enables integration with existing routing topologies

Networking

- NAT/PAT
- DHCP server, relay, client
- 4,000 VLANs
- Support for HTTP, HTTPS, SSH, Telnet, SNMP, NTP and ICMP

Security

- End-to-end WPA/WPA2, TKIP (128 bit), PSK, AES (128 bit)
- Authentication: 802.1X (RADIUS), EAP methods
- MAC and IP address filtering
- Access Control List (ACL)
- Digital certificates

Traffic Management

- Wi-Fi Multimedia (WMM), 802.11e
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- DSCP/DiffServ
- Bandwidth control

RF Management

- Automatic channel selection
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ADVANCED FEATURES

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- Active Video Transport (AVT) technology performs deep packet inspection, adaptive jitter removal and corrects transmission packet loss
- MobileMatrix technology allows users to roam between mesh routers while maintaining their application sessions

POWER

- Power
 - 100~240 VAC 50/60 Hz (MSR4000 AC models)
 - High power PoE (60 watts) input required (MSR4000 PoE powered models)
- Power consumption: 36 watts max (excludes power consumed by any PoE device connected to and powered by the MSR4000 AC versions)

INTERFACES

- 10/100/1000BASE-T Ethernet network interface (RJ45)
- 802.3af PoE-PSE power output on Ethernet interface (on AC models only)
- USB console interface
- Eight N-type antenna connectors

MOUNTING

- Mounting kit:
 - Mast mounting
 - Wall mounting
 - Solar shield included

MECHANICAL

- Dimensions:
 - Unit: 325mm x 290mm x 135mm (13" x 11.5" x 5")
 - Shipping box: 415mm x 352mm x 428mm (16.3" x 13.9" x 16.9")
- Weight (MSR4KP):
 - Unit: 5.5kg (12.1lb)
 - Shipping box: 11.75kg (25.9lb)
- Weight (MSR4KAC):
 - Unit: 6.5kg (14.3lb)
 - Shipping box: 12.75kg (28.1lb)

ENVIRONMENTAL

- Operating:
 - Temperature: -30° C to 60° C (-22° F to 140° F) for PoE powered model; -40° C to 55° C (-40° F to 131° F) for AC powered model
- Storage and transportation temperature range: -30° C to 70° C (-22° F to 158° F)
- Weather rating: IP66
- Wind survivability: Up to 165 mph
- Shock and vibration: ETSI 300-19-2-4 spec T41.E class 4M3
- Transportation: ISTA 2A

REGULATORY

- Regulatory Model Numbers
 - MSR4000 PoE Powered: MSR4K43N0
 - MSR4000 AC Powered: MSR4K43N3
- FCC/Industry of Canada
- CE Marked
- R&TTE Directive 1995/5/EC
- Low Voltage Directive 72/23/EEC
- EN 300 328
- EN 301 489
- EN 301 893
- UL/IEC/EN 60950
- CB Scheme Safety, cTUVus
- Japan MIC/VCCI
- Korea KCC
- Brazil ANATEL
- Mexico NOM/COFETEL
- China SRRC/CCC
- IEC 60529 IP66, NEMA 4X
- AS/NZS 4260, 4771, 3548

CERTIFICATIONS

- Wi-Fi certified: 802.11a/b/g/n

WARRANTY

- 1 year parts/labor

ORDERING INFORMATION

Part Number	Description
MSR4KP	<ul style="list-style-type: none">• Aruba MSR4000 Outdoor Wireless Mesh Router• Four 802.11a/b/g/n 320 mW radios (2.4 GHz, 5 GHz, 4.9 GHz)• 10/100/1000BASE-T Ethernet interface (RJ45)• Power input via (high-power PoE) Ethernet interface• One mounting kit with sun shield• New boot loader
MSR4KAC	<ul style="list-style-type: none">• Aruba MSR4000 Outdoor Wireless Mesh Router• Four 802.11a/b/g/n 320 mW radios (2.4 GHz, 5 GHz, 4.9 GHz)• AC power input• 10/100/1000BASE-T Ethernet interfaces (RJ45) with 802.3af PoE power sourcing capability• One mounting kit with sun shield• New boot loader



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