A6 | Scalable 6 GHz PTMP, Built for Modern Networks

Unlicensed 8x8 Beamforming Access Point Radio

The Mimosa A6 is a carrier-grade 6 GHz point-to-multipoint access point delivering up to 4.5 Gbps sector capacity. Designed for scalable broadband deployments, it combines 8x8 beamforming, OFDMA scheduling, and GPS synchronization to enable high client density, low latency, and consistent performance. With access to wider 160 MHz channels in the cleaner 6 GHz band, the A6 delivers fiber-like speeds with the flexibility of wireless.

AFC-Ready for U.S. Deployments

Supports Mimosa's A6 + C6, C6x, and C6x Lite Edition clients for compliant 5 GHz and 6 GHz operation.

High-Capacity Sector Performance

Up to 4.5 Gbps per sector with 160 MHz channels, delivering gigabit-class subscriber experiences.

Cleaner Spectrum, Better Reliability

Operates in the less congested 6 GHz band which offers reduced interference for more consistent performance.

Advanced PTMP Efficiency

8x8 MU-MIMO and beamforming enable higher client density and improved spectral efficiency.

Network-Wide Synchronization

GPS time-sync enables scalable deployments by improving frequency reuse and reducing self-interference.

Built for Long-Term Deployment

Carrier-grade design with over the air software upgrades ensures adaptability as networks evolve.

Ideal Applications

Fixed Wireless Access (FWA)

Deliver broadband to residential and business subscribers with scalable PTMP architecture.

Network Densification

Increase network capacity and coverage in growing service areas with high-efficiency sector deployments.

Hybrid-Fiber + Wireless Networks

Complement fiber infrastructure with flexible wireless access at the network edge.

Rural Broadband Expansion

Extend high-speed connectivity to underserved areas without the high cost of deploying fiber.

Urban and Suburban Deployments

Operate in challenging radio environments using advanced interference mitigation with beamforming.

Learn more at: mimosa.co/products/a6

PERFORMANCE

Max Throughput:	4.53 Gbps IP aggregate UL/DL
Wireless Protocols:	WiFi Interop; TDMA
Client Capacity:	100* (*client capacity will vary)

RADIO

MIMO & Modulation:	8x8 MU-MIMO; OFDMA (future release), BPSK-1024 QAM
Bandwidth:	Single or dual1 20/40/80/160 MHz channels
Frequency Range:	PTMP: 5150–6425 MHz (restricted by country of operation)
Max Output Power:	24 dBm Restricted by country, mode or frequency of operation
Rx Sensitivity: @ 20 MHz (MCS 0)	-87 dBm @ 160 MHz | -90 dBm @ 80 MHz | -93 dBm @ 40 MHz -96 dBM @ 20 MHz

POWER

Max Power Consumption:	40 W
System Power Method:	PoE port, or via the separate DC port
PoE Power Supply:	Passive, 48-56vdc @ 1200mA
System Lightning & ESD Protection:	6 kV

ANTENNA

Gain:	16 dBi
Beamwidth:	90o azimuth,10o elevation
Front-to-Back Ratio:	>30 dB
Cross-Pol Isolation:	>20 dB
Polarization:	Dual-linear XPIC

PHYSICAL

Dimensions:	Height: 490mm (19”) | Width: 295mm (11.6”) | Depth: 75mm (3”)
Weight:	3.95 kg (8.7 lbs)
Wind Survivability:	200 km/h (125 mph)
Enclosure Characteristics:	Outdoor UV-stabilized, engineered polymer with integrated metal mounting back
Wind Loading:	39 kg @ 160 km/h (86 lbs @ 100 mph)
Network Interface:	(1) GbE copper PoE, (2) 10 GbE SFP+ (optical)
Mounting:	Dual adjustable mounting brackets for 30 mm (1.18”) to 90 mm (3.54”) OD pipes (included)

ENVIRONMENTAL

Outdoor Ingress Protection Rating:	IP67
Operating Temperature:	-40°C to +55°C (-40°F to 131°F)
Operating Humidity:	5 to 100% condensing
Operating Altitude:	4,420 m (14,500') maximum
Shock and Vibration:	ETS 300-019-2-4 class 4M5

FEATURES

10 Gigabit Ethernet:	(2) SFP+ (optical), MM or SM
Management Services:	MMP support; Netconf (future support); SNMPv2c/v3; Syslog; HTTPS; HTML 5 based Web GUI; IPv4 and IPv6
Smart Spectrum Management:	Active scan monitors/logs ongoing RF interference across all channels; Dynamic auto-optimization of channel and bandwidth use
Security:	WPA3; AES; RADIUS; 802.1x authorization
QoS:	Supports Voice, Video, Best Effort and Background traffic classes. 4 user-configurable QoS levels for SRS (GPS Sync) (CBWFQ) - (future release); CoS Classifier, with user-configurable precedence
VLAN:	Per subscriber VLAN, Q-in-Q, Management VLAN, and per-client VLAN, Passthrough VLANs, VLAN filtering (ingress), Multicast VLAN forking, IGMP/MLD snooping and proxy, IPv6 DHCP Option-18/37, and IPv4 DHCP Option-82
Collocation Synchronization:	1PPS GPS TX/RX synchronization for collocated, co-channel radios; Adjustable up/downstream bandwidth ratio
GNSS Location:	GNSS-1 (GPS + GLONASS)
Part Number:	100-00113

REGULATORY AND COMPLIANCE

Approvals:	FCC Part 15.407; IC RSS210; CE (RED, EMCD, LVD, RoHS); ETSI 301 893/302 502
RoHS Compliance:	Yes
Safety:	EN 62638-1
FCC ID:	2ABZJ-100-00113

1. Actual client capacity may vary by conditions.
2. 6 GHz operation subject to country regulations

Mimosa Networks, a division of Radisys, is the global technology leader in wireless broadband solutions, enabling service providers to connect dense urban and hard-to-reach rural homes at a fraction of the cost of fiber. Mimosa Networks was acquired in 2023 by Radisys, the global leader in open telecom solutions.