# mimosa

# A6 | Carrier-Grade Connectivity Redefined

#### Unlicensed 8x8 Beamforming Point-to-Multipoint Radio

The A6 fixed wireless access point delivers up to 4.5 Gbps capacity, enhanced subscriber connectivity, and synchronized network scalability for unlicensed, outdoor, fixed wireless PTMP networks. Designed as a carrier-grade solution, the A6 supports continuous software upgrades, ensuring long-term value and adaptability. By leveraging expanded 160 MHz channels in the less congested 6 GHz band, the A6 provides fiber-like gigabit speeds to subscribers, making it a reliable and forward-looking choice for modern broadband deployments.



#### SCALABLE, LOW-NOISE 6 GHZ BAND

Previous OFDM technologies limited the scale of client deployments and the ability to deploy in dense, noisy areas. In PTMP client deployments, the C6x pairs together with new multi-user OFDMA scheduling and beamforming technologies on the A6 access point to enable subscriber scaling, advanced noise management, and access to the new low-noise

#### SUPERIOR TECHNOLOGY

Equipped with the latest technologies—such as 8x8 MU-MI-MO, 1024-QAM, noise-fighting beamforming, massively reduced resource unit size, low-latency, and network-wide GPS sync—the A6 sets new performance and scalability standards across the industry.

#### EXCELLENT PERFORMANCE AND VALUE

Leveraging the less congested 6 GHz spectrum, the A6 delivers gigabit+ subscriber speeds that are ideal for advanced rural broadband projects while offering the scalability to handle dense, urban NLOS (non-line-of-sight) deployments cost-effectively. With its cutting-edge features, the A6 strikes the perfect balance between performance and value, meeting the demands of modern broadband networks.

## PERFORMANCE

Max Throughput:	4.53 Gbps IP aggregate UL/DL
Wireless Protocols:	WiFi Interop; TDMA (future release)
Client Capacity :	100 <sup>1</sup>

#### RADIO

MIMO & Modulation:	8x8 MU-MIMO; OFDMA (future release), BPSK-1024QAM
Bandwidth:	Single or dual1 20/40/80/160 MHz channels
Frequency Range:	PTMP: 5150–6425 <sup>2</sup> MHz (restricted by country of operation)
Max Output Power:	24 dBm Restricted by country 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:	Includes dual adjustable mounting brackets for 30 mm (1.18") to 90 mm (3.54") OD pipes



#### ENVIRONMENTAL

	Outdoor	Ingress Protection Rating:	IP67
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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 (fu- ture release); 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 us- er-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
Collocation Synchronization:	1PPS GPS TX/RX synchronization for collocated co-channel radios; Adjust- able up/downstream bandwidth ratio
GPS Location:	GNSS-1 (GPS + GLONASS)
Part Number:	100-00113

### **REGULATORY AND COMPLIANCE**

Approvals:	ls: FCC Part 15.407; IC RSS210; CE (RED, EMCD, LVD, RoHS); ETSI 30 893/302 502	
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; not yet available in the U.S.

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.

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