

# A6 - Supercharged Access Point

Wi-Fi 6E-Based, 8x8, Beamforming, Point-to-Multipoint (PTMP)



- 5.150-6.425 GHz
- 6 Gbps
- IP67
- SRS
- 24 dBm
- 8x8 MU-MIMO
- 6 GHz AFC<sup>1</sup>

The A6 fixed wireless access point delivers massive 6 Gbps capacity, unbelievable subscriber capacity, and synchronized network scalability for unlicensed, outdoor, fixed wireless PTMP networks. The first future-proof solution delivering fiber fast gigabit speeds to subscribers via wireless, the A6 extends beyond the traditional 5 GHz band to take advantage of expanded 160 MHz channels in the new, low-noise 6 GHz band

### Scalable, Low-Noise 6 GHz Band

Previous OFDM-based fixed wireless solutions lacked subscriber scalability, requiring costly investment in too many AP sites, introducing massive interference in an already crowded 5 GHz band, with no noise mitigation capabilities.

### Superior Technology

Equipped with the latest technologies—such as 8x8 MU-MIMO, 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.

### Extreme Performance and Value

Pairing these incredible innovations with brand new, interference-free 6 GHz spectrum, the A6 can deliver gigabit+ subscriber speeds needed for advanced rural broadband projects, and the high-scalability to tackle the most dense, urban NLOS areas cost effectively.

## Technical Specifications

### Performance

- **Max Throughput:**  
6 Gbps IP aggregate UL/DL
- **Wireless Protocols:** WiFi  
Interop; TDMA (future release)

### Radio

- **MIMO & Modulation:**  
8x8 MU-MIMO; OFDMA (future release), BPSK-1024QAM
- **Bandwidth:**  
Single or dual<sup>1</sup> 20/40/80/160 MHz channels
- **Frequency Range:**  
5150–6425 MHz  
Restricted by country of operation
- **Max Output Power:** 24 dBm  
Restricted by country of operation
- **Rx Sensitivity:** @ 1024 QAM  
-47 dBm @ 160 MHz  
-50 dBm @ 80 MHz  
-53 dBm @ 40 MHz  
-56 dBm @ 20 MHz

### Physical

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

### Antenna

- **Gain:** 16 dBi (24dBi with Beamforming)
- **Beamwidth** 90° azimuth, 10° elevation
- **Front-to-Back Ratio:** >30 dB
- **Cross-Polar Isolation:** >20 dB
- **Polarization:** Dual-linear XPIC

<sup>1</sup> Dual channel is an upcoming feature

### Power

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

### 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 (no service impact); Dynamic auto-optimization of channel and bandwidth use
- **Security:** WPA3; AES; RADIUS; 802.1x authorization
- **QoS:** Supports 4 user-configurable QoS levels for SRS (GPS Sync) (CBWFQ); 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; Adjustable up/downstream bandwidth ratio
- **GPS Location:**  
GNSS-1 (GPS + GLONASS)

### 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



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.