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
Wi-Fi 6E	OFDMA	6 GHz AFC[1]

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 Wi-Fi 6E Technology
Armed with the latest Wi-Fi 6E technologies, including 8x8 MU-MIMO, 1024-QAM, noise fighting beamforming, massively reduced resource unit size, low-latency OFDMA, and network wide GPS sync, the A6 resets nearly every performance and scalability bar in 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.

Need more information?
Get in touch with the Mimosa sales team by visiting
https://mimosa.co/contact-us

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, BPSK-1024QAM
- **Bandwidth:**
  Single or dual[1] 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

1 Dual channel is an upcoming feautre

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