

# Supercharged Point-to-Multipoint (PTMP)

# Wi-Fi 6E-Based, 8x8, Beamforming, A6 Access Point

The A6 fixed wireless access point delivers up to 7 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

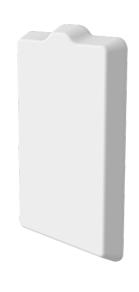
Previous OFDM-based fixed wireless solutions lacked subscriber scalability, requiring costly investment in too many AP sites, introducing massive interference in an already crowded 5 GHz band, with no noise mitigation capabilities.

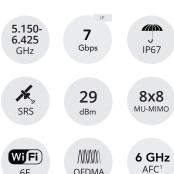
# Superior Wi-Fi 6E Technology

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.





# **Specifications**

#### **Performance**

• Max Throughput: 7 Gbps IP aggregate UL/DL (9608 Mbps PHY)

• Wireless Protocols: WiFi Interop; TDMA (future release)

#### Radio

• MIMO & Modulation: 8x8 MU-MIMO; OFDMA, BPSK-1024QAM

• Bandwidth:

Single or dual 20/40/80/160 MHz channels

• Frequency Range: 5150-6425 MHz

Restricted by country of operation

• Max Output Power: 29 dBm • 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: Dual standard pole straps for 30 mm (1.18") to 90 mm (3.54") OD pipes

• Network Interface2: (1) GbE copper PoE, (2) 10 GbE SFP+ (optical)

### **Antenna**

• Gain: 24 dBi with adaptive beamforming • Beamwidth: 90° azimuth, 7° elevation

• Front-to-Back Ratio: >30 dB • Cross-Polar Isolation: >20 dB • Polarization: Dual-linear XPIC

#### **Power**

• Max Power Consumption: 40 W

• System Power Method: Outdoor PoE or DC

• System Lightning & ESD Protection: 6 kV

• PoE Power Supply:

Passive PoE compliant, 48-56 V (not 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) ports

• 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); Behavior Aggregate (BA) and CoS Classifier, with user-configurable precedence

• VLAN: Per subscriber VLAN, Q-in-Q, triple tagging; 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



Mimosa, a product division of Airspan, 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 was acquired in 2018 by Airspan Networks Holdings Inc. (NYSE American: MIMO), the award-winning, leading vendor of 5G software and hardware.



<sup>1</sup> Automatic Frequency Coordination database support via firmware update, once formally approved by the FCC

<sup>&</sup>lt;sup>2</sup> May be upgraded prior to launch for additional functionality