

# **Supercharged Access Point**

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

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.



MMM

OFDMA

6 GHz

AFC

Wi Fi



## **Specifications**

#### Performance

- Max Throughput: 7 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 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: Dual standard pole straps 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
- Beamwidth 90° azimuth, 10° 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: SFP+ (optical)
- 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
- Part Number: 100-00113-AS-1



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

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.

