



# Unparalleled Access

The Mimosa A5 access point delivers cutting-edge multipoint technology for service providers to affordably deliver the industry's first scalable gigabilit wireless broadband network.

### **Fiber Speed Access**

Capable of delivering the speed business users and consumers need at a fraction of the cost of delivering fiber to the premise.

### **Bigger and Faster**

With up to 1.5 Gbps of total capacity, the Mimosa A5 is the industry's fastest multipoint solution.

### Network Scalability Perfected

Unique integrated high precision GPS Sync technology allows every deployed device to be collaboratively synchronized across the network, allowing easy channel reuse to save spectrum network-wide.

## Working Above the Noise

Advanced Auto-Gain Control techniques automatically squelch out underlying interference with only 10 dB

operating margin required to deliver incredible client performance.

### Network-Wide Cloud Control

Mimosa Cloud makes deployment a breeze, interacting with devices network-wide to proactively assist the A5 to optimize network and subscriber experience for the best performance and capacity management.

## **Beautifully Compact**

Delivering leading performance in a tiny form factor, the A5 makes suburban rooftop or urban installation a fast, easy and discrete solution.

## Total Efficiency

Using smart antenna beamforming and MU-MIMO technologies, the A5 delivers incredible spectrum efficiency, meaning more bandwidth for users and more users can join the network.

## **Technical Specifications**

#### Performance

- · Max Throughput: Up to 1.0 Gbps IP (1.7 Gbps PHV)
- · Client Capacity: 100 clients
- Wireless Protocols: WiFi Interop, Mimosa GPS Sync

#### Radio

- MIMO & Modulation: 4x4:4 MIMO OFDM up to 256-QAM
- Bandwidth\*: 20/40/80 MHz channels tunable in 5 MHz increments for GPS Sync; tunable in 20 MHz increments for WiFi Interop
- Frequency Range: 4900 6200 MHz restricted by country of operation ('new' US/FCC 5600-5650 support)
- · Max Output Power: 30 dBm
- · Sensitivity (MCS 0): -87 dBm @ 80 MHz, -90 dBm @ 40 MHz, -93 dBm @ 20 MHz

### Antenna

- Gain: A5-18: 18 dBi
- A5-14: 14 dBi
- Beamwidth (3 dB): 70° azimuth
- Electrical Downtilt: A5-18: 4° A5-14: none
- Front-to-Back Ratio: >30 dB
- Cross-Polar isolation: >20 dB or greater
- · Polarization: 4 Panels, Alt. Circular

### Physical

### Dimensions:

- Height 18 dBi: 668 mm (26.29") 14 dBi: 314 mm (12.36") Width - 142.44 mm (5.61")
- Weight: 18 dBi: 2.73 kg (6 lbs) 14 dBi: 1.75 kg (3.85 lbs)
- Enclosure Characteristics: Outdoor UVstabilized engineered polymer
- Wind Survivability: 200 km/h (125 mph)
  - Wind Loading: 18 dBi: 16.03 kg @ 160 km/h 35.34 lbs @ 100 mph 14 dBi: 7.72 kg @ 160 km/h 17.03 lbs @ 100 mph
- Mounting: Dual pole strap feed points integrated into metal base with integrated curvature for contact with mounting poles

#### Power

- Max Power Consumption: 25W
- System Power Method: 802.3 at compliant
- System Lightning & ESD Protection: 6 kV
- · PoE Power Supply: 802.3at and Passive POE \* 4.9 GHz uses 20 MHz channel widths (US only, regula-

#### tions vary by region) Mimosa Networks, Inc. • www.mimosa.co • @gomimosa

compliant, 48-56 V Power over Ethernet supply with IEC61000-4-5 surge protection

#### 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 & Vibration: ETS 300-019-2-4 class 4M5

#### Features

- Gigabit Ethernet: 10/100/1000-BASE-T
- MU MIMO: Device leverages directionality to transmit to multiple clients simultaneously
- **Synchronization:** GPS + GLONASS allows for network-wide sync and interference avoidance
- GPS Sync Mode: Optional TDMA protocol for increased network efficiency
- WiFi Interop Mode: Interoperates with WiFi compliant devices
- Network Processing: Advanced AP control for capacity and subscriber management
- Access Control Lists: Permit, deny and remark traffic flows
- Traffic Shaping: Per CPE UL/DL committed and maximum rate shaping
- Auto Everything: Automatic control of RF settings for optimal network performance
- Management Services: Mimosa cloud monitoring and management SNMPv2 & Syslog legacy monitoring HTTPS HTML 5 based Web UI 2.4 GHz 802.11b/g/n radio for local

management access

- Smart Spectrum Management: Active scan monitors/logs ongoing RF interference across channels (no service impact) Dynamic auto-optimization of channel and interference avoidance
- Security: WPA2 + Mimosa 802.1x RADIUS Future support of WPA2-Enterprise/HotSpot 2.0, Management VLAN support
- QoS: Supports 4 pre-configured QoS levels
- **GPS Location:** GNSS-1 (GPS + GLONASS)

#### Regulatory + Compliance

- Approvals: FCC Part 15.407 and Part 90Y, IC RSS210 and RSS111, CE, ETSI 301 893/302 502
- · RoHS Compliance: Yes
- Safety: UL/EC/EN/ 60950-1 + CSA-22.2

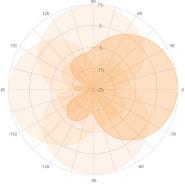


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Ouad Sector 360° Antenna



360° Antenna Top Down View



14 dBi Azimuth Antenna Plot