

Super Sector

A5c Point-to-Multipoint Access Point

4.9–6.4 GHz



With the fastest client speeds and great access point capacity, along with local and network-wide spectrum reuse, the connectorized Mimosa A5c delivers the highest possible scale for any unlicensed fixed wireless network. The A5c is well suited for long-range pole and tower multipoint applications, access point collocation (GPS Sync) and Municipal and Rural Licensed Public Safety multipoint (4.9 GHz).

Increased Capacity at Each Site

With integrated, high-precision GPS Sync technology, new A5c sectors can easily be added at existing Mimosa A5 and B5 sites and reuse the same channel. This saves valuable, scarce unlicensed spectrum resources when new A5c devices are installed “back-to-back” on the same tower or pole.

Network Scalability Perfected

Every deployed device is collaboratively synchronized across the network. This allows easy channel reuse to save valuable spectrum network wide. Connected to the Mimosa Cloud, deployment of the A5c is incredibly simple with network spectrum use and performance optimized across all of your deployed devices.

Ultra-High Client Capacity

TDMA techniques provide significant improvements when scaling the number of clients. By dynamically allocating upstream timeslots upon client request, network scale, spectrum efficiency and access point utilization are optimized to the highest degree possible.

Fiber Speeds

With client speeds capable of 500+ Mbps and access point capacity up to 1.0 Gbps (IP), the A5c delivers the speeds consumers and business users demand at a fraction of the cost of delivering fiber-to-the-premises.

Add Subscribers with Ease

Install, aim and go! We've eliminated manual installation and pre-provisioning complexity, so you can focus on adding subscribers quickly.

Technical Specifications

Performance

- **Max Throughput:** Up to 1.0 Gbps IP (1.7 Gbps PHY)
- **Client Capacity:** 100 clients (WiFi Interop); 44 clients (SRS)
- **Wireless Protocols:** WiFi Interop, Spectrum Reuse Synchronization (SRS)

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 to standard WiFi channels for WiFi Interop
- **Frequency Range:** GPS Sync: 4900–6400 MHz; WiFi Interop: 5170–5835 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

Power

- **Max Power Consumption:** 25 W
- **System Power Method:** 802.3at compliant
- **PoE Power Supply:** Passive POE compliant, 48-56 V Power over Ethernet supply with IEC61000-4-5 surge protection

Physical

- **Dimensions:** Height: 300 mm (11.81")
Width: 151 mm (5.94")
Depth: 85 mm (3.35")
- **Weight:** 1.75 kg (3.86 lbs)
- **Enclosure Characteristics:** Outdoor UV-stabilized engineered polymer with integrated mounting panel
- **Mounting:** Dual-pole strap mount and slip on mount for comparable antenna
- **Connector Type:** Female Type N (x4)

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') max
- **Shock & Vibration:** ETS 300-019-2-4 class 4M5

Features

- **Gigabit Ethernet:** 10/100/1000-BASE-T
- **Synchronization:** GPS+GLONASS allows for network-wide sync and interference avoidance
- **Collocation:** 1PPS GPS Tx/Rx synchronization for same tower collocation and channel reuse
- **Network Processing:** Advanced AP control for capacity and subscriber management
- **Management Services:** Mimosa Cloud monitoring and management; SNMPv2 & Syslog legacy monitoring; HTTPS, HTML 5-based Web UI (2.4 GHz WiFi management module no longer available as of December 2020)
- **Smart Spectrum Management:** Active scan monitors/logs ongoing RF interference across channels (no service impact); Dynamic auto-optimization of channel and bandwidth use
- **Security:** WPA2 PSK & Enterprise 802.1x; Radius provisioning, COA, DM; 128-bit AES with hardware acceleration
- **VLANs:** Per subscriber VLAN; Q-in-Q, triple tagging; Management VLAN
- **QoS:** Supports 4 pre-configured QoS levels
- **GPS Location:** GNSS1 (GPS + GLONASS)
- **Traffic Shaping:** Per CPE UL/DL commit and maximum rate shaping
- **Access Control List:** Permit, Deny and Remark Layer 2 and Layer 3 traffic flows

Regulatory + Compliance

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

**4.9 GHz uses 20 MHz channel widths



A5c Backplate



A5c Connectors

Mimosa Networks, a 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 Networks was acquired in 2018 by Airspan, the leading vendor of 4G/5G LTE small cells and backhaul technologies.