



Super Sector

With the fastest client speeds and great access point capacity, along with local and network-wide spectrum reuse, the 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.

Ultra High Client Capacity

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

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 Mimosa Cloud, deployment of the A5c is incredibly simple with network spectrum use and performance optimized across all of your deployed devices.

Fiber Speeds

With client speeds capable of 500 Mbps+ and access point capacity up to 1.5 Gbps, 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
- **Wireless Protocols:** WiFi Interop
Mimosa GPS Sync (TDMA)**

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 - 6200 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:** 25W
- **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 (12.40")
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') maximum
- **Shock & Vibration:** ETS 300-019-2-4 class 4M5

Features

- **Gigabit Ethernet:** 10/100/1000-BASE-T
- **Multi-User MIMO**:** Device leverages beamforming to transmit to multiple clients simultaneously
- **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 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 bandwidth use
- **Security:** WPA2 + Mimosa 802.1x RADIUS Management VLAN support
- **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

** Enabled in future software releases



A5c Backplate



A5c Connectors