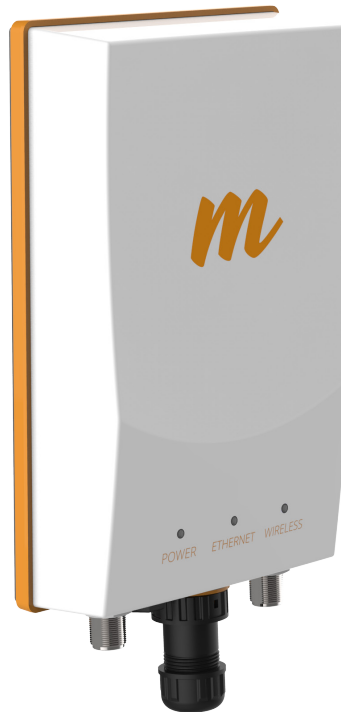


# Extreme Customization and Reliability

## B5c Point-to-Point Backhaul Radio

4.9–6.2 GHz



The Mimosa B5c is the industry's fastest connectorized unlicensed and public safety connectivity solution, allowing virtually any antenna to be used for long distance point-to-point backhaul. The B5c is ideal for long-range relay and tower links, and custom engineered collocation. It is also suitable for licensed Public Safety operation on the 4.9 GHz spectrum.

### Ultra Rugged

Carrier-grade IP67 design allows the B5c to withstand the harshest of environmental conditions.

### Double Reliability

Tames unlicensed spectrum interference via custom engineered multi-channel and auto-everything technology. As good as two smart links in one radio.

### Incredibly Fast and Flexible

Recognized as the fastest unlicensed backhaul in the industry. Extensive bandwidth control options, low latency, reserved bandwidth and GPS sync mode mean peak performance.

### Easily Add New Links

The B5c is spectrum friendly. Unique high-precision GPS sync technology reuses the same channel network wide. Keep adding more capacity to more sites and waste less spectrum.

### Monitor with Ease

Assessing link health and identifying potential problems has never been easier. Links are instantly monitored by our Mimosa Cloud service with rich data collection and analysis.

## Technical Specifications

### Performance

- **Max Throughput:**  
Up to 1.5 Gbps IP aggregate UL/DL (1.7 Gbps PHY)
- **Low Latency:**  
<1 ms in Auto Mode
- **Wireless Protocols:**  
TDMA, TDMA-FD

### Radio

- **MIMO & Modulation:**  
4x4:4 MIMO OFDM up to 256QAM
- **Bandwidth\*:**  
Single or Dual 20/40/80 MHz channels
- **Frequency Range:**  
4900–6200 MHz restricted by country of operation (new US/FCC 5600–5650 support)
- **Max Output Power:**  
30 dBm (2-stream)  
27 dBm (4-stream)
- **Sensitivity ( MCS 0 ):**  
-87 dBm @ 80 MHz  
-90 dBm @ 40 MHz  
-93 dBm @ 20 MHz

### Power

- **Max Power Consumption:**  
20 W
- **System Power Method:**  
48 V DC 802.3 at compliant power injectors
- **System Lightning & ESD Protection:**  
6 kV
- **PoE Power Supply:**  
Passive POE compliant, 48-56 V Power over Ethernet supply with IEC61000-4-5 surge protection

### Physical

- **Dimensions:**  
Height - 267 mm (10.5")  
Width - 158 mm (6.2")  
Depth - 74 mm (3")
- **Weight:** 1.6 kg (3.5 lbs)
- **Enclosure Characteristics:**  
Outdoor UV stabilized plastic  
Aluminum mounting panel
- **Wind Survivability:**  
200 km/h (125 mph)
- **Wind Loading:**  
9.89 kg @ 160 km/h (21.8 lbs @ 100 mph)
- **Mounting:**  
Dual standard pole straps for 30 mm (1.18") to 90 mm (3.54") OD pipes
- **Connector Type:**  
Female Type N (x2), intended for use with dual polarization antenna

### 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
- **Dual Link Operation:**  
2 independent dual-stream radios operating on non-contiguous frequencies; Automatic load balancing of traffic across 4 total MIMO streams with individual stream encoding up to 256 QAM
- **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 Antenna Alignment:**  
Hands-free dedicated 2.4 GHz Wi-Fi management radio alignment tool
- **Smart Spectrum Management:**  
Active scan monitors/logs ongoing RF interference across channels (no service impact); Dynamic auto-optimization of channel and bandwidth use
- **Security:**  
128-bit AES PSK with hardware acceleration
- **QoS:**  
Supports 4 pre-configured QoS levels
- **GPS Location:**  
GNSS-1 (GPS + GLONASS)
- **Collocation Synchronization:**  
1PPS GPS TX/RX synchronization for collocated co-channel radios  
Adjustable up/downstream bandwidth ratio

### 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

\* 4.9 GHz uses 20 MHz channel widths only (US only, regulations vary by region)

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.