Fast. Affordable. Easy.
B5-Lite Backhaul Radio

Switch to the award-winning Mimosa B5-Lite, the easiest, fastest, and most affordable wireless bridge kit on the market. This backhaul radio is ideal for connecting large properties, co-located office buildings, hospital buildings, or campuses. No fiber in your future? No problem—the B5-Lite is a great short range fiber-digging alternative. Public safety providers can also take advantage of the licensed 4.9 GHz safety band and easily deploy the B5-Lite for an immediate backhaul boost. The B5-Lite is a fantastic addition to any network. Make the change today and discover blazing backhaul.

Superior Performance
Our speeds will blow you away. With up to 700 Mbps (IP) and under 1 ms of latency, high performance has never been this affordable.

Monitor with Ease
Assessing link health and identifying potential problems is easy. Links are instantly monitored by our Mimosa Cloud service with rich data collection and analysis.

Rugged and Affordable
Extreme outdoor conditions have nothing on the B5-Lite. The B5-Lite handles huge fluctuations with incredible affordability.

Just Mount and Go
Connect quickly with our complete kit including super compact integrated antennas and wall mounts. Includes optional pole mounting kit.

Technical Specifications

Performance

- **Max Throughput:**
  700+ Mbps IP (833+ Mbps PHY)
- **Low Latency:**
  Configurable to 5+ ms
- **Wireless Protocols:**
  Auto-TDD/TDMA

Radio

- **MIMO and Modulation:**
  2x2:2 MIMO OFDM up to 256-QAM
- **Bandwidth†:**
  20/40/80 MHz channels tunable to
  5 MHz increments
- **Frequency Range:**
  4900-6000 MHz restricted by country
  of operation (*new* US/FCC
  5600-5650 support)
- **Max Output Power:**
  23 dBm
- **Sensitivity (MCS0):**
  -87 dBm @ 80 MHz
  -90 dBm @ 40 MHz
  -93 dBm @ 20 MHz

Antenna

- **Gain:** 20 dBi
- **Beamwidth (3 dB):**
  14° (azimuth and elevation)
- **Cross-Polar Isolation:** >20 dB
- **Polarization:** Dual 45°
  slant polarization

Power

- **Max Power Consumption:**
  15 W
- **System Power Method:**
  Passive PoE
- **PoE Power Supply:**
  Passive PoE compliant, 48-56 V
  Power over Ethernet supply

Physical

- **Dimensions:**
  Width: 153.31 mm (6.04")
  Diameter: 260.33 mm (10.25")
- **Weight:** 0.72 kg (1 lb, 9 oz)
- **Enclosure Characteristics:**
  Outdoor UV stablilized plastic

- **Wind Survivability:** 200 km/h (125 mph)
- **Wind Loading:** 39 kg @ 160 km/h
  (86 lbs @ 100 mph)
- **Mounting:** Single pole strap feed point
  integrated into plastic back plate with
  integrated curvature for contact with
  mounting poles. Azimuth and Elevation
  adjustability only provided via J-mount
  elevation adjustment and hose clamp
  loosened rotation on the pole.

Environmental

- **Outdoor Ingress Protection Rating:**
  IP55
- **Operating Temperature:**
  -40°C to +55°C (-40°F to 131°F)
- **Outdoor Humidity:** 5 to 100%
- **Operating Altitude:**
  4,420 m (14,501') maximum
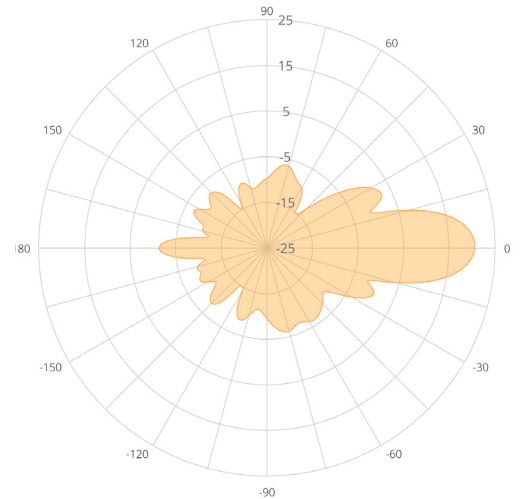- **Shock and Vibration:**
  ETS 300-019-2-4 class 4M5

Features

- **Gigabit Ethernet:**
  10/100/1000-BASE-T
- **Management Services:**
  Mimosa cloud monitoring and
  management; SNMPv2 & Syslog legacy
  monitoring; HTTPS; HTML 5 based Web UI
- **Smart Spectrum Management:**
  Active scan monitors/logs ongoing RF
  interference across channels with no
  service impact; Dynamic
  auto-optimization of channel
  and bandwidth use
- **Security:**
  WPA2 AES 128bit encryption PSK with
  hardware acceleration
- **QoS:**
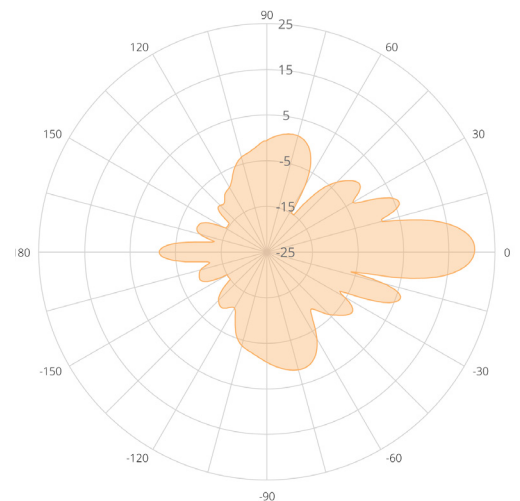 Supports 4 pre-configured QoS levels

Regulatory and 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 only

(US only, regulations vary by region)

B5-Lite Azimuth Polar Plot

B5-Lite Elevation Polar Plot

Mimosa Networks is a leading provider of 5G Fixed wireless solutions creating new competition in the industry to close the connectivity gap. Mimosa access, backhaul, and client solutions enable broadband service providers to connect dense urban and hard-to-reach rural homes at a fraction of the cost of fiber. Mimosa's technology allows unprecedented levels of efficiency, enabling scarce spectrum to be concurrently shared across an entire network. Founded in 2012, Mimosa is VC-funded and deployed in over 130 countries worldwide.

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