mimosa

Next Generation Broadband





B5-Lite Backhaul

Introducing the B5-Lite, your next low-cost, high-throughput backhaul radio. Using Mimosa's TDMA protocol and 802.11ac technology, this 2x2:2 radio is a great option for locations that do not require collocation.

Capable of 750+ Mbps throughput, this radio can serve less bandwidth hungry areas easily. Offering the same low latency as the B5 and a 20 dBi antenna, the B5-Lite strips away a few advanced B5 features to provide you with an alternative low-cost solution. The B5-Lite is a fantastic addition to any network.

Auto Everything



Automatically optimize bandwidth, frequency + power use

Broad Spectrum



4900-6000 MHz restricted by country of operation

Low Power



15 W max power consumption for solar deployments

Lightweight



.72 Kg without mounting bracket

Technical Specifications

Performance

- Max Throughput: 750+ Mbps
- · Low Latency: Configurable to 5ms+
- · Wireless Protocols: Auto-TDD/TDMA

Radio

- MIMO & 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 (MCS 0):
- -87 dBm @ 80 MHz
 -90 dBm @ 40 MHz
 -93 dBm @ 20 MHz

Antenna

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

Power

- Max Power Consumption: 15W
- 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:** Width: 153.31 mm Diameter: 260.33 mm
- Weight: 0.72 Kg
- Enclosure Characteristics: Outdoor UV stabilized 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:
- Operating Temperature: -40°C to +55°C (-40°F to 131°F)
- Operating Humidity: 5 to 100% condensing
- Operating Altitude: 4420 m (14500') maximum
- Shock & 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 (no service impact) Dynamic auto-optimization of channel and bandwidth use
- Security: WPA2 + Mimosa 802.1x Client
- QoS: Supports 4 pre-configured QoS levels

Regulatory + Compliance

- Approvals[‡]: FCC Part 15.407and Part 90Y, IC RS210, 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

‡ Anticipated by product shipment



B5-Lite Backhaul



B5-Lite Backhaul on J-Mount

