



# Gigabit Backhaul Made Easy

The Mimosa B5 backhaul radio is hands down the easiest to use and highest capacity unlicensed 5 GHz backhaul solution for short and mid-range link applications. Ideal for collocation applications, relay sites and building-to-building settings.

# Incredibly Fast. Incredibly 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.

### 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.

## Ultra Rugged

Carrier-grade IP67 design allows the B5 to withstand the harshest of environmental conditions.

# Just Mount and Go

The integrated high gain antenna and super easy quick mount lets you install in minutes, and accurately aim the B5 using the Mimosa smartphone aiming tool.

## Easily Add New Links

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.

# Double Reliability

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



# Technical Specifications

#### Performance

- Max Throughput: Up to 1.5 Gbps IP aggregate UL/DL (1.7 Gbps PHY)
- Low Latency: Configurable to 5ms+
- Wireless Protocols: TDMA, TDMA-FD, Auto-TDMA

#### Radio

- · MIMO & Modulation: 4x4:4 MIMO OFDM up to 2560AM
- Bandwidth: Single or Dual 20/40/80 MHz channels
- · Frequency Range: 5470-5850 MHz
- 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

#### Antenna

- · Beamwidth ( 3dB ): 8° (HPOL and VPOL)
- Elevation Adjust: ± 20° mechanical
- Front-to-Back Ratio: >30 dB
- Cross-Polar Isolation: >20 dB
- Polarization: Dual-Linear (horizontal & vertical)

### Power

- Max Power Consumption: 20W
- · 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: Diameter 442 mm (17.4") Depth - 362 mm (14.3") with bracket
- Weight: 4.9 kg (10.8 lbs) with bracket
- Enclosure Characteristics: Single enclosure with radome Outdoor UV stabilized plastic Painted steel bracket plate
- Wind Survivability: 200 km/h (125 mph)
- · Wind Loading: 39 kg @ 160 km/h (86 lbs @ 100 mph)
- Mounting: Pole mounting kit included for 30mm (1.18") to 90mm (3.54") OD pipes

### **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 noncontiguous 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



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
- GPS Location: GNSS-1 (GPS + GLONASS)
- Collocation Synchronization: 1PPS GPS TX/RX synchronization for collocated cochannel radios

Adjustable up/downstream bandwidth

### Regulatory + Compliance

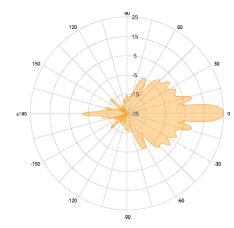
- Approvals: FCC Part 15.407, IC RSS210, CE, ETSI 301 893/302 502
- RoHS Compliance: Yes
- Safety: UL/EC/EN/ 60950-1 + CSA-22.2



B5 Backhaul



B5 - 6 Dish Collocation



**B5** Polar Plot



Mimosa Networks, Inc. · www.mimosa.co · @gomimosa

Tel: +66 2 792 2400 | Fax: +66 2 792 2499, +66 2 943 5771 | E-mail: sales@planetcomm.com

©2016 Mimosa Networks, Inc. All rights reserved. The Mimosa logo is a registered trademark of Mimosa Networks, Inc. in the United States. All other company names may be trade names or trademarks of their respective owners. 705-00004 RevB 4/16

