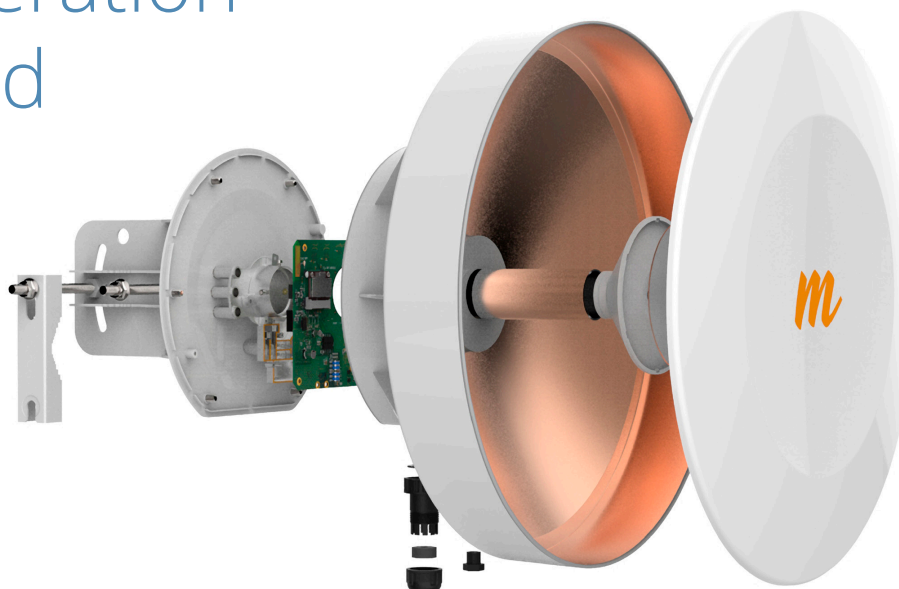




# Next Generation Broadband



## B5 Integrated Backhaul

The B5 Backhaul. Cutting edge 802.11ac + radical engineering come together to give you 1.7 Gbps PHY, 1 million PPS and the highest reliability backhaul on the market. And it's still light as a feather.



### Dual Link

Actively load balances across two different channels - noise or radar/DFS issues?  
We've got you covered



### Auto Everything

Automatically optimize bandwidth, frequency + power use



### Site Share

GPS sync for multiple collocated devices in one location for maximum spectrum re-use



### Hardware Reliability

IP67, lightning protected device + PoE, innovative heat sink design



### Lightweight

4.9 kg with bracket



### Low Power

20 W max power consumption for solar deployments

## Technical Specifications

### Performance

- **Max Throughput:** Up to 1.5 Gbps IP aggregate UL/DL (1.7 Gbps PHY)
- **Low Latency:** 2+ ms
- **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:** 5050-5875 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

### Antenna

- **Gain:** 25 dBi
- **Beamwidth ( 3dB ):** 8° ( Hpol and Vpol )
- **Elevation Adjust:** ± 20° mechanical adjust
- **Front-to-Back Ratio:** >30 dB
- **Cross-Polar Isolation:** >20 dB or better
- **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:** 4420 m (14500') 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
- **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)
- **Colocation Synchronization:** 1PPS GPS TX/RX synchronization for collocated co-channel radios Adjustable up/down-stream bandwidth ratio

### Regulatory + Compliance

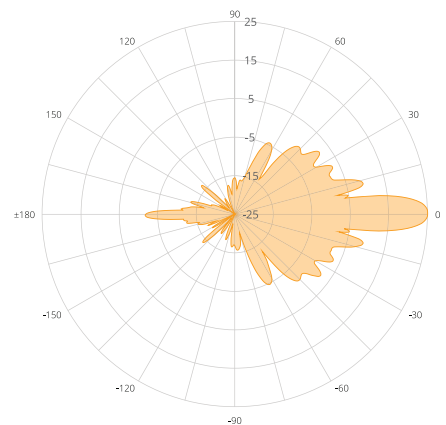
- **Approvals:** FCC Part 15.407, IC RS10, CE, ETSI 301 893/302 502
- **RoHS Compliance:** Yes
- **Safety:** UL/EC/EN/ 60950-1 + CSA-22.2



B5 Backhaul



B5 - 6 Dish Collocation



B5 Polar Plot



Mimosa Network, Inc.

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