

## iBridge B5c Point-to-Point Backhaul Radio Extreme Customization and Reliability

### INCREDIBLE SPEED

With 1.5+ Gbps (IP), the B5c is recognized as the fastest unlicensed backhaul in the industry

### ULTRA RUGGED

Carrier-grade IP67 design for harsh conditions

### SPECTRUM REUSE SYNC

High-precision GPS sync technology enables same-site collocation and relay site channel reuse

### MONITOR WITH EASE

Assessing link health has never been easier with cloud management

### EXTREMELY RELIABLE

Dual-Link and Auto Everything provide two bonded channels on separate frequencies with smart interference avoidance and low packet loss (less than .0001%)

### LOW LATENCY

Low latency, less than 1 ms Backhaul (PTP)

### FREQUENCY

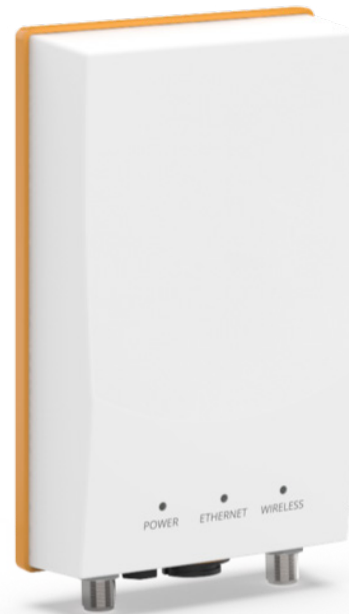
Extended frequency range of 4.90 to 6.20 GHz

### LONG-RANGE LINKS

Built for long-range applications including towers, relay sites, and building-to-building links

### OUTPUT POWER

30 dBm (2 stream) and 27 dBm (4 stream)



4.90-6.20 GHz

IP 1.5+ Gbps

IP67

SRS

1 ms Latency

### iBridge B5c Backhaul Radio

The iBridge 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 iBridge 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.

## 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:** 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:** 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:** 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)

