

# iBridge C5c Backhaul and Client Radio FWA and Long Range applications for PTP Backhaul

#### PRICE AND PERFORMANCE

Low cost 700+ Mbps (PTP) and 500+ Mbps (PTMP) radio

#### **LOW LATENCY**

Low latency, 1 ms, in PTP mode

## SPECTRUM REUSE SYNC

Supports Spectrum Reuse Sync (SRS) across the network

#### **RELIABLE**

Low packet loss, less than 0.001%

#### **MOUNTING**

Snap-in mounts for popular dishes

## **RUGGED AND BUILT TO LAST**

Cast metal housing, IP55 rated

## **NOISE RESISTANT**

Automated gain adjustment (AGC) to combat residential noise

#### **FOLIAGE FIGHTING**

Improved link budgets to handle foliage in MicroPoPs (short-range PTMP)

## **WIDE CHANNELS**

80 MHz channel width delivers 500+ Mbps (IP)

## WIDE FREQUENCY RANGE

Frequency range 4.90 to 6.40 GHz for PTP, 4.90 to 6.20 GHz for PTMP

#### **LONG-RANGE LINKS**

Long-distance support; Defined by the gain of the antenna used

## **OUTPUT POWER**

High-conducted power, 27 dBm, for long distance links













## iBridge C5c

Designed specifically to connect with iBridge A5c access points in GigaPoP and MicroPoP architectures (short and long-range PTMP), the compact, connectorized iBridge C5c enables massive scaling of subscribers and capacity.

In addition to these client connections, the iBridge C5c can also be used in backhaul (PTP) applications for one third of the cost of existing solutions.



# **Technical Specification**

## Performance

- Max Throughput: PTMP: 500+ Mbps IP (866 Mbps PHY,) PTP: 700+ Mbps IP (866 Mbps PHY)
- Wireless Protocols: WiFi Interop, Airspan propriety SRS
- Modes: PTMP Client, PTP Backhaul

## Radio

- MIMO and Modulation: 2x2:2 MIMO OFDM up to 256-QAM
- Bandwidth\*: 20/40/80 MHz channels tunable to 5 MHz increments for SRS; Tunable to standard WiFi channels for WiFi Interop
- Frequency Range: PTMP: 4900 6200 MHz, PTP: 4900 – 6400 MHz (Restricted by country of operation) 'new' US/FCC 5600-5650 MHz support
- Max Output Power: 27 dBm
- Sensitivity (MCS0): -87 dBm @ 80 MHz,
   -90 dBm @ 40 MHz, -93 dBm @ 20 MHz

#### Power

- Max Power Consumption: 12.9 W
- System Power Method: Passive PoE (24-56VDC)
- PoE Power Supply: Passive PoE compliant, 48-56 V Power over Ethernet supply (included)

## Physical

- Dimensions: Depth: 44.0 mm (1.73"),
   Width: 65 mm (2.56"), Height: 188.4 mm (7.42")
- Weight: 295 gr (10.4 ounces)
  Mounting: Single pole strap
  Connector Type: RP-SMA (x2)
- \* 4.9 GHz uses 20 MHz channel widths (US only, regulations vary by region)
- \*\* Enabled in future software release

#### Environmental

- Operating Temperature: -40°C to +55°C (-40°F to 131°F)
- Operating Humidity: 5 to 100% condensing
- Outdoor Ingress Protection Rating: IP55
- Operating Altitude: 4,420 m (14,500') maximum
- Shock & Vibration: ETS 300-019-2-4 class 4M5 Features

#### Features

- Gigabit Ethernet: 10/100/1000-Base-T
- Multi-User MIMO\*\*: CPE is MU-MIMO capable
- Management Services: Cloud monitoring and management SNMPv2 & Syslog legacy monitoring

HTTPS HTML5 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 PSK & Enterprise 802.1x; Radius provisioning, COA, DM (from A5); 128-bit AES with hardware acceleration
- VLANs: Per subscriber VLAN; Q-in-Q, triple tagging; Management VLAN
- 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



