

Altai B5 3.5 Wireless PTMP Bridge

The Altai B5 3.5 Wireless PTMP Bridge/CPE is designed to be used in Altai Super WiFi systems to provide carrier-grade ultra long range and high throughput backhaul bridging.



The Altai B5 3.5 PTMP Bridge/CPE comprises of a number of high-performance antenna options which operate in both LOS and NLOS environments, in 3.5 GHz licensed frequency bands.

Featuring highest performing hardware and operating system coupled with most innovative radio technology providing with best sensitivity, increased output power across all modulations and wide dynamic range, Altai B5 3.5 represents a perfectly balanced solution for any type of Point-to-Multiple-Point connectivity.

Super High Throughput and Range Backhauling

LOS / B5 3.5 PTMP Bridge 16 dBi antenna	20 km
LOS / B5 3.5 PTMP Bridge ext. antenna	20 km
LOS / B5 3.5 CPE 22 dBi antenna	12 km
LOS / B5 3.5 CPE external antenna	25 km
Throughput / B5 3.5 PTMP Bridge	300 Mbps [#]
Throughput / B5 3.5 CPE	35 Mbps

Benefits of Altai B5 3.5 Wireless PTMP Bridge/CPE

The Altai B5 3.5 PTMP is a wireless Point-to-Multiple-Point solution which combines high-speed capability, up to 240 Mbps throughput, with a rich set of best-in-class features and benefits such as leading-edge radio protocols providing unrivalled spectral efficiency and wireless transmissions over distances in excess of 20 km.

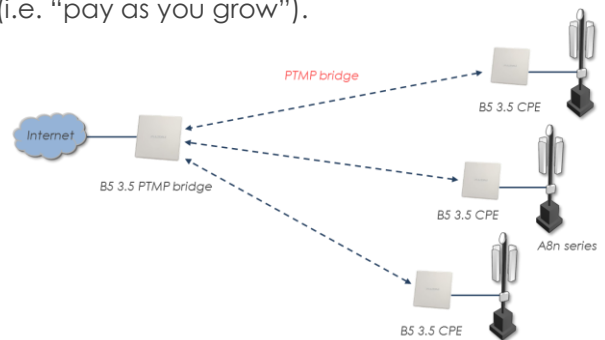


Cost Effective to Deploy

Altai's diverse range of solutions enables service providers of all types to build higher capacity networks with even fewer network elements, thereby significantly reducing their overall CAPEX and subsequent OPEX throughout the life of their network.

Altai B5 3.5 Wireless PTMP Bridge for Backhaul

The Altai B5 3.5 PTMP product family is an optimal solution for mobile operators and all other service operators requiring multi-megabit capacity for their backhaul links. In all these applications, our solutions offer operational cost saving benefits such as quick deployment, ease of configuration and the ability to upgrade existing infrastructures via software download to cater for new requirements (i.e. "pay as you grow").



As an integral part of our Super WiFi network infrastructure, the B5 3.5 PTMP provides the following:

- Configurable 3.4 to 3.7 GHz frequency band
- Possible operational distances in excess of 25 km
- High capacity – up to 240 Mbps throughput
- 2 x 2 MIMO innovative technology
- "Pay as you grow" software upgradeable capacity feature
- 3.5/5/7/10/14/15/20/28/30/40 MHz channel widths
- Unique plug & play out-of-box ultra-long LOS and NLOS backhaul solution
- Gigabit Ethernet port and flexible uplink/downlink reallocation
- Advanced Quality-of-Service support, reliable and robust design

Wireless Interface

- Operating Mode PTMP Bridging
- Technology MIMO 2x2 OFDM 64/128
- Modulation BPSK 1/2 to QAM64 5/6
- Operating Frequency 3.4 to 3.7 GHz configurable
- Transmit Power 23 dBm (Max.)
- Receiver Sensitivity -67 to -101 dBm
- Channel Bandwidth 3.5/5/7/10/14/15/20/28/30/40 MHz
- VoIP/ RTP Aware Superpacketing
- DFS
- Automatic Bitrate Control
- Automatic Transmit Power Control
- Automatic Distance Learning
- Channel Time Adjustment
- Spectrum Analyzer Mode
- Channel Testing Tools

Antenna

- Antenna type 2 antenna version for Bridge
- Integrated 14 dBi Sector
- 2 x N-female antenna port
2 antenna versions for CPE
- Integrated 22 dBi Panel
- 2 x N-female antenna port
- Frequency 3.5 GHz
- Polarization Dual Polarized
- 3-dB Horizontal Beamwidth 9°
- 3-dB Vertical Beamwidth 9°

Performance

- Maximum Throughput 80, 150 & 300# Mbps for Bridge
4, 8, 12, 20 and 35 Mbps for CPE
License Upgradeable
- Distance Up to 12 km for 22 dBi CPE
Up to 25 km for ext. port CPE

Networking

- Gigabit Ethernet Port for Bridge, Fast Ethernet for CPE
- RS-232 Serial Port
- Ethernet-over-IP Tunneling
- ARP Protocol Support
- Fully-fledged Layer 2 Switch – Transparent Transport for MPLS, stacked VLAN etc., Multiple Switching Groups, Full VLAN, 802.1q and 802.1ad, STP/rSTP, IGMP Snooping, Trunk Groups
- RIPv2/ OSPFv2/ Static Routing
- L2/ L3 Firewall
- NAT (Multipool, H.323-aware)
- DHCP Client/ Server/ Relay
- Dynamic Adaptive Polling
- Pseudo-radio Interface

Security

- Line-speed AES128 over-the-air encryption
- Storm/ Flood Protection
- Password Protection
- Protocol Messages Encryption
- Secure Command-line Access via SSH Protocol

Management

- Web-based Administration Tool
- Command-line – SSH, Telnet, Serial Port, Remote Shell
- Remote Firmware Upgrade (HTTP, FTP)
- SNMPv1/ v3, MIB II, Private MIB
- Configurable SNMP Traps
- Automatic Over-the-Air Firmware Upgrade

Quality-of-Service

- 16 Priority Queues
- IEEE 802.1p Support
- IP TOS, DiffServ Support
- Full Voice Support
- Traffic Limiting – Absolute, Relative, Mixed
- Traffic Redirection

Physical Specification

- Dimension 240 x 240 x 51 mm for ext. ant. Bridge
305 x 305 x 60 mm for 22 dBi CPE
240 x 240 x 51 mm for ext. ant. CPE
- Weight 2.3 kg for ext. antenna Bridge
2.2 kg for 22 dBi CPE
1.6 kg for ext. antenna CPE

Power Supply

- Power Source PoE Injector (48 VDC for Bridge, 12-48 VDC for CPE, 110-240 VAC, 50/60 Hz)
- Power Consumption 30 W (Max.) for Bridge
15 W (Max.) for CPE

Environmental Specification

- Operating - Temperature 40 °C to +60 °C for Bridge
0 °C to +40 °C for PoE Injector
- Humidity 100% Condensing for Bridge
95% Non-condensing for PoE
- Weatherproof IP66 Compliant

Certification

- FCC* / CE / Others

Product Ordering Information

Standard Package

- Choices of PTMP Bridge and CPE (Model No.: BR3522):
 - B5 3.5 Wireless PTMP Bridge with 14 dBi Antenna
 - B5 3.5 Wireless PTMP Bridge with 2 antenna ports
 - B5 3.5 Wireless CPE with 22 dBi Antenna
 - B5 3.5 Wireless CPE with 2 antenna ports (N-female)
- Choices of 80, 150 or 300# Mbps maximum throughput for PTMP Bridge; Choices of 4, 8, 10, 20 or 35 Mbps for CPE
- PoE Injector and Mounting Accessories
- Optional 3.5 GHz External Antenna for Bridge and CPE with external antenna ports

Contact Us

- Email: sales@altaitechnologies.com

Maximum real throughput will be capped at 240 Mbps
* Feature will be available in future release

B5-PB-160815

Although Altai has attempted to provide accurate information in these materials, Altai assumes no legal liability for the accuracy and completeness of the information. All specifications are subject to change without notice.