



## Product Overview

Altai BX270-N is an attractively priced 500 Mbps outdoor subscriber unit with an integrated antenna, that operates in the 5 GHz band. It is interoperable with all the Altai 5 GHz PtMP base stations.

The BX270-N provides four level of QoS and ensures a reliable link in congested spectrum and tough path conditions by using Altai's field proven air interface. Its channel bandwidth can be dynamically selected, either per transmission or per reception direction, hence guaranteeing maximum link capacity.

The subscriber unit is designed to provide impressive packet switching power to guarantee capacity in short packets traffic.

Highly durable, the BX270-N complies with the IP67 standard to reduce truck roll costs.

## Product Highlights

- » Up to 500 Mbps subscriber unit
- » 22 dBi integrated antenna
- » 4.9 – 6.0 GHz
- » Up to 40 km
- » Best-effort service level
- » Interoperable with all Altai 5 GHz PtMP base stations
- » Highly durable – IP67

## Architecture

- Outdoor unit with integrated antenna

## Network Interface

- Data Interface 1 x 1 GE RJ45 Port with PoE PD
- PoE and ODU Interfaces Outdoor CAT-5e; Maximum Cable Length: 75m for 1000Base-T

## Radio

- Wireless Topology PtMP Subscriber Unit
- Maximum Capacity 500 Mbps Net Aggregate Throughput (Up to 250 Mbps per Direction)
- Range Up to 40 km
- Frequency 4900 MHz – 6090 MHz \*
- Channel Bandwidth Configurable: 10, 20, 40, 80 MHz \*
- Dynamic Bandwidth Selection 20/40/80 MHz
- Modulation OFDM (BPSK/QPSK/16QAM/64QAM/256 QAM)
- Error Correction FEC k = 1/2, 2/3, 3/4, 5/6
- Adaptive Modulation/Coding Supported
- Duplex Technology TDD
- DFS Supported \*
- Antenna Modes MIMO 2x2, Diversity, Adaptive MIMO/Diversity
- Dynamic Bandwidth Mgmt. Best Effort Service Level
- Maximum TX Power 26 dBm \*
- Encryption AES128
- Uplink/Downlink Allocation Configurable: Symmetric or Asymmetric

## Antenna

- Integrated Antenna 22 dBi
- Gain 2.0: 1
- VSWR 10° (Typical)
- 3 dB Azimuth Beamwidth 10° (Typical)
- 3 dB Elevation Beamwidth Dual Linear (Vertical and Horizontal)
- Polarization -12 dB (Typical)
- Sidelobes Level -25 dB (Typical)
- Cross Polarization 25 dB
- F/B Ratio 30 dB (Typical)
- Port-to-Port Isolation DC Grounded
- Lightning Protection

## Networking

- Sub Convergence Layer Layer 2, Hub Mode
- QoS Packet Classification to 4 Priority Queues according to 802.1P or Diffserv
- VLAN Support 802.1Q, QinQ, 4094 VLANs
- ODU Management IPv4/IPv6 Dual-Stack; SNMPv1, SNMPv3; HTTP/HTTPS using Web Browser
- 802.1x Supported
- Option 82 Supported
- DHCP Filtering Supported
- IGMP Snooping Supported
- PPPoE Filtering Supported
- RADIUS Authorization Supported
- RADIUS User Authentication Supported
- Syslog Supported

## Physical Specification

- Dimension 325 (w) x 325 (h) x 64 (d) mm
- Weight 1.22 kg

## Power Supply

- Power Consumption < 13W
- Power Feeding Power provided over ODU-IDU Cable
- PoE Input Voltage Range 24 - 56VDC

## Environmental Specification

- Operating Temperature -35 °C to 60 °C
- Humidity 100% Condensing
- Enclosure Protection IP67 per EN/IEC 60529, NEMA Type 4 Enclosure

## Regulatory Compliance

### Radio

- USA FCC 47CFR Part 15.407
- EU ETSI EN 301 893; ETSI 302 502

### Safety

- USA UL/CSA-C22.2 62368-1, UL/CSA-C22.2 60950-22
- EU EN/IEC 62368-1, EN/IEC 60950-22

### EMC

- USA FCC 47CFR Part 15 Subpart B, Class B
- EU ETSI EN 301 489-1, ETSI EN 301 489-4, ETSI 301 489-17

## Product Ordering Information

### BX270-N (Part No.: AT-5HC5-9A50)

- BX270-N PtMP Subscriber Unit
- Mounting Kit
- IP67 Cable Gland

### Optional Accessories

- PoE Injector with DC Input 24VDC – 57VDC
- PoE Injector with AC Input 100VAC – 240VAC

### Contact Us

- Email: [sales@altaitechnologies.com](mailto:sales@altaitechnologies.com)

BX270N-PB-20220606

\* May be limited by regulation

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.