



Product Overview

Altai BX250-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 BX250-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 BX250-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: DC Grounded

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: 2 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

BX250-N (Part No.: AT-5HC5-9A50)

- BX250-N PtMP Subscriber Unit
- Mounting Kit
- IP67 Cable Gland
- PoE Injector with AC Input 100VAC – 240VAC

Optional Accessories

- PoE Injector with DC Input 24VDC – 57VDC

Contact Us

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* May be limited by regulation

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