

BreezeAIR AXE Highlights

- Superior net capacity: **2.1Gbps**
- **4.9-7.1 GHz** solution
- **Most efficient dynamic asymmetric TDD protocol**
- Ultra-low latency: **2-5ms**
- Long range: **130 Km**
- Top-level security: **AES-256** encryption & MAC level authentication
- Unmatched interference rejection via unique AIS technology
- Time synchronization eliminates self-interference and allows efficient frequency reuse
- Rugged & reliable IP67 design
- Ultimate availability: Link-in-service time <30 seconds
- Lowest power consumption ensures minimal stress & best MTBF
- Industry-leading 9600 Bytes Jumbo frames support

BreezeAIR AXE – PTP & PTMP

BreezeAIR AXE introduces superior dynamic net throughput of 2.1Gbps combined with ultra-low latency and top-level security @ 4.9-7.1GHz

Designed for unmatched interference rejection, BreezeAIR's unique Automatic Interference Sensibility (AIS) technology guarantees stable performance with constant latency and throughput.

BreezeAIR AXE PTP & PTMP solutions set a benchmark of unrivaled performance and reliability, making it the ultimate choice for future-proof wireless systems.

Unmatched Interference Rejection

With unprecedented dynamic asymmetric throughput of 2.1Gbps and extremely low latency, BreezeAIR AXE is the optimal solution for high-capacity applications such as fiber-like backhuls, mission critical networks, video surveillance and nLOS solutions.

Rugged IP67 design, lowest power consumption and industry leading AES-256 encryption ensure top-level security and reliability.

Phenomenal range of more than 130 Km, highest capacity, lowest latency, and outstanding RF interference rejection places BreezeAIR AXE at the top of its category.



BreezeAIR AXE Specifications

Radio		
	BreezeAIR AXE-L	BreezeAIR AXE
Topology	PTP, PTMP CPE	PTP, PTMP BS, PTMP CPE
Radio Frequency	4.9-5.9 GHz	6.1-7.1 GHz, 4.9-5.9 GHz
Net Throughput	Up to 1 Gbps, 2x2 MIMO	Up to 2.1 Gbps, 2x2 MIMO
Range	Up to 40Km	More than 130Km
Channel Width	20/40/80 MHz	20/40/80/160 MHz
Modulation	12 levels: BPSK - 1024QAM	14 levels: BPSK - 4096QAM
Output Power	Up to 25dBm, configurable TPC and ATPC	Up to 28dBm, configurable TPC and ATPC
Time Synchronization	2 modes: Internal / external	3 modes: Internal / external / on-board GPS
Handling Interference	AIS – Automatic Interference Sensibility ACM – Adaptive Coding & Modulation ACS – Automatic Channel Selection Fastest ARQ – Automatic Retransmit reQuest	AIS – Automatic Interference Sensibility ACM – Adaptive Coding & Modulation ACS – Automatic Channel Selection Fastest ARQ – Automatic Retransmit reQuest
Encryption & Security	256-bit AES & MAC level authentication	256-bit AES & MAC level authentication

Networking & Management	
Access Technology	Time Division Duplex (TDD), Time Division Multiple Access (TDMA)
Asymmetric TDD	Dynamic & Automatic (according to real time traffic) or Fixed
Typical Data Latency	2-5ms (PTP)
MTU size	9600 Bytes Jumbo frames
Network Modes	Layer 2 Bridge, VLAN, 802.1ad QinQ, tagging, VLAN / broadcast filters
Authentication	Via username + password, RADIUS/TACACS authentication supported
QoS	8 priority queues based on 802.1q, 802.1p, TOS, DiffServ and DSCP
Management	IPv4/IPv6 dual stack, ViewAir NMS, Cloud-based NMS, WEB (HTTP/HTTPS), SNMPv1, SNMPv2, SNMPv3, Telnet, SSH, EMS (BreezeManager), TFTP
Analysis Tools	Built in throughput test, RF Analyzer and path profiling tools
Performance Data	Real time & history – logs and counters of traffic and radio data

Physical & Environmental		
	BreezeAIR AXE-L	BreezeAIR AXE
Physical Interface	1000 Base-T POE (optional 2 ports)	2500 Base-T POE
SFP support	Not Supported	1000Mbps (optional)
Mechanical	19 x 19 x 4 cm, <1Kg (connectorized) 21 x 21 x 7 cm, <2Kg (17.5dBi) 30 x 30 x 7 cm, <2.5Kg (23dBi)	19 x 19 x 4 cm, <1Kg (connectorized) 21 x 21 x 7 cm, <2Kg (17.5dBi @ 5.xGHz) 30 x 30 x 7 cm, <2.5Kg (23dBi @ 5.xGHz, 24dBi @ 6.xGHz) 37 x 37 x 8 cm, <3.5Kg (16dBi, 90 degrees @ 6.xGHz)
Power Consumption	<13Watt	<13Watt
IP rating	IP67	IP67
Temperature	-40°C to 60°C	-40°C to 60°C
Humidity	100% non-condensing (Rainproof)	100% non-condensing (Rainproof)