BM5X23D0E50

BreezeAir 8000 ET 5.x GHz 50Mbps radio, integrated 23dBi dual polarization antenna

Telrad's BreezeAIR 8000 ET is the complete solution for Service Providers and Operators, offering extensive portfolio with net throughput up to 200 Mbps and 'pay as you grow' upgrade capabilities. BreezeAIR 8000 ET provides most robust, reliable and flexible Point-to-Point and Point-to-Multipoint connectivity solution for Public & Private Enterprises, WiFi hotspots and BWA/LTE backhaul sites.

Specifications



Radio

Radio Frequency	4.8-6.0 GHz
Antenna	Outdoor Radio Unit with integrated 23 dBi dual polarization antenna
Net Throughput	50 Mbps - MIMO (License scalable 10 - 200 Mbps)
PPS	Up to 400,000 Packets Per Second
Channel Size	5/7/10/14/20/28MHz
Waveform	Advanced OFDM 2x2 dual polarization MIMO - BPSK, QPSK, 16QAM, 64QAM: Hitless 7 stages Adaptive Coding & Modulation (ACM), Fixed modulation mode, LDPC coding, Configurable modulation thresholds (min/ max)
Output Power	Up to 30 dBm, configurable in 1dB step
Handling Interference	• AIS – Automatic Interference Sensibility • Hitless ACM – Adaptive Coding & Modulation • ACS – Automatic Channel Selection • FEC – Forward Error Correction, k = 1/2, 2/3, 3/4, 5/6 • Fastest ARQ – Automatic Retransmit reQuest • TDD and FDD modes - software configurable
Encryption & Security	128-bit AES & MAC level authentication

Networking and Management

Topology	Point-to-Point (PTP) - (License/Software configurable)
Access Technology	Time Division Duplex (TDD) & Frequency Division Duplex (FDD) Time Division Multiple Access (TDMA) - dynamic or symmetric
Data Latency	1ms typical per SU
Jumbo Frames	Supported
Network Modes	Layer 2 Bridge, VLAN, QinQ, VLAN / broadcast / IP filters, Layer 3 Routing, NAT, DHCP server, DHCP Relay
VLAN	Transparent, VLAN filter, tagging/stripping, QinQ
QoS	8 priority queues based on 802.1p, TOS and DSCP
Traffic Shaping	Bandwidth control for uplink and downlink independently
Management	ViewAir NMS, WEB, SNMP, Telnet, NBI CORBA, EMS (Link Manager) Built in throughput test, RF Analyzer and path profiling tools
Performance Management	Real time & history – logs and counters of traffic and radio data

Physical and Environmental

Physical Interface	1 x 10/100 Base-T
Connector Type	1 x RJ-45
Dimensions and Weight	30 x 30 x 6 cm <2Kg
PoE Adapter: • AC-DC • DC-DC	 Input: 100-240 VAC, 47-63 Hz; Dimensions: 12 x 6 x 3.5 cm Input: 10-60 VDC; Dimensions: 16 x 6 x 3 cm
Power Consumption	<7 Watt
IP Rating	IP67
Operating Temperature	-55°c to 65°c
Operating Humidity	100% non condensing (Rainproof)

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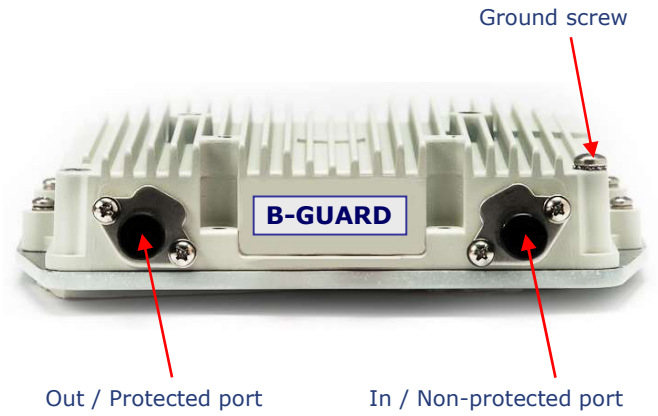
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BreezeGuard

BreezeGuard - 1000Mbps PoE Outdoor Surge Protector is designed to protect BreezeAIR PoE network from lightning over-voltage, transient over-voltage and static discharge. The protector implements multi-level protection circuit with advanced manufacturing process, and has excellent performance on discharge current, limiting voltage, response time, stability and over-all reliability.

BreezeGuard Features

- 10/100/1000Base-T PoE Gigabit Ethernet protection
- Multi protection circuits - Gas-Tube + TVS technology
- Dual protection - Common and differential modes
- TVS array technology, low capacitance
- Multi-Strike Capability
- IP67 enclosure - full outdoor solution
- CAT6, CAT5e and CAT5 compatible



Specifications

Nominal operating voltage	48V
Max. continuous operating voltage	57V
Nominal discharge current (8/20us) In	3kA
Max. discharge current (8/20us) Imax	5kA
Limiting voltage: • Line-line (@6kV, 10/700us) • Line-line (@3kV, 8/20us)	 ≤150V ≤150V
Transmission rate	10/100/1000Mbps
Insertion loss	≤0.5dB
Protection line	1-8
Response time	1ns
Load current	350mA
Protection grade	IP67
Dimensions	19x19x4 cm
Weight	<1Kg
Temperature	-40°c to 85°c
Relative humidity	100% non condensing (rainproof)

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BreezeAIR AC POE

BreezeAIR AC PoE is a 10/100/1000Base-T PoE, optimized for BreezeAIR radios



Specifications

Input voltage	100-240 VAC, 47-63Hz
Output voltage	48VDC
Data pins	1,2 & 3,6 & 4,5 & 7,8
Power pins (output)	4,5 = +48V 7,8 = -48V
Transmission rate	10/100/1000Mbps
Protection Function	Over current protection Short Circuit protection
Dimensions	120x60x34 mm
Weight	<0.25Kg
Temperature	0°c to 40°c
Model: B-ACGPOE-xx	xx = Plug type US = US plug EU = EU plug AU = AU plug UK = UK plug IL = IL plug

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BreezeAIR Advanced Mounting Kit

Advanced mounting Kit - Wall/pole mount, azimuth & elevation

B-ADV-MK Features

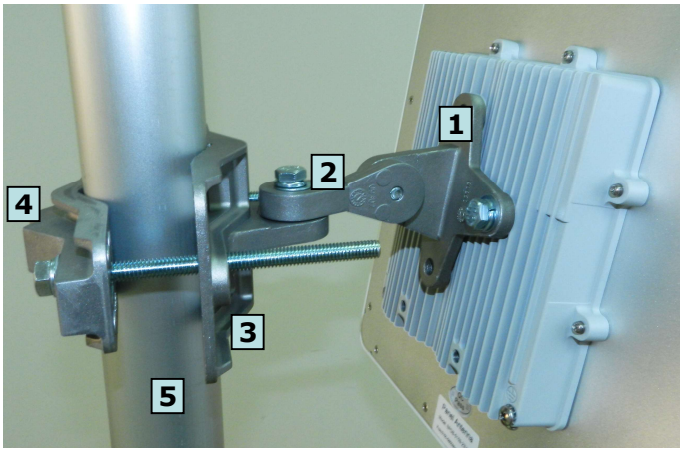
- **BreezeAIR's Azimuth and Elevation Adjustable Mount**
- **Suitable for pole or wall mounting**
- **Made of Die Cast Aluminum**
- **Heavy duty**

Specifications

Material	Aluminum
Kit Weight	0.750 Kg
Diameter range	1"-4"
Movement Possibility	Azimuth ± 45° Elevation ± 45°

Packing list

Item	Qty	Description
1	1	B-MK1 (End Mounting Member)
2	1	B-MK2 (Middle Mounting Member)
3	1	B-MK3 (base Member)
4	1	B-MK4 (Back Member)
5	1	Pole 1"-4" (not supplied)
6	6	Helical Spring Lock Washer 5/16
7	6	Plain Washer 5/16
8	4	Hex Cap Screw 5/16-18 x 1"
9	2	Hex Cap Screw 5/16-18 x 5"



Installation

- Place B-MK1 (1) on the unit, as illustrated in the picture. Align the holes with the screw studs.
- Connect B-MK1 (1) to the unit with spring washers (6), plain washers (7) and screws (8). Tighten the screws at a torque of 30 Lbs·In.
- Connect B-MK2 (2) to B-MK1 (1) with spring washer (6), plain washer (7) and screw (8). Leave the screw slightly loose.
- Connect B-MK3 (3) to B-MK1 (2) with spring washer (6), plain washer (7) and screw (8). Leave the screw slightly loose.
- Attach B-MK3 (3) and B-MK4 (4) to the pole (5) as illustrated, and connect them using spring washers (6), plain washers (7) and screws (9). Close screws (9) together (in turns), up to tightening torque of 30 Lbs·In.
- Distance between ends of B-MK3 (3) and B-MK4 (4) on both sides must be equal. No skewness is allowed.
- Adjust the desired angle, and fully tighten the loose screws (of B-MK2) at a torque of 30 Lbs·In.

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