

Optimized License-Exempt Broadband Wireless Access

BreezeACCESS[®] EZ

BreezeACCESS EZ presents a cost-effective solution for Wireless Internet Service Providers (WISPs) and an array of broadband wireless applications in urban and rural deployments. BreezeACCESS EZ offers superior capacity and range, with enhanced QoS and security, providing optimal support throughout the 5 GHz frequency band.

Range of Features for Premium Value

- Effective delivery of powerful broadband with capacity of up to 23 Mbps per Access Unit (AU-EZ), throughput of up to 12 Mbps per Subscriber Unit (SU-EZ) and multiple subscribers per sector
- Extended coverage range of up to 12 km LOS (FCC)
- Enhanced QoS with MIR/CIR per SU per direction (UL/DL), enabling operators to control network and effectively define Class of Service (COS)
- TDD OFDM technology supporting non-line-of-sight (NLOS) deployments
- Embedded security mechanism with hardware-based AES FIPS 197 encryption, enabling secured wireless links without sacrificing throughput
- Enhanced networking with complete VLAN tagging functionality (802.1q)
- Single SU integrating all enhanced features for the entire 4.9-5.9 GHz band



System Components

Alvarion's BreezeACCESS EZ solution consists of a central Access Unit (AU-EZ) which provide access to multiple outdoor Subscriber Units (SU-EZ)

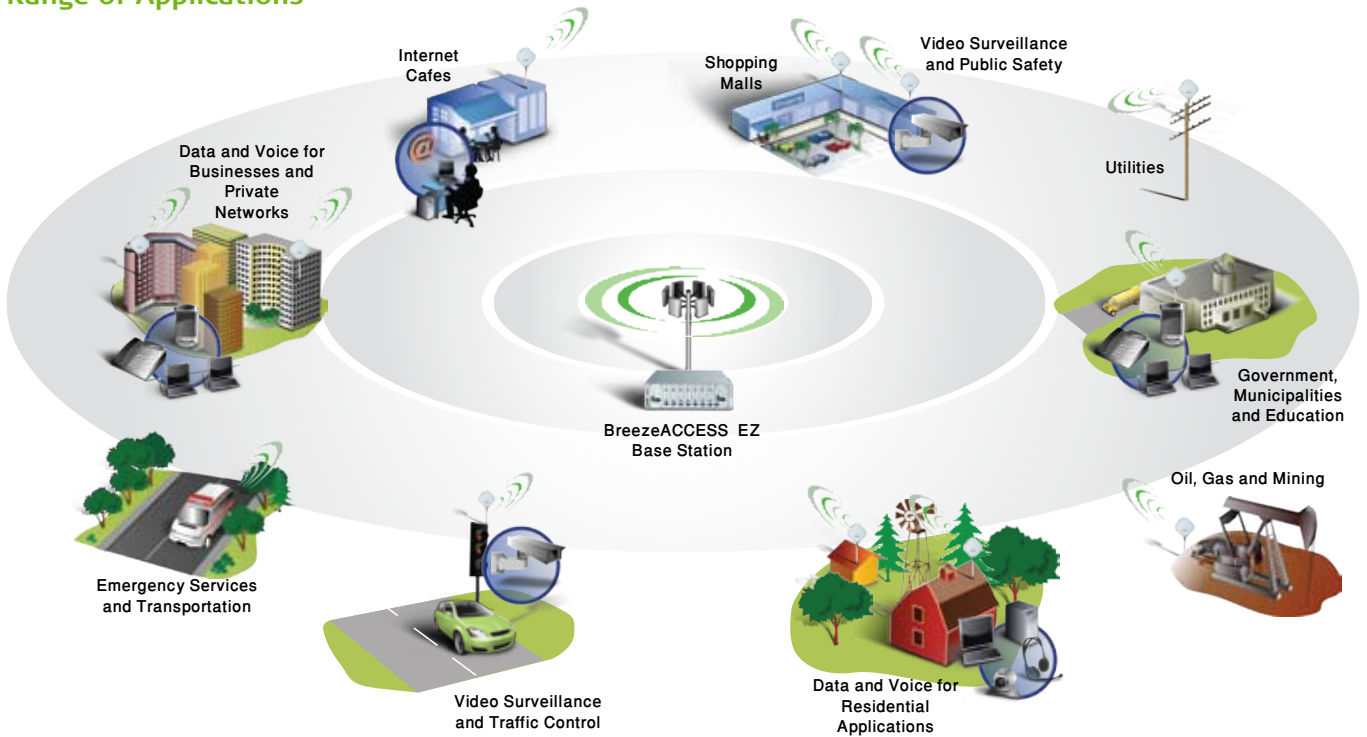


AU-EZ is a single sector, stand-alone base station which consists of a network interface/power supply indoor unit (IDU) and an outdoor radio unit (ODU). The AU-EZ can be deployed using a variety of high-gain external antennas (60/90/120/360)



Each SU-EZ features a wireless connection to the AU-EZ providing an efficient platform for continuous broadband access. The SU-EZ consists of an outdoor wireless radio with an integrated high performance 17 dBi flat panel antenna, and the same IDU as the AU-EZ for power supply and network interface. Designed for fast installation and configuration, the SU-EZ includes complete mounting bracket, visual antenna alignment navigation and intuitive web-based user interface.

Range of Applications



Internet Cafes

Shopping Malls

Video Surveillance and Public Safety

Utilities

Data and Voice for Businesses and Private Networks

BreezeACCESS EZ Base Station

Government, Municipalities and Education

Emergency Services and Transportation

Video Surveillance and Traffic Control

Data and Voice for Residential Applications

Oil, Gas and Mining

Range of Benefits

- **Experience and Maturity**

BreezeACCESS EZ is an integral part of the BreezeACCESS family of broadband wireless access systems which is deployed extensively around the world.

- **Affordable and Cost-Effective**

The BreezeACCESS EZ solution combines reduced equipment and deployment costs with the ability to deploy multiple subscriber units per sector. This cost-effective solution enables WISPs to seamlessly extend services to residential customers previously unable to afford them, while securing rapid ROI for a compelling business case.

- **Enhanced Functionality and Performance**

BreezeACCESS EZ features enhanced functionality which enables the effective deployment of up to 150 SUs per sector. Maximum and committed information rates (MIR\CIR), support various Class of Service (CoS) models for a variety of applications.

- **Flexible and Simple Network Expansion**

BreezeACCESS EZ is a complete out-of-the-box solution designed with an array of advanced features which facilitate network deployment and expansion. These features include: networking (802.1q), security (FIPS-197), QoS (CIR\MIR), control (ATPC) and management (BreezeConfig, Web).

- **Distribution Oriented**

BreezeACCESS EZ is an all-in-one box solution which best supports distribution needs. BreezeACCESS SU EZ features a single part number for the entire 5 GHz frequency band, addressing all cross-geographical market requirements.



“Alvarion’s wireless network is providing safe and proprietary connectivity between homes and schools, enabling us to bridge the digital divide and give schoolchildren an equal opportunity for development of ICT skills.”

Colin Scott, Senior Adviser Strategic
Director for e-Learning
Hartlepool Borough Council, UK

- **Quick Installation**

Subscriber units designed with an integral antenna can be easily deployed using the SNR alignment LED bar, enabling operators to minimize OPEX and expedite deployment rates.

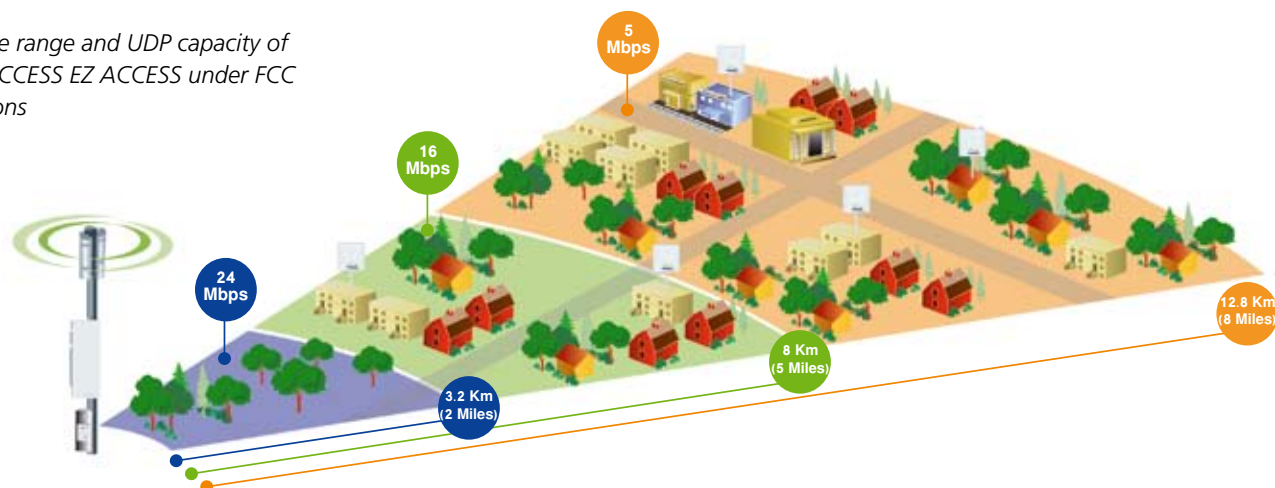
- **Reliable and Robust**

A ruggedized outdoor solution, BreezeACCESS EZ operates over an extended temperature range in a variety of environments.

- **Empowering Communities**

BreezeACCESS EZ provides an affordable solution to bridge the digital divide by offering vast opportunities for enhanced communication, public safety, education, business and social development.

Coverage range and UDP capacity of BreezeACCESS EZ ACCESS under FCC regulations



Headquarters

International Corporate HQ
Tel: +972.3.645.6262
Email: corporate-sales@alvarion.com

North America HQ
Tel: +1.650.314.2500
Email: n.america-sales@alvarion.com

Sales Contacts

Australia:
anz-sales@alvarion.com

Asia Pacific:
ap-sales@alvarion.com

Brazil:
brazil-sales@alvarion.com

Canada:
canada-sales@alvarion.com

Caribbean:
caribbean-sales@alvarion.com

China:
cn-sales@alvarion.com

Czech Republic:
czech-sales@alvarion.com

France:
france-sales@alvarion.com

Germany:
germany-sales@alvarion.com

Italy:
italy-sales@alvarion.com

Ireland:
uk-sales@alvarion.com

Japan:
jp-sales@alvarion.com

Latin America:
lasales@alvarion.com

Mexico:
mexico-sales@alvarion.com

Nigeria:
nigeria-sales@alvarion.com

Philippines:
ph-sales@alvarion.com

Poland:
poland-sales@alvarion.com

Portugal:
sales-portugal@alvarion.com

Romania:
romania-sales@alvarion.com

Russia:
info@alvarion.ru

Singapore:
asean-sales@alvarion.com

South Africa:
africa-sales@alvarion.com

Spain:
spain-sales@alvarion.com

U.K.:
uk-sales@alvarion.com

Uruguay:
uruguay-sales@alvarion.com

For the latest contact information
in your area, please visit:
www.alvarion.com/company/locations



www.alvarion.com

© Copyright 2009 Alvarion Ltd. All rights reserved.
Alvarion® and all names, product and service names referenced herein are either registered trademarks, trademarks, tradenames or service marks of Alvarion Ltd.
All other names are or may be the trademarks of their respective owners. The content herein is subject to change without further notice.
"WiMAX Forum" is a registered trademark of the WiMAX Forum. "WiMAX," the WiMAX Forum logo, "WiMAX Forum Certified" and the WiMAX Forum Certified logo are trademarks of the WiMAX Forum.

214778 rev.d

Specifications

Radio and Modem

| | | |
|------------------------------|---|--|
| Frequency | AU-EZ: 5.15-5.35 GHz, 5.47-5.725 GHz, 5.725-5.875 GHz SU-EZ: 4.9-5.875 GHz | |
| Media Access | Time Division Duplex (TDD) | |
| Channel Bandwidth | 10 MHz (Future support), 20 MHz | |
| Radio Technology | Orthogonal Frequency Division Multiplexing (OFDM) | |
| | Subscriber Unit EZ | Access Unit EZ |
| Max Throughput/Capacity | 12 Mbps full duplex | 23 Mbps aggregated capacity |
| Max Tx. Power @ Antenna Port | -9 dBm to 18 dBm, 3 dB steps | -10 dBm to 21 dBm, 3 dB steps |
| Antenna | Integrated Flat Panel Antenna, 17dBi, 24 AZ x 18 EL | Choice of Detached Antennas: ³ 16dBi, 60 AZ x 10 EL ³ 17dBi, 90 AZ x 6 EL ³ 15dBi, 120 AZ x 6 EL ³ Omni 8dBi, 360 AZ x 4.5 EL* *Not available for 5.4/5.3 FCC |

Data Communications

| | |
|----------------------|---|
| VLAN and QoS support | 802.1Q, MIR/CIR per SU per direction (UL/DL), Advanced Automatic Transmit Power Control (ATPC) |
|----------------------|---|

Configuration and Management

| | | |
|-----------------------|--|---|
| Management Options | SU-EZ: Web-Based, Telnet, SSH, SNMP AU-EZ: Telnet, SNMP | |
| Management Access | Local via Ethernet Port or remotely over the Wireless Link | |
| IP Address Assignment | Automatic (DHCP Client), Manual | |
| Configuration File | Upload/Download via FTP/TFTP | |
| | Subscriber Unit EZ | Access Unit EZ |
| Software Upgrade | Download via FTP/TFTP with Backup Image File of running version for safe operation | Download via FTP/TFTP with Dual Image File allowing downgrade to previous version |
| Security | WEP 152, SSL 0.95A, SSH v2 AES 128 FIPS 197 compatible | WEP 152 AES 128 FIPS 197 compatible |

Mechanical, Electrical and Environmental

| | SU-EZ Outdoor Unit | AU-EZ Outdoor Unit | Indoor Unit |
|-----------------------|---|--------------------------|--|
| Size | 195 x 190 x 74 mm | 305 x 117 x 57 mm | 140 x 66 x 35 mm |
| Weight | 1.47 kg | 1.8 kg | 0.3 kg |
| Power | Typical: 10W Max: 40W | Typical: 12W Max: 25W | AC In: 85-265 VAC, 50-60 Hz DC Out: 55 VDC, 1 A max |
| Operating Temperature | -40 C to 55 C | -40 C to 55 C | 0 C to 40 C |
| Operating Humidity | 5% to 95%, non-condensing. Ingress Protection for Outdoor Units: IP65 | | |

Standards Compliance

| | |
|----------------------|--|
| Safety | UL/CUL (CSA60950-1, UL60950-1, UL-50) CE/CB (EN60950 include IPX4 /IEC 60950-1) |
| Radio | EN 301 893 (V 1.5.1), EN 302 502 (V 1.2.1) EN 301 489 (DC power), FCC Part 15E 15.407 |
| EMC | CE Class B (EN55022, EN55024), EN 301 489-1/17 FCC Class B Part 15 |
| Hazardous Substances | RoHS Compliant |

About Alvarion

Alvarion (NASDAQ: ALVR) is the largest WiMAX pure-player with the most extensive WiMAX customer base and over 250 commercial deployments around the globe. Committed to growing the WiMAX market, the company offers solutions for a wide range of frequency bands supporting a variety of business cases. Through its OPEN WiMAX strategy, superior IP and OFDMA know-how, and ability to deploy end-to-end turnkey WiMAX projects, Alvarion is shaping the new wireless broadband experience.