

### All Outdoor, All-in-one WiMAX™ 802.16e Base Station

## **BreezeMAX® Extreme**

The BreezeMAX Extreme is an all outdoor WiMAX 802.16e base station for fixed and nomadic service applications. Joining the BreezeMAX family, it offers operators enhanced coverage in an easy-to-deploy, single compact box. Furthermore, it supports a strong business case with reduced CAPEX and OPEX, and enables operators to pay-as-they-grow, according to network growth and changes.



BreezeMAX Extreme
Deployment Scenarios

#### **Easy Installation and Management**

The BreezeMAX Extreme single-box design features a small footprint and simple mounting demands, facilitating a fast installation process. This offers a range of advantages, including:

- Reduction of real estate costs for towers and indoor housing units
- Elimination of complicated and expensive RF cabling needs
- Quick setup and configuration with the BreezeMAX management tool

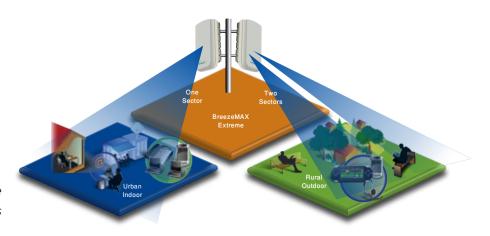
# Flexible Configurations for Diverse Deployments

BreezeMAX Extreme offers enhanced area coverage, overall sector capacity and versatile configuration options which support rural deployments and business applications. This dual-sector, compact base station offers operators an attractive price/performance ratio and its open architecture introduces a commonality of building blocks, ease-of-use and network deployment conformability.

Furthermore, the flexible design enables a macro-like, enhanced configuration by linking multiple units to create a multisector, multi-carrier cell/site.

The BreezeMAX Extreme design supports:

- 2<sup>nd</sup> order diversity and 2x2 MIMO technology for better signal robustness in non-line-of-sight (NLOS) environments
- Multiple channel bandwidth options, including 5 and 10 MHz
- GPS architecture, enabling the connection of up to four devices utilizing a single GPS clock, reducing the CAPEX associated with mounting and location of multiple GPS antennas
- Optional integrated ASN gateways for flexible network planning and pay-as-you-grow business models
- DC and AC power options
- Single or dual sector configuration in the same unit, enabling reduced CAPEX and OPEX



#### Headquarters

International Corporate HQ corporate-sales@alvarion.com North America HO

n.america-sales@alvarion.com

#### **Sales Contacts**

Australia: anz-sales@alvarion.com

Asia Pacific:

ap-sales@alvarion.com

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-sales@alvarion.com

Russia:

info@alvarion.ru

Singapore: asean-sales@alvarion.com

South Africa:

africa-sales@alvarion.com

Spain: spain-sales@alvarion.com

uk-sales@alvarion.com

Uruguav:

uruquay-sales@alvarion.com

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

### **OPEN WiMAX-Based Ecosystem**

The BreezeMAX Extreme ecosystem includes Alvarion's robust CPE portfolio of standard 802.16e subscriber units and devices. Based on the OPEN WiMAX strategy, BreezeMAX Extreme also enables operators to add best-of-breed CPEs according to specific requirements thus extending their options when planning service offerings and support portfolios.

### **Specifications**

#### **Radio & Modem**

Unit type

All outdoor base station

Frequency

3.5 GHz band 3,400 - 3,600 MHz 3.65 GHz band\* 3,650 - 3,700 MHz

Access method IEEE 802.16-2005 (16e OFDMA)

512, 1024

QPSK 1/2, 3/4

Operation mode

Channel bandwidth 5 MHz, 7 MHz\*, 10 MHz 0.25 MHz

Frequency resolution FFT size Modulation

QAM16 1/2, 3/4 QAM64 2/3,3/4,5/6

\*future

#### **Transmit Power**

3.x GHz 30 dBm 2.x GHz 30 dBm

± 1 dB maximum ± 1 dB maximum

**Diversity support** 2x2, MIMO A, MIMO B\*

\*future

#### **Interfaces**

Network

Standard compliance Data interface

IFFF 802 3 CSMA/CD 10/100 Mbps, half/full duplex

with auto negotiation

Power 48 VDC

#### Mechanical

Dimensions (H x D x W)

51 x 28 x 15 cm (20 x 11 x 6 in) Less than 11 kg (24.2 lb) Weight

### **Environmental Conditions**

Operating Temperature Operating humidity

Environmental

Radio

-40°C to 55°C

5%-95% non condensing, weather protected

#### **Standard Compliance**

Type Standard EMC ETSI EN 301 489-1

FCC p15

Safety CE EN 60950-1/22 UL 60950-1/22

ETSI 300 019 Part 2-1,

2-2, 2.3, 2.4

ETSI EN 302 326

FCC part 27, part 90

#### www.alvarion.com

© Copyright 2009 Alvarion Ltd. All rights reserved. © copyright 2009 Alvarion Ltd. All rights reserved. Alvarion® and all names, product and service names referenced herein are either registered trademarks, trademarks, trademarks or service marks of Alvarion Ltd. All other names are or may be the trademarks of their respitive owners. The content herein is subject to change without further notice.

Forum. "WiMAX," the WiMAX Forum logo, "WiMAX Forum Certified" and the WiMAX Forum Certified logo are trademarks of the WiMAX Forum.

215120 rev.b

#### **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 proven ability to deploy end-to-end turnkey WiMAX projects, Alvarion is shaping the new wireless broadband experience