



# BreezeMAX® Si 4000

Simply Connect to the World of WiMAX™

The BreezeMAX Si family is part of Telrad's rich portfolio of WiMAX end user devices. Meet mass-market needs at reduced operational costs with optimal in-building coverage, and zero touch installation and provisioning.

#### **Ideal for Residential and SOHO Use**

**BreezeMAX Si** is a family of compact, single-box indoor access units. Designed to address the needs of residential and SOHO users, it combines a range of features including easy plug-and-play installation, NLOS capabilities for in-building coverage and optional battery backup for primary voice service. BreezeMAX Si supports the 2.3, 2.5 and 3.5 GHz frequency bands and includes a range of built-in technologies, such as advanced antenna scanning, hybrid ARQ, sub-channelization and high receive sensitivity to ensure enhanced coverage, capacity and user throughput.

#### **Zero Touch Installation and Provisioning**

BreezeMAX Si is an easy-to-use plug and play solution, offering data, voice and WiFi interfaces in a compact desk-mounted box. BreezeMAX Si is designed with intelligent automatic provisioning methods, improving both the top and bottom lines. Zero touch installation and provisioning enables reduced operational costs (OPEX) and speeds up deployment of new devices, resulting in faster time-to-money for new networks.

## **BreezeMAX Si Highlights**

- IEEE 802.16e-2005 Wave 2 compliant
- Designed for residential and SOHO use
- Non-Line-of-Sight (NLOS) support for in-building coverage
- Plug-and-play installation and provisioning
- Compact, desk-mounted indoor WiMAX device
- Various physical interfaces: up to 4 data ports, 2 VoIP FXS ports and WiFi access point
- Optional frequencies: 2.3\*, 2.5\* or 3.5 GHz
- Coverage range of up to 3 km
- Carrier-grade network management system simplifying network deployment and rapid expansions

\* Future

# **Specifications**

| Physical Interface LAN VoIP WiFi  WiMAX Features Standard Compliance | 1 x 10/100 Base-T port<br>1 x SIP FXS port<br>802.11b/g (only 3.5 GHz)<br>IEEE 802.16e-2005                                 | Networking Features Device Management Firewall WAN | Web, TR-069, OMA-DM Yes NAT IP CS, multiple DHCP clients, Eth/VLAN CS, Static IP, internal PPPoE client, internal L2TP |
|--|---|--|--|
| Duplex Mode  | TDD   |  | client, internal PPTP  |
| Frequency Bands  |   |  | client, IPSec VPN client   |
| 2.x GHz*<br>3.x GHz*   | 2485-2695 MHz<br>3400-3600 MHz  | NAT  | NAT, Virtual Server, Special Application DMZ   |
| Channel bandwidth  | 5, 7, 10 MHz  |  | Host   |
| Modulation<br>Transmit Power   | QPSK, 16QAM, 64QAM<br>28dBm   | VPN  | Internal VPN clients, L2TP, PPTP with or w/o IPSEC   |
| Antenna Type   | 2 x Embedded Dipole   |  | per configuration  |
| Antenna Gain   | 5dBi  |  | Supports NAT transversal   |
| Authentication   | EAP-TTLS, EAP-TLS<br>(optional)   |  | for transparent VPN<br>Transfer  |
| QoS  | BE, RT, NRT, ERT, UGS   | <b>Mechanical Features</b>                         |  |
| * 2.3, 2.5 GHz: Future   |   | Dimensions (HxWxD)                                 | 230x155x35 mm  |
| VoIP Features (optional)   |   | Power Source                                       | 100-240 VAC, 50-60 Hz  |
|  |   | 1 OWEI SOUTCE                                      | <u> </u>   |
| Standard Compliance  | SIP v2 RFC 3261   | Standards and Regula                               |  |
| Standard Compliance<br>Voice Codecs                                  | •   |  |  |
| •  | SIP v2 RFC 3261<br>G.711 (a-law and u-law),   | Standards and Regula                               | <b>rtions</b> FCC Part 15B Class B   |
| Voice Codecs   | SIP v2 RFC 3261<br>G.711 (a-law and u-law),<br>G.729ab, T38<br>Call transfer, call waiting, 3-<br>way conference call, call | Standards and Regula<br>EMC                        | FCC Part 15B Class B ETSI EN 301 489-1/4 EN 55022 Class B FCC Part 25, 27  |
| Voice Codecs  Call Features  | SIP v2 RFC 3261<br>G.711 (a-law and u-law),<br>G.729ab, T38<br>Call transfer, call waiting, 3-<br>way conference call, call | Standards and Regula<br>EMC                        | FCC Part 15B Class B ETSI EN 301 489-1/4 EN 55022 Class B FCC Part 25, 27 EN 300 328, EN 302 326-1,                    |

### **About Telrad**

Telrad Networks is a global 4G solution provider with hundreds of commercial 4G deployments. Telrad delivers industry-leading network solutions for broadband wireless, LTE-Advanced and WiMAX to telecom operators, enterprises and WISPs worldwide. Telrad Networks is committed to delivering best-of-breed products, service and support to our customers, and is backed by Fortissimo Capital, a group of private equity funds with nearly \$500 million under management.

