# WAVEXpress TurboMAX BS Plus



The WAVEXpress TurboMAX BS Plus integrates the base station controller (BSC) and high-power base station (BTS) into a single chassis It is a highpower, low-cost, compact solution to provide Wireless Local Loop (WLL), microcell expansion, and specialty GSM deployment. The TurboMAX BS Plus combines all of the functionality of the BSC and the high-power BTS making it the perfect solution to provide capacity to a growing market or low cost expansion solution in a new deployment.

# **Network Features**

| Features   | Capacity/Standard   |
|--|---|
| Number ofTRXs per BS Plus                              | Up to three internal (located inside the BS Plus chassis)<br>Up to eight total (two internal and six external TRXs) |
| Number of BTSs per BS Plus                             | Up to four BTS nodes (one internal)   |
| Traffic Capacity                                       | 37 Erlangs @ 2% Grade of Service  |
| BTS Link   | Abis Interface  |
| BSC to MSC Link  | GSM A-Interface   |
| Frequency Band Supported                               | GSM 900/1800, 1900 MHz PCS network  |
| Output Power   | 40W   |
| RF Receiver Sensitivity<br>Receive diversity supported | -109 dBm (w/o diversity)<br>-111 dBm (with diversity)   |
| Sectorization  | Supported   |
| GPRS   | Hardware ready  |

# **System Specifications**

| Configurations         |  |
|------------------------|--|
| Maximum Number of TRXs | Up to three internal; eight total (two internal and six external)                                  |
| Maximum Number of BTSs | One internal; four total   |
| Number of Trunk Ports  | Up to six  |
| Traffic Capacity       | 37 Erlangs @ 2% GOS1   |
| Transmission           | Star or Daisy Chain  |
| Interfaces             |  |
| MSC                    | GSM Compliant A Interface  |
| BTS                    | GSM Compliant Abis Interface   |
| RF                     | GSM Compliant Air Interface; supports<br>Phase 1, 2 or 2+ GSM and PCS<br>Compliant Mobile Stations |
| Transmission           | Dual Port G.703 compliant E1 75/120 Ohm<br>Dual Port T1.403 compliant T1 100 Ohm                   |
| Ethernet               | IEEE802.3; 10baseT   |
| Serial                 | DB9 male connector supporting<br>DCE Interface   |



# WAVEXpress TurboMAX BS Plus

### Radio

GSM RF Interfaces Power Control Rx Sensitivity

**GSM** Vocoding Integrated TRAU Supporting EFR or standard vocoding **Transcoding Capacity** Up to 64 Traffic Channels Electrical **Power Options** 110/220 VAC, 50-60 Hz -48 VDC **Power Consumption** 7.9 Amperes @ 115 VAC<sup>2</sup> 4.0 Amperes @ 230 VAC<sup>2</sup> 17.8 Amperes @ -48 VDC<sup>2</sup> Mechanical Dimensions (HxWxD) 61 x 28 x 55 centimeters (24 x 11 x 22 inches) Weight 40 kg (88 lbs) **Environmental Operating Environment** Temperature: -5 to 45°C Humidity: 10% to 90% (non-condensing) Regulatory

GSM 900/1800 and PCS 1900

Static: 12dB in 2dB steps

-109 dBm (w/o diversity)

-111 dBm (with diversity)

ETS 300 609-1 (GSM11.21), ETS 300 342-2; CB Report; PCS 1900: FCC Part 15 and Part 24, and Industry Canada ICES-003 & RSS-133, and SRSP-510; NTRL/C

Notes: 1. Grade of Service

2. Standard Configuration of three E1/T1 and two TRX cards

Specifications subject to change without notice This product is designed for professional installation only See www.iwv.com for the latest version of this data sheet

Effective Date: October 2002

## **U.S. HEADQUARTERS**

312 Constitution Drive Menlo Park, California 94025, USA Tel: 1.650.838.2100 Fax: 1.650.321.6250

#### **AMERICAS**

Carrera 45 #175-67 Bogota, Colombia Tel: +57.1.6699393 Fax: +57.1.6149468

Peru 213 e/Rio de Janeiro Asuncion, Paraquay Tel: +595 21 22 55 75 Fax: +595 21 22 80 37

### EUROPE

23, Allée des Impressionnistes - BP 50295 95 958 Roissy CDG Cedex Paris, France Tel: +33.14938.9191 Fax: +33.14938.9190

Intec 2.5 Wade Road Basingstoke Hampshire, RG24 8NE, UK Tel: +44.1256.777580 Fax: +44.1256.777585

#### ASIA/PACIFIC

Suite 806, Level 8 505 Stkilda Road Melbourne, 3004, Australia Tel: +61.3.98681646 Fax: +61.3.98681668

Room O, 4/F, Tower A East Gate Plaza No 9 Dong Zhong Street Dong Cheng District Beijing, P.R. China 100027 Tel: +86.10.64.18.1968 Fax: +86.10.64.18.1372

Tech Centre, Unit 316 72 Tat Chee Ave Kowloon Tong Hong Kong Tel: +852.2574.1922 Fax: +852.2519.9033

1100 88 Corporate Center Sedeno cor. Valero Sts. Salcedo Village, Makati City 1227 Tel: +632.754.8029 Fax: +632.754.8028

Lincoln House Cinnamon Garden Residencies 1/7 67, Ward Place Colombo 07, Sri Lanka Tel: +94 1 662 164 Fax: +94 75 368 281



For further information on interWAVE, please visit us at: www.iwv.com ©2002 interWAVE. All rights reserved. The interWAVE logo is a trademark, and WaveNet is a registered trademark of interWAVE. Each trademark, tradename or service mark of any other company appearing in this document

belongs to its holder.