interWAVE

WAVEXpress BSC

interWAVE's WAVEXpress BSC is a base station controller based on the ETSI GSM standard (and its DCS/PCS derivatives) for wireless cellular communications. Configured with one or more interWAVE BTSs, it enables wireless access to existing voice and data networks for cellular telephones, laptop computers, and any other mobile station conforming to the GSM standard. It manages wireless user connectivity from a mobile station to an MSC via the GSM standard A and Abis interfaces. The WAVEXpress BSC lowers costs and increases service quality within any GSM, DCS, or PCS digital wireless network.

Network Features

Features	Capacity/Standard
Number of TRXs per BSC	Up to 36 TRX modules
Number of BTSs per BSC	Up to 16 BTS nodes
Traffic Capacity	178 Erlangs @ 2% Grade of Service[1]
WAVEXpress BTS Link	Abis-Interface
BSC to MSC Link	GSM A-Interface
GPRS	Hardware ready

System Specifications

Configuration

Maximum Number of TRXs	36
Maximum Number of BTSs	16
Maximum Number of Trunk Ports	16

Interfaces

MSC	GSM Compliant A Interface
BTS	GSM Compliant Abis Interface
Transmission	Dual Port G.703 compliant E1 75/120 Ohm Dual Port T1.403 compliant T1 100 Ohm
Ethernet	IEEE802.3; 10 BaseT
Serial	DB9 male connector supporting DCE interface

GSM Vocoding

Integrated TRAU	Abis Interface supporting enhanced full rate (EFR) or full rate
Transcoding Capacity	Up to 240 Traffic Channels

Electrical

Power Options	110/220 VAC, 50-60 Hz -48 VDC Optional redundant power supply
Power Consumption	4.10 Amperes @ 115 VAC[2] 2.00 Amperes @ 230 VAC[2] 8.20 Amperes @ -48 VDC[2]

GSM
Networks

Wireless
Office

FUSION

Wireless
Broadband

WAVEXpress BSC

Mechanical

Dimensions (HxWxD)	61 x 28 x 41 centimeters (24 x 11 x 16 inches)
Weight	20 kg (44lbs)

Environmental

Operating Environment	Temperature: -5 to 45°C Humidity: 10% to 90% (non-condensing)
Regulatory	GSM 900 & DCS 1800: CB Report; EN550022, IEC1000-4; PCS 1900: FCC Part 15 Class A, NTRL/C; Telecom; E1; 120 Ohm CTR12/13: 75 Ohm NTR-4/10/11; IEC 950; Part 6; FCC Part 15 & Part 68 and Industry Canada ICES-003 & CP-03

Notes: 1. Grade of Service

2. Standard Configuration of Eight E1/T1 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

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Release 6.0

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*For further information on interWAVE,
please visit us at: www.iwv.com*