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More Services. More Subscribers. More Reach.



Product Highlights

- The Ultimate WiMAX Platform
- Benefit from WiMAX performance today
- 3.5 GHz Licensed band operation
- Best in class spectral efficiency and Non-Line-of-Sight operation
- Up to 288 Mbps throughput per cell
- Up to 30 km point-to-multi-point range
- Carrier class solution in three different form factors
- Prioritized voice and data services
- Unique Continuity Program – delivering seamless transition to WiMAX Forum Certified systems

Target Applications

- E1/T1 Replacement
- Cellular Backhaul
- Urban Hotzones
- Enterprise MTU/MDU
- VoIP

Industry Leading OFDM and WiMAX Experience

For more than 10 years, Wi-LAN has revolutionized the broadband wireless marketplace with its W-OFDM technology. W-OFDM has now been adopted by both Wi-Fi® (802.11) and WiMAX Forum™ (802.16) and is the heart of the LIBRA MX™ – the world's only 4th Generation OFDM System.

LIBRA MX allows carriers and service providers to experience the benefits of WiMAX performance today. LIBRA MX's advanced 7 MHz channel offers twice the performance of 3.5 MHz products, resulting in equivalent network performance costing half as much as competitive systems.

Non-Line-of-Sight (NLOS) operation and best of breed spectral efficiency expands the accessible customer base while delivering higher capacity to end users. Rapid network rollout and easy subscriber unit installation enables carriers to generate immediate customer revenue from a range of voice and data services.

LIBRA MX delivers a fast return on investment, helping to build profitable and sustainable voice and data businesses for small, medium and large corporations, home offices and multi-tenant installations. Its modular architecture means that infrastructure deployment occurs in step with customer demand. The carrier grade LIBRA MX base station ensures that network availability and service reliability is second to none.

LIBRA MX ushers in a new era of opportunity and growth. With LIBRA MX and Wi-LAN's Continuity Program™ you can confidently invest in your future now, and migrate to WiMAX Forum Certified™ systems when they become available.

universal. broadband. wireless.

Libra MX Base Station Specifications

Radio Specifications	Output Power (Antenna Port)	BPSK, QPSK: +30dBm; 16QAM: +26dBm; 64QAM: +23dBm			
	Frequency Range	3.4 - 3.6 GHz			
	Technology	W-OFDM, WiMAX/IEEE 802.16-2004 Optional			
	Coverage	NLOS, NrLOS, LOS			
	Range	Up to 30 km			
	Cell Configuration	1 - 6 sectors			
	Throughput Base Station	48 Mbps per sector (64QAM, 7 MHz, FDX)			
	Throughput Subscriber Unit	24 Mbps (64QAM, 7MHz, HDX)			
	Receive Sensitivity (at 10E-6 BER)	BPSK	QPSK	16QAM	64QAM
	Minimum Receiver Sensitivity - 3.5 MHz ¹	-91 dBm	-88 dBm	-82 dBm	-75 dBm
	Minimum Receiver Sensitivity - 7 Mhz ²	-89 dBm	-86 dBm	-80 dBm	-73 dBm
	Channel Size	3.5 MHz / 7 MHz			
	IF Frequency	465 MHz			
	IF Cable Loss	9 db			

Network Support	Network Connection	10/100 Base T, E1/T1 option
	VLAN Compliance	Yes, IEEE 802.1q
	CIR/MBR	Yes
	Bridge Functionality	Yes
	Network Filtering	MAC address, IP address, IP subnet
	QoS Support	IPTOS

Wireless Networking	Network Topologies	Point-to-Point, Point-to-Multipoint
	RF Protocol	W-OFDM 256 FFT
	No. of Subscriber Units per Base Station	2,047 per sector

Security	Data Scrambling	Yes
	Data Security Password	Yes
	Configuration Security	Yes

Management	Remote Management	Telnet, SNMP
	Remote Management Access	From the wired LAN or from the wireless link
	Local Management Port	RS 232 Serial Port, USB
	Software Upgrade	Remote upgradable

Physical, Electrical and Environmental	Power Consumption	Max 350 W/500 W (cPCI/RFU)
	Input Voltage	36 - 60 V DC / 110-220 VAC (external supply)
	Form Factor	Rack mountable, 1U, 4U, 8U
	Operating Temperature	-45°C to 45°C
	Relative Humidity	5-90%

¹ Based on average signal, 3.5 MHz Noise BW, 290 Kelvin
² Based on average signal, 7 MHz Noise BW, 290 Kelvin



Wi-LAN Inc.
 2891 Sunridge Way NE
 Calgary, AB
 Canada T1Y 7K7
 Tel: 1-403-273-9133
 Email: info@wi-lan.com
www.wi-lan.com

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