Consisting of an all-outdoor, single sector base station and multiple subscriber configurations (integrated antenna or N-Connector for external antenna), the Tsunami MP.16 series offers the most scalable, best value WiMAX system for the 3.3 GHz frequency band. Like all Proxim products, the MP.16 3300 continues to offer a comprehensive feature set to future-proof wireless networks.

- Housed in a ruggedized enclosure, the 3300 can be deployed in extreme weather conditions
- Frequency support for 3.3 GHz band
- Advanced revenue-enhancing features are standard – including flexible bandwidth provisioning for DSL, T1 or Ethernet-like tiered services

Scalable Networks
Proxim Wireless delivers a more scalable approach to system deployment, beginning with entry-level single-sector base stations and growing into six-sector macro base stations with GPS synchronization; this approach lowers the barrier to deploy WiMAX systems and enables a wider variety of service providers to use this technology, from rural providers requiring less dense configurations to metropolitan providers who need to support more nodes at closer range.

Proxim delivers a complete portfolio of additional technologies designed to augment WiMAX; Proxim also offers in-building enterprise Wi-Fi® solutions, as well as Wi-Fi mesh for the outdoor edge of a network, connecting to WiMAX for infrastructure and even wireless Gigabit for backhaul.

Experienced in WiMAX Applications
Drawing on Proxim's leadership in the point-to-multipoint arena, the 3300 products have been developed as platforms to service multiple applications. By leveraging our industry-leading Tsunami MP.11 product line, Proxim is able to bring that expertise in supporting the service provider market to this product which is WiMAX complaint.
- Leveraging existing software features, mechanical designs and customer channels, Proxim effectively addresses markets such as:
  - Cost-effective last mile access
  - Security and surveillance
  - Metropolitan networks
- Investment protection through common concept of network design and software feature sets, which includes rich management capabilities, most advanced encryption with AES and authentication via RADIUS, antenna alignment utility, and revenue-enhancing services with bandwidth control

Advanced Security Protects Privacy
Multiple security mechanisms protect operator, residential customer and enterprise privacy.
- Weatherized enclosure allows co-location on rooftops – limiting physical access
- Advanced encryption protects over-the-air transmission
- Client authentication with X.509 certificates
- Password protection of all remote management methods
- Easy integration with existing RADIUS systems for subscriber provisioning

Designed for Fast Installation and Lower Maintenance Cost
The 3300 incorporates hardware and software features that reduce labor costs associated with initial deployment and post-sales maintenance.
- Provides consistent deployment & user experience to Tsunami MP.11 product via an
  easy-to-use graphical interface
- Single UV-shielded CAT5 cable carries power and data
- Decrease Subscriber Unit configuration time with integrated and vertical/horizontal
  polarized antennas
- Eliminate guess work in locating the remote antennas with audible tone and real-time signal strength measurements
- Support for both local and remote management, removing the need for expensive on-site supports

End-to-End Broadband Wireless Product Portfolio
- **Tsunami™ MP.11**
  Our best selling Point-to-Multipoint product line
- **MeshMAX**
  A PMP and access point all-in-one solution
- **ORiNOCO AP**
  World-class performing enterprise 11n access points
- **Tsunami™ MP.16**
  WiMAX for the 3.3 – 3.65 GHz frequency band

Proxim Wireless is a global pioneer of end-to-end broadband wireless systems that deliver the quadruple play. From Wi-Fi to wireless Gigabit Ethernet – our WLAN, mesh, WiMAX and point-to-point products are available through our extensive global channel networks.

CONFIGURATION / MODELS	3300-B00-WLD0, 3300 – MP.16 3300 Base Station 3300-S00-WLD0 3300 – MP.16 3300 Subscriber Station – connectorized 3300-S00-WLD1, 3300– MP.16 3300i Subscriber Station – integrated antenna				
WIMAX COMPLIANCE	IEEE 802.16-2004 (WiMAX profile 3.5 T1)				
WARRANTY	1 Year Parts and Labor				
FREQUENCY	3.3 GHz to 3.5 GHz				
DUPLEXING MODE	TDD				
CHANNEL BANDWIDTH	3.5 MHz and 7 MHz				
INTEGRATED ANTENNA	18 dBi				
ANTENNA PORT	N-Female, 50 ohms				
DATA COMMUNICATION PORT	10/10 Base-TX Ethernet, Manual/Auto Negotiate, Half/Full Duplex RJ-45				
SERIAL PORT / GPS PORT	RJ-45 Connector				
NLOS & INTERFERENCE MITIGATION FEATURES	OFDM 256 FFT, Adaptive Modulation, FEC				
OUTPUT POWER (AT ANTENNA PORT)	Up to 21 dBm Maximum BS Output Power configurable to 5-21 in one dB steps				
MODULATION	OFDM modulation, 256 FFT points; BPSK, QPSK, 16QAM, 64QAM				
FRAME DURATION	5, 10 and 20 ms				

RADIO PERFORMANCE		Modulation & FEC	Rx Sensitivity (10^6)	Minimum C/I	Spectral Efficiency	Burst Data Rate Mbps Tg/Tb = 1/16
	3.5 MHz	BPSK – ½	-95 dBm	4.5 dB	0.5 bps/Hz	1.4 Mbps
		QPSK – ½	-92 dBm	6.6 dB	1 bps/Hz	2.8 Mbps
		QPSK – ¾	-90 dBm	8.9 dB	1.5 bps/Hz	4.2 Mbps
		16QAM – ½	-87 dBm	11.9 dB	2 bps/Hz	5.6 Mbps
		16QAM – ¾	-84 dBm	15.2 dB	3 bps/Hz	8.5 Mbps
		64QAM – ⅔	-80 dBm	19.3 dB	4 bps/Hz	11.3 Mbps
		64QAM – ¾	-78 dBm	21.3 dB	4.5 bps/Hz	12.7 Mbps
	7 MHz	BPSK – ½	-92 dBm	4.5 dB	0.5 bps/Hz	2.8 Mbps
		QPSK – ½	-89 dBm	6.6 dB	1 bps/Hz	6.6 Mbps
		QPSK – ¾	-87 dBm	8.9 dB	1.5 bps/Hz	8.5 Mbps
		16QAM – ½	-84 dBm	11.9 dB	2 bps/Hz	11.3 Mbps
		16QAM – ¾	-81 dBm	15.2 dB	3 bps/Hz	16.9 Mbps
		64QAM – ⅔	-77 dBm	19.3 dB	4 bps/Hz	22.6 Mbps
		64QAM – ¾	-75 dBm	21.3 dB	4.5 bps/Hz	25.4 Mbps

LOCAL MONITORING	Serial/CLI RJ45 Port; Logging feature which logs to serial port, flash, RAM, or a syslog server		
REMOTE MONITORING	SSH/CLI, HTTPS, TFTP; SNMP v1, v2 (MIBII, Proxim MIBs, Bridge MIB, RIPv2 MPB, 802.16 MIB, Etherlike MIB)		
REMOTE MGMT ACCESS	Wired-LAN or over-the-air		
PASSWORD	Multi-Level Password (user, administrator, installer, factory, engineering)		
SUBSCRIBER AUTHENT.	X509v3 digital certificate; MAC Address Table		
VLAN	Support for 802.1Q VLAN tagging and filtering; Support for transparent passing of 802.1Q-compliant VLAN tagged frames		
QOS	Asymmetric Bandwidth Control	Uplink and Downlink CIR Control "committed information rate" per service flow Uplink and Downlink MIR Control "maximum information rate" per service flow	
	Packet Classification Capabilities	802.1D/802.1Q/802.1p priority, IPTOS, VLAN ID, IP source/destination address, source/destination port, Ethernet source/destination address, IP protocol, and Ethertype	
	Scheduling	Best Effort, Universal Grant Services, Traffic is scheduled per service flow, enabling min/max bandwidth, priority, jitter and latency control for voice, video and data	

	Outdoor Radio Unit (SS and BS)	Indoor Power Injector
OPERATING TEMPERATURE	-40° to +60°C	0° to +40°C
WEIGHT	5.3 lbs	2.7 lbs
DIMENSIONS	Packaged (BS, SSR): 14.57 x 13.70 x 8.19 in	5.12 x 3.62 x 2.64 in
SAFETY STANDARDS	EN 60950 (CE)	UL 1950 D3; CSA 22.2 No.950 or CUL; VDE EN60950 or TUV
EMI STANDARDS	RSS-210 (Canada), ETS EN 301 489-1, ETS 301 021, TS2 (SS), ETS 302 085 CS2 (BS)	Conduction: FCC docket 20780 curve "B"ETS 302 085 VDE 0871 curve" B Radiation: FCC class "B"
STATIONS	BASE STATION Tsunami MP.16 Base Station Radio Indoor Subscriber Station Power Injector 4" Pole Mount Bracket Serial Dongle for Antenna Alignment Cable Termination Kit Quick Installation Guide CD-ROM containing User Documentation Indoor Base Station Power Injector	SUBSCRIBER STATION: Tsunami MP.16 Subscriber Radio (either with Type-N or Integrated Antenna) 4" Pole Mount Bracket Cable Termination Kit Power Cord (for Indoor Power Injector) Printed Quick Installation Guide
ACCESSORY AND SPARE KITS	Spare Power DC Injector (69823) ; Surge Arrestor 5 GHz - Standard-N Female to Female (5054-SURGE) PoE (Power Over Ethernet) Surge Arrestor (70251); MP.16 3.5 GHz Antenna	

APPLICATIONS

Security and Surveillance

High definition IP-surveillance cameras for monitoring city streets, airports, bridges, seaports, transportation hubs, offices and warehouses

Last-Mile Access

Competitive broadband service access alternative to DSL or cable for residences and T1 or Ethernet for businesses

Broadband Service Access

For businesses and residences in developing countries and regions where wired infrastructure is not an option

Metropolitan Area Networks

Secure reliable backhaul of Wi-Fi Mesh cells

PROXIM wireless

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