



	MeshMAX™ Series	Tsunami™ MP.16 Series	Tsunami™ MP-8100 Series		Tsunami™ MP.11 Series	
<b>Product</b>	3500WM, 3500W, 5054WM, 5054W	Tsunami™ MP.16 3500	Tsunami™ MP-8100-BSU/SUR	Tsunami™ MP-8100-CPE	Tsunami™ MP.11 2454-R/5054-R	Tsunami™ MP.11 5012
<b>Description</b>	Industry's first convergence of WiMAX, Wi-Fi® Mesh and Wi-Fi	WiMAX Forum Certified™ products for 3.5 GHz frequency band	4G wireless connectivity for carrier, WISP and government networks	Economical wireless Customer Premises Equipment for large scale networks	Capabilities of fixed and mobile WiMAX for license-free frequencies	Economical subscribers ideal for large scale deployments
<b>Applications and Environments</b>	<ul style="list-style-type: none"> <li>Network operator can deliver bundle of IPTV, VoIP and Internet access to subscribers</li> <li>Secure and reliable backhaul of Wi-Fi Mesh traffic</li> <li>Security and surveillance</li> <li>Municipal, rural and service provider broadband networks</li> <li>Enterprise campus networks</li> </ul>	<ul style="list-style-type: none"> <li>Broadband last-mile access for metropolitan and rural areas</li> <li>Voice, video and data transmission with optimal economics</li> <li>Security and surveillance</li> <li>Service provider and municipal broadband networks</li> <li>Security and surveillance</li> </ul>	<ul style="list-style-type: none"> <li>Cellular voice, video and data networks</li> <li>Repeater to extend distance or overcome path blockage in wireless broadband network</li> <li>High-performance wireless connectivity capable of streaming video from multiple HD video surveillance cameras</li> <li>WISP and Carriers</li> <li>Security and surveillance networks</li> <li>Government and public safety networks</li> </ul>	<ul style="list-style-type: none"> <li>Broadband wireless access for metropolitan and rural areas</li> <li>Residential and business Internet access</li> <li>Enterprise, Campus networking</li> <li>Voice, video and data networks</li> <li>Broadband access for residential markets</li> <li>Carriers and WISPs</li> <li>Government and public safety networks</li> <li>Health care</li> </ul>	<ul style="list-style-type: none"> <li>Broadband last-mile access for metropolitan and rural areas</li> <li>Voice, video and data transmission with optimal economics</li> <li>Security and surveillance</li> <li>Service provider and municipal broadband networks</li> <li>Broadband access for ground and water transportation</li> <li>Security and surveillance</li> </ul>	<ul style="list-style-type: none"> <li>Broadband last-mile access for metropolitan and rural areas</li> <li>Voice, video and data transmission with optimal economics</li> <li>Service provider and municipal broadband networks</li> <li>Broadband access for residential market</li> </ul>
<b>Key Features</b>	<ul style="list-style-type: none"> <li>Tri-radio design provides WiMAX backhaul, Wi-Fi Mesh link and Wi-Fi access in one device</li> <li>Simplifies network architecture, deployment and management</li> <li>Significantly reduces TCO with lowest deployment cost per square mile</li> </ul>	<ul style="list-style-type: none"> <li>Product complies with IEEE 802.16 - 2004 standard</li> <li>WiMAX QoS for voice, video, data</li> <li>All-in-one, outdoor base station delivers scalable solution by allowing single sector deployments to grow into multi-sector deployments</li> </ul>	<ul style="list-style-type: none"> <li>Widest range of operating frequencies</li> <li>Supports 3x3 MIMO smart antenna technology</li> <li>Non-line-of-sight capabilities</li> <li>Dual Gigabit Ethernet ports with PoE out to power other external devices like surveillance cameras</li> </ul>	<ul style="list-style-type: none"> <li>Widest range of operating frequencies</li> <li>Supports 2x2 MIMO smart antenna technology</li> <li>Non-line-of-sight capabilities</li> <li>2048 bytes large frame support</li> <li>24dBm high power radio</li> <li>Up to 256-bit AES encryption</li> </ul>	<ul style="list-style-type: none"> <li>WiMAX capabilities for license-free frequency bands</li> <li>WiMAX QoS for voice, data and video</li> <li>Fast handoffs for mobility up to 200 km/hr</li> </ul>	<ul style="list-style-type: none"> <li>Aggressive ROI and fast payback for network providers</li> <li>Compatible with existing MP.11 5054 products</li> <li>Throughput comparable to or better than cable/DSL</li> </ul>
<b>SPECIFICATIONS</b>						
<b>Frequency Band</b>	<ul style="list-style-type: none"> <li>3.5 GHz or 5.15-5.85 GHz (WiMAX link)</li> <li>5.15-5.85 GHz (Mesh link)</li> <li>2.4 GHz or 5.15-5.85 GHz (Wi-Fi access)</li> </ul>	3.40 - 3.60 GHz	<ul style="list-style-type: none"> <li>2.3 - 2.5 GHz</li> <li>4.9 GHz</li> <li>5 GHz</li> <li>6.1 GHz</li> </ul>	<ul style="list-style-type: none"> <li>2.3 - 2.5 GHz</li> <li>4.9 GHz</li> <li>5 GHz</li> <li>6.1 GHz</li> </ul>	<ul style="list-style-type: none"> <li>2.4 GHz (2454-R)</li> <li>5 GHz (5054-R)</li> </ul>	5 GHz
<b>Wireless Protocol</b>	<ul style="list-style-type: none"> <li>802.16-2004 or WOPR (WiMAX)</li> <li>802.11a (Wi-Fi and Mesh)</li> <li>802.11b/g (Wi-Fi)</li> </ul>	802.16-2004	Wireless Outdoor Routing Protocol (WORP; proprietary)	Wireless Outdoor Routing Protocol (WORP; proprietary)	Wireless Outdoor Routing Protocol (WORP; proprietary)	Wireless Outdoor Routing Protocol (WORP; proprietary)
<b>Data Rate</b>	<ul style="list-style-type: none"> <li>25.4 Mbps (3.5 GHz)</li> <li>54 Mbps (5.15-5.85 GHz and 2.4 GHz)</li> </ul>	25.4Mbps	300Mbps	300Mbps	54Mbps	12Mbps
<b>QoS</b>	802.16d QoS (WiMAX); Draft 802.11e, 802.1p, 802.1q (Wi-Fi Mesh)	802.16d QoS (WiMAX)	802.16d QoS (WiMAX)	802.16d QoS (WiMAX)	802.16d QoS (WiMAX)	802.16d QoS (WiMAX)
<b>Security</b>	<ul style="list-style-type: none"> <li>AES (WiMAX)</li> <li>802.11i, AES, TKIP (Wi-Fi Mesh)</li> </ul>	<ul style="list-style-type: none"> <li>AES</li> <li>Radius base authentication of subscribers based on MAC address</li> </ul>	<ul style="list-style-type: none"> <li>AES</li> <li>Proprietary nature of RF protocol</li> <li>Packet filtering, Intracell blocking</li> </ul>	<ul style="list-style-type: none"> <li>Up to 256-bit AES</li> <li>Proprietary RF protocol (change all bullets to use this language)</li> <li>Packet filtering, Intracell blocking</li> </ul>	<ul style="list-style-type: none"> <li>AES</li> <li>Proprietary nature of RF protocol</li> <li>Packet filtering, Intracell blocking</li> </ul>	<ul style="list-style-type: none"> <li>AES</li> <li>Proprietary nature of RF protocol</li> <li>Packet filtering, Intracell blocking</li> </ul>
<b>Form Factors</b>	ODU tri-radio device, 3 x Type-N connectors	<ul style="list-style-type: none"> <li>Base: ODU, N-connector</li> <li>Subscriber station: ODU, N-connector or Integrated 21 dBi Antenna</li> </ul>	<ul style="list-style-type: none"> <li>Base: ODU, N-connector</li> <li>Subscriber station: ODU, N-connector or Integrated 21 dBi Antenna</li> </ul>	<ul style="list-style-type: none"> <li>ODU, N-connector or Integrated 16 dBi Antenna</li> <li>Subscriber station: ODU, N-connector or Integrated 18 or 23 dBi Antenna</li> </ul>	<ul style="list-style-type: none"> <li>Base: ODU, N-connector</li> <li>Subscriber station: ODU, N-connector or Integrated 18 or 23 dBi Antenna</li> <li>Indoor Subscriber</li> </ul>	<ul style="list-style-type: none"> <li>Indoor Subscriber: Bundled with 15 dBi Window Antenna</li> <li>Outdoor Subscriber: Integrated 18 dBi Antenna</li> </ul>