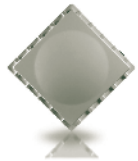
# Proxim Wireless At-a-Glance
## *Outdoor Broadband Wireless Access Products*



| PRODUCT | ORiNOCO® AP-4000MR | ORiNOCO® AP-4900MR | TeraMax™ | Tsunami® MP.11 2454 / MP.11 5054 | Tsunami® MP.16 3500 |
|---|---|---|---|---|---|
| **Description** | High-capacity, multiple-use outdoor wireless mesh system | Public safety outdoor wireless mesh system | Low-cost, data-only OFDM point-to-multipoint system | Capabilities of Fixed and Mobile WiMAX for U.S. and Global Markets | WiMAX Forum Certified™ products for 3.5 GHz frequency band |
| **Applications** | • Metro-area Wi-Fi coverage with fully redundant wireless backbone<br>• Mobile wireless networking<br>• Voice, video and data transmission with optimal economics | • Metro-area and mobile Wi-Fi coverage using 4.9 GHz U.S. public safety<br>• Voice, video and data transmission with optimal economics | • Broadband last-mile access for metropolitan and rural areas<br>• Networks requiring data but not voice and video<br>• Extending TurboCell® networks | • Broadband last-mile access for metropolitan and rural areas<br>• Mobile wireless networking<br>• Voice, video and data transmission with optimal economics | • Broadband last-mile access for metropolitan and rural areas<br>• Voice, video and data transmission with optimal economics<br>• Network protection using licensed 3.5 GHz frequency band |
| **Environments** | • Municipal broadband networks<br>• Service provider broadband networks<br>• Enterprise metro-area networks | • Police<br>• Fire<br>• Emergency first responders | • Service provider broadband networks<br>• Municipal broadband networks | • Service provider broadband networks<br>• Municipal broadband networks<br>• Broadband access for ground and water transportation<br>• Security and surveillance | • Service provider broadband networks<br>• Municipal broadband networks<br>• Regions where 3.5 GHz frequency band is available for commercial use |
| **Key Features** | • Dual-radio base station<br>• 802.11a + b/g Wi-Fi coverage<br>• ORiNOCO Mesh Creation (OMCP) for backhaul at 5 GHz<br>• Fast handoffs for mobility<br>• Secure Management<br>• Enterprise class security | • Dual-radio base station<br>• 802.11b/g Wi-Fi coverage<br>• ORiNOCO Mesh Creation Protocol (OMCP) for backhaul at 4.9 GHz<br>• Fast handoffs for mobility<br>• Secure Management<br>• Enterprise class security | • Adaptive dynamic polling to eliminate intracell interference<br>• OFDM modulation for near-line of sight connections<br>• Operates in 5.8 GHz band (license-free in many countries) | • WiMAX functionality available now for U.S. license-free frequency bands<br>• WiMAX QoS for voice, data and video<br>• Fast handoffs for mobility<br>• Optional dynamic frequency selections to detect 67 radar types | • Product complies with WiMAX 802.16d-2004 standard<br>• Operates at licensed 3.5 GHz frequency band<br>• Leverages mechanical design of Tsunami MP.11 |
| **SPECIFICATIONS** | | | | | |
| **Frequency Band** | • 2.4 GHz or 5 GHz for access<br>• 5 GHz for backhaul | • 2.4 GHz for access<br>• 4.9 GHz for backhaul | • 5.8 GHz | • 2.4 GHz (2454)<br>• 5.25-5.35 GHz, 5.4-5.7 GHz and 5.725-5.850 GHz (5054) | • 3.5 GHz |
| **RF Protocol** | • 802.11a, 802.11b, 802.11g | • 802.11b, 802.11g | • TurboCell (proprietary) | • Wireless Outdoor Routing Protocol (WORP; proprietary) | • 802.16d-2004 |
| **OTA Data Rate*** | 54 Mbps | 54 Mbps | 36 Mbps | 54 Mbps | 13 Mbps |
| **Max Throughput*** | Up to 40 Mbps @ 20 MHz Channel | Up to 40 Mbps @ 20 MHz Channel | Up to 16 Mbps @ 20 MHz Channel | Up to 30 Mbps @ 20 MHz Channel | Up to 9.3 Mbps @ 3.5 MHz Channel |
| **Max Range*** | • Up to 5 miles for 802.11a<br>• Up to 19 miles for 802.11b/g | • Up to 1.7 miles for 4.9 GHz<br>• Up to 19 miles for 802.11b/g | • Up to 3 miles PtMP<br>• Up to 30 miles PTP EX enclosures<br>• Up to 8 miles PTP Flat Panels | • Up to 12.5 miles PtMP<br>• Up to 20 miles PTP | • Up to 14 miles |
| **QoS** | Draft 802.11e; 802.1p | Draft 802.11e; 802.1p | No | 802.16 QoS: up to 8 service classes, 4 service flows and 8 PIRs per service | 802.16 QoS: up to 64 service classes, 16 service flows and 16 PIRs per service |
| **Roaming** | Yes | Yes | No | Yes - Fast handoffs at speeds up to 120m/hr (200km/h) | No |
| **Dynamic Frequency Selection** | Yes | N/A - Automatic Channel Selection | No | Yes | No |
| **Security** | • 802.11i<br>• AES Encryption | • 802.11i<br>• AES Encryption | • AES<br>• DES<br>• Blowfish<br>• Proprietary nature of RF protocol | • AES<br>• Proprietary nature of RF protocol<br>• Packet filtering<br>• Intracell blocking | • AES |
| **Form Factors** | ODU, 2 x N-connectors | ODU, 2 x N-connectors | • Base: ODU, N-connector<br>• Subscriber station: ODU,N-connector or Integrated 23 dBi FP Antenna | • Base: ODU, N-connector<br>• Subscriber station: ODU, N-connector or Integrated 18 or 23 dBi Antenna<br>• Indoor CPE | • Base: ODU, N-connector<br>• Subscriber station: ODU, N-connector or Integrated 21 dBi Antenna |

For detailed technical specifications, please visit **http://www.proxim.com/products/bwa/multipoint**



ATAG_406_BWA

**www.proxim.com**