

### Economical Pico Base Station

Tranzeo's **TR-WMX-3.5-pBS** is a carrier-class WiMAX Pico Base Station (pBS) that is fully compliant with the IEEE 802.16-2004 standard (802.16d). It's based on the industry-leading Wavesat chipset, and features high performance radio with up to +20dBm output power. Combined with Tranzeo's full line of subscriber units and the intuitive AirSync™ Element Management System (EMS), the **TR-WMX-3.5-pBS** provides the most economical turn-key solution for wireless broadband applications in the licensed 3.5GHz band.

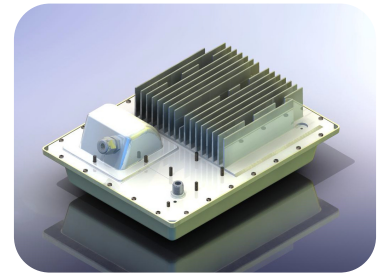
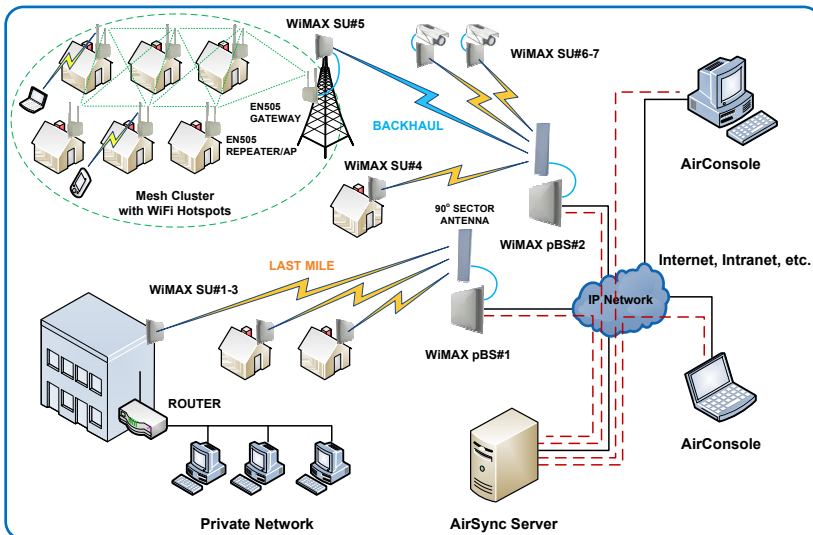
Ideal for rapid deployment and low to medium density applications including rural and enterprise networks, Tranzeo products are designed for the lowest total cost of ownership (TCO) and superior performance, offering incredible ROI.

Designed and manufactured at Tranzeo's leading edge engineering facilities and state-of-the-art manufacturing in British Columbia, Canada resulting in the highest quality and lowest price. The **TR-WMX-3.5-pBS** is RUS accepted with "Buy American" status, making it qualified for stimulus funding.

The ruggedized weatherproof design meets IP67 and NEMA Type 4X environmental standards, requiring minimum installation and maintenance costs in conditions ranging from -35 °C to +50 °C. The **TR-WMX-3.5-pBS** is also backed by Tranzeo's **1-Year Parts & Labour Warranty** and unparalleled **Lifetime Technical Support** for worry-free network operation.

### Applications

- Internet Service
- Community Broadband
- Data Acquisition
- Security and Surveillance
- VoIP and IPTV Service
- Backhaul



### Key Features

- IEEE 802.16-2004 Compliant
- Based on the Wavesat Chipset
- Up to +20dBm Transmit Power
- Selectable 3.5MHz and 7MHz Channel Bandwidths
- Full QoS Traffic Classifiers and Scheduling: UGS, rtPS, nrtPS, BE
- IEEE 802.1Q Management VLAN
- IEEE 802.1d Transparent Bridging
- AirSync™ Element Management System (EMS)
- Remote Firmware Upgrade and Software Management
- Power-over-Ethernet (PoE)
- IP67 & NEMA Type 4X Enclosure

### About Tranzeo Wireless Technologies™

Tranzeo Wireless Technologies Inc. (TSX:TZT) leads the wireless broadband industry for value, by producing high-performance wireless network equipment with a low cost of ownership and unparalleled service allowing communities and businesses to communicate without boundaries. Since the company's inception in 2000, Tranzeo's optimum cost effectiveness, premium quality and responsive support have attracted a growing number of devoted dealers and distributors worldwide.

| Radio Interface and Model Information   |   |               |             |
|---|---|---------------|-------------|
| Standards                               | IEEE 802.16-2004 (802.16d)  |               |             |
| Radio Operation                         | Pico Base Station (Point-to-Multipoint, LOS, NLOS)  |               |             |
| Frequency Range                         | 3400 – 3600 MHz   |               |             |
| Channel Bandwidths <sup>(1)</sup>       | 3.5 MHz, 7 MHz (Selectable)   |               |             |
| Frequency Resolution                    | 250kHz Steps  |               |             |
| Duplex Method                           | TDD, OFDM 256-FFT   |               |             |
| Adaptive Modulation                     | 64-QAM, 16-QAM, QPSK, BPSK  |               |             |
| Spectral Efficiency                     | 5 bits/sec/Hz (64-QAM un-encoded)   |               |             |
| Receiver Sensitivity                    | <b>Burst Type</b>   | <b>3.5MHz</b> | <b>7MHz</b> |
|   | <b>BPSK ½</b>   | -95           | -93         |
|   | <b>QPSK ½</b>   | -93           | -90         |
|   | <b>QPSK ¾</b>   | -91           | -86         |
|   | <b>16-QAM ½</b>   | -87           | -83         |
|   | <b>16-QAM ¾</b>   | -83           | -81         |
|   | <b>64-QAM ¾</b>   | -79           | -76         |
| <b>64-QAM ¾</b>                         | -76   | -73           |             |
| Transmit Power                          | +20 dBm (max)   |               |             |
| RF Output Dynamic Range                 | 30 dB   |               |             |
| Tx Constellation Error at Maximum Power | -31.5 dB (Typ.)   |               |             |
| Antenna Connector                       | N-Type Female Connector   |               |             |
| Model No. <sup>(2)</sup>                | TR-WMX-3.5-pBS- <b>f</b> / <b>W</b>   |               |             |
| Networking and Management               |   |               |             |
| Management, Provisioning & Monitoring   | Airsync™ Element Management System  |               |             |
| Network Protocols                       | TCP/IP, UDP, NAT, DHCP Client/Server, VPN Pass-Through  |               |             |
| Bridging                                | IEEE 802.1d Transparent Bridge  |               |             |
| VLAN Support                            | IEEE 802.1Q Management VLAN   |               |             |
| QoS/Scheduling                          | UGS, rtPS, nrtPS, BE  |               |             |
| QoS/Traffic Classifier                  | ToS, Protocol, Address, Source Port, MAC address, User Priority, VLAN ID  |               |             |
| Bandwidth Control                       | Asymmetric Bandwidth Control  |               |             |
| Error Control                           | Concatenated Reed-Solomon Convolution Code  |               |             |
| Ethernet                                | 1 x 10/100Base-T with Auto-Sense (Water-Tight RJ-45)  |               |             |
| Power Supply                            |   |               |             |
| Power Consumption                       | 15 Watts (max)  |               |             |
| Power Supply                            | Power over Ethernet (PoE)   |               |             |
| DC Adapter                              | 24VDC/2.0A (INPUT: 120-240VAC~ 50-60Hz, 0.4A)<br>f-Model: Fixed UL Plug (US only) W-Model: Snap-In Plugs for US, UK, and EU included                                |               |             |
| Mechanical and Environmental            |   |               |             |
| Dimensions                              | 13.25" x 10.25" x 5.50" (337mm x 260mm x 140mm)   |               |             |
| Weight                                  | 6.4 lbs (2.9 Kg)  |               |             |
| Installation Hardware (included)        | PoE Injector with Built-in Surge Protection, DC Adapter, Ethernet Boot with Weatherproof Gasket, L-Bracket and U-Bolt with up to 20° Up/Down Tilt for Pole Mounting |               |             |
| Weather Rating                          | IP67 and NEMA Type 4X   |               |             |
| Operating Temperature                   | -35°C to +50°C  |               |             |
| Compliance and Warranty                 |   |               |             |
| Export Control                          | HTC 8517.69.0000, ECCN 5A002 ENC, ECL 1-5.A.2.A.1   |               |             |
| Compliance & Approvals                  | RoHS, FCC Part 15, Industry Canada (RSS192), CE! (EMC: EN 301 489, Safety: EN 60950, Radio: EN 302 326)   |               |             |
| Warranty                                | 1-Year Parts and Labour   |               |             |

<sup>(1)</sup> Not all channels are approved for use in all regions. <sup>(2)</sup> f: FCC Model (for use in the USA only), W: World Model (subject to local regulatory requirements). Specifications are subject to change without notice. Tranzeo and the Tranzeo logo are registered trademarks of Tranzeo Wireless Technologies Inc. All other trademarks mentioned herein are the property of their respective owners.