

### Advanced All-in-One AP/PxP/CPE

Tranzeo's **TR-5a** Series of Tri-Band and Tri-Mode Outdoor units can be configured as AP, PxP Bridge, or CPE. These units feature high performance radios and advanced networking and management capabilities including NAT Routing, StreamEngine™ QoS, Security, Bandwidth Throttling, and Dual Ethernet ports.

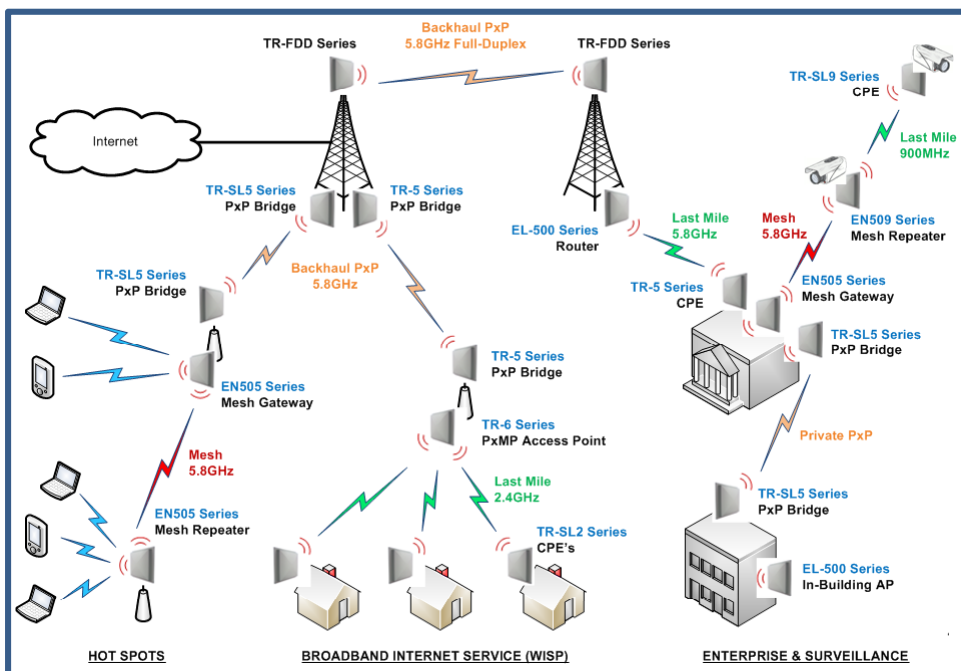
The ruggedized weatherproof all-in-one design meets IP67 and NEMA Type 4X environmental standards, requiring minimum installation and maintenance costs in conditions ranging from -60 °C to +60 °C. The **TR-5a** is also backed up by an industry-leading **5-Year Parts and 3-Year Part & Labour Warranty** and **Lifetime Technical Support** for worry-free network operation.

Tranzeo's leading edge engineering facilities combined with our state-of-the-art in-house manufacturing ensures highest quality products at very competitive prices. The **TR-5a** family of products are RUS accepted with "Buy American" status.



### Applications

- Remote Data Acquisition
- Internet Service
- Video Transmission
- Security and Surveillance
- Private Networks
- WiFi Hot Spots



### Key Features

- IEEE 802.11a Compliant
- Up to +13dBm Transmit Power with Adjustable Output
- 5, 10, or 20MHz Channel BW
- 7W Solar Friendly Power Draw
- Bandwidth Throttling
- Built-in StreamEngine™ QoS
- WEP/WPA/WPA2 Security
- NAT, PPPoE, VPN Pass-through
- Dual Ethernet Ports
- Power-over-Ethernet (PoE)
- Daylight Visible Alignment LED's
- Easy to Install All-In-One Unit
- Web-based Management Tools
- Remote Firmware Upgrade

### About Tranzeo Wireless™

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.

### Tranzeo Wireless Technologies Inc.

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## Technical Specifications

Radio Interface					
<b>Standards</b>	IEEE 802.11a				
<b>Frequency Range</b>	5170 – 5875 MHz				
<b>Channel Bandwidths</b>	5MHz, 10MHz, 20 MHz				
<b>Radio Mode</b>	Access Point (AP), Point-to-Point (PxP), Customer Premise Equipment (CPE)				
<b>Transmit Power</b>	+13 dBm (max) with Adjustable Output				
<b>Receiver Sensitivity</b>	-73 dBm @ 54 Mbps, -85 dBm @ 6 Mbps				
<b>Data Rate &amp; Modulation</b>	48/54 Mbps QAM-64, 24/36 Mbps QAM-16, 12/18 Mbps QPSK, 6/9 Mbps BPSK				
<b>Receive Signal Strength</b>	Noise and Receive Signal Levels (dBm) and Daylight Visible Alignment LED's				
<b>Antenna Polarization</b>	Horizontal or Vertical				
Antenna Options and Model information					
Model No. <sup>(1)</sup>	Type	Wind Load (N)		Beamwidth	
		100 mph	125 mph	Horizontal	Vertical
TR-5a-Nf/W	N-Female Connector	105	165	N/A	N/A
TR-5a-20f/W	20 dBi Panel (internal)	105	165	8.7°	7.7°
TR-5a-24f/W	24 dBi Panel (internal)	182	285	8.7°	7.7°
TR-5a-26f/W	26 dBi Grid (external)	149	232	6°	6°
TR-5a-29f/W	29 dBi Dish & Radome (external)	350	547	6°	6°
TR-5a-32f/W	32 dBi Dish & Radome (external)	787	1230	4°	4°
TR-5a-V15f/W	15 dBi Vertical Sector (external)	52	82	120°	5°
TR-5a-V17f/W	17 dBi Vertical Sector (external)	52	81	60°	5°
TR-5a-H16f/W	16 dBi Horizontal Sector (external)	105	164	90°	6°
Networking and Management					
<b>Device Management</b>	Cross-Platform Utility, Web-Based Management, Remote Configuration and Firmware Upgrades (via IP), TFTP, SNMP v2c (MIB-II, 802.11 MIB, Tranzeo MIB), Import/Export/Save Settings Profiles				
<b>Protocols</b>	TCP/IP, UDP, NAT, DHCP Client/Server/Relay, PPPoE, WDS, VPN Pass-Through, Multiple MAC Bridging				
<b>Quality of Service (QoS)</b>	StreamEngine™ QoS				
<b>Bandwidth Management</b>	Bandwidth Throttling (Bridge and Router Modes)				
<b>Security</b>	40/64-bit and 128-bit WEP Encryption, WPA/WPA2 (TKIP/AES/Enterprise), MAC address filtering				
<b>Ethernet</b>	2 x 10/100Base-T (Water-Tight RJ-45) <sup>(2)</sup>				
<b>Max DHCP Clients</b>	255				
Power Supply					
<b>Power Consumption</b>	7 Watts (max)				
<b>Power Supply</b>	Power over Ethernet (PoE) - PoE Injector with Surge-Protection included				
<b>DC Adapter</b>	18VDC/1.1A (INPUT: 120-240VAC~ 50-60Hz, 0.6A) f-Model: Fixed UL Plug (US only) W-Model: Snap-In Plugs for US, UK, and EU included				
Mechanical and Environmental					
	<b>TR-5a-N/26/29/32/V15/V17/H16</b>	<b>TR-5a-20</b>	<b>TR-5a-24</b>		
<b>Dimensions (radio only)</b>	10.38" x 8.63" x 3.00" (26.4cm x 21.9cm x 7.6cm)	13.22" x 10.28" x 3.50" (33.6cm x 26.1cm x 8.9cm)	16.18" x 14.43" x 3.50" (41.1cm x 36.7cm x 8.9cm)		
<b>Dimensions (radio package)</b>	21" x 13" x 4" (54cm x 33cm x 10cm)	24" x 13" x 4" (61cm x 33cm x 10cm)	28" x 17" x 4" (54cm x 33cm x 10cm)		
<b>Weight (radio package)</b>	4.65 lbs (2 Kg)	6.30 lbs (3 Kg)	9 lbs (4 Kg)		
<b>Installation Hardware</b>	Mounting Bracket (1), Kept Nut/Washer (8), U-Bolt with 2 Nuts (1), Ethernet Boot (1), LMR400 Cable (3ft) <sup>(3)</sup>				
<b>Environmental Rating</b>	IP67 and NEMA Type 4X				
<b>Operating Temperature</b>	-65°C to +60°C				
<b>Storage Temperature</b>	-40°C to +85°C				
Compliance and Warranty					
<b>Export Control</b>	HTC 8517.69.0000, ECCN 5A002 ENC, ECL 1-5.A.2.A.1				
<b>Compliance &amp; Approvals</b>	RoHS, FCC Part 15 Class B, Industry Canada, CEI, EMC: EN 301 489, Safety: EN 60950, Radio: EN 302 213				
<b>Warranty</b>	5-Year Parts / 3-Year Parts and Labour <sup>(4)</sup>				

<sup>(1)</sup> f: FCC Model (for use in the USA only), W: World Model (subject to local regulatory requirements) <sup>(2)</sup> Dual-Ethernet boot cover kit sold separately <sup>(3)</sup> LMR cable is included with the TR-5a-N model only <sup>(4)</sup> 1-Year Parts and Labour warranty for products built before December 1, 2006, and 3-Year Parts and Labour warranty for products built after December 1, 2006 and before December 31, 2007. Specifications are subject to change without notice. StreamEngine is a trademark of Ubicom. Tranzeo and the Tranzeo logo are registered trademarks of Tranzeo Wireless Technologies Inc.