

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

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

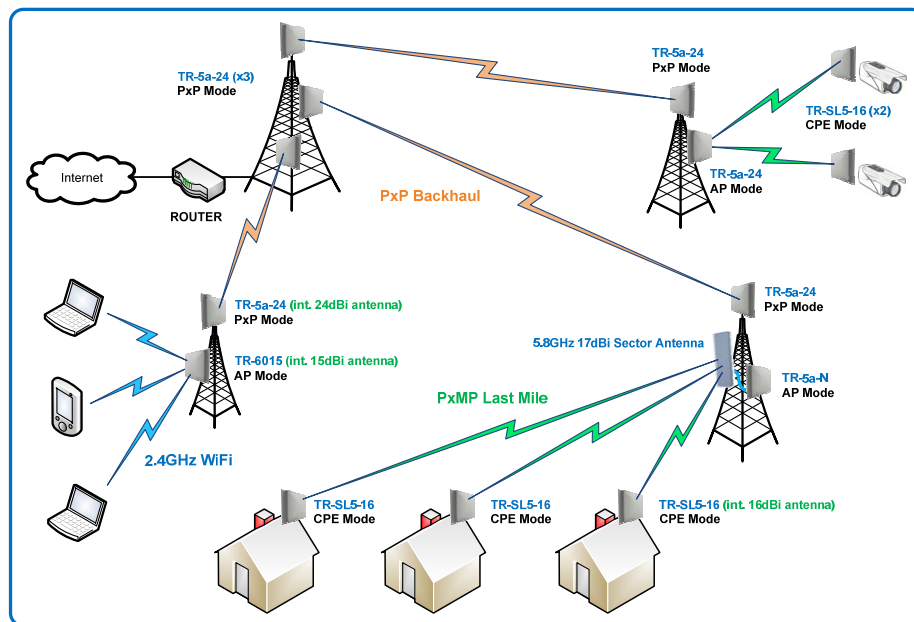
The ruggedized weatherproof all-in-one design meets IP67 and NEMA Type 4X environmental standards, requiring minimum installation and maintenance costs in conditions ranging from -60 °C to +60 °C.

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 is 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
- AP/PxP/CPE Wireless Modes
- Up to +13dBm Transmit Power with Adjustable Output
- 5, 10, or 20MHz Channel BW
- 7W Solar Friendly Power Draw
- Bridge/Router Network Modes
- 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
- IP67 & NEMA Type 4X Enclosure
- Easy to Install All-In-One Units with Integrated Panel Antennas
- Web-based Management Tools
- Remote Firmware Upgrade

## 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.

## Tranzeo Wireless Technologies Inc.

19473 Fraser Way, Pitt Meadows, BC, Canada V3Y 2V4 • T: 604.460.6002 • F: 604.460.6005 • Toll Free: 1.866.872.6936 • [www.tranzeo.com](http://www.tranzeo.com)

Radio Interface					
Standards	IEEE 802.11a				
Frequency Range	5170 – 5875 MHz				
Channel Bandwidths	5MHz, 10MHz, 20 MHz				
Radio Mode	Access Point (AP), Point-to-Point (P×P), Customer Premise Equipment (CPE)				
Transmit Power	+13 dBm (max) with Adjustable Output				
Receiver Sensitivity	-73 dBm @ 54 Mbps, -85 dBm @ 6 Mbps				
Data Rate & Modulation	48/54 Mbps QAM-64, 24/36 Mbps QAM-16, 12/18 Mbps QPSK, 6/9 Mbps BPSK				
Receive Signal Strength	Noise and Receive Signal Levels (dBm) and Daylight Visible Alignment LED's				
Antenna Polarization	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	72	112	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					
Device Management	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				
Protocols	TCP/IP, UDP, NAT, DHCP Client/Server/Relay, PPPoE, WDS, VPN Pass-Through, Multiple MAC Bridging				
Quality of Service (QoS)	StreamEngine™ QoS				
Bandwidth Management	Bandwidth Throttling (Bridge and Router Modes)				
Security	40/64-bit and 128-bit WEP Encryption, WPA/WPA2 (TKIP/AES/Enterprise), MAC address filtering				
Ethernet	2 x 10/100Base-T (Water-Tight RJ-45) <sup>(2)</sup>				
Max DHCP Clients	255				
Power Supply					
Power Consumption	7 Watts (max)				
Power Supply	Power over Ethernet (PoE)				
DC Adapter	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>		
Dimensions (radio only)	10.38" x 8.63" x 3.00" (264mm x 219mm x 76mm)	13.22" x 10.28" x 3.50" (336mm x 261mm x 89mm)	16.18" x 14.43" x 3.50" (411mm x 367mm x 89mm)		
Dimensions (radio package)	21" x 13" x 4" (540mm x 330mm x 100mm)	24" x 13" x 4" (610mm x 330mm x 100mm)	28" x 17" x 4" (720mm x 430mm x 100mm)		
Weight (radio package)	4.65 lbs (2 Kg)	6.30 lbs (3 Kg)	9 lbs (4 Kg)		
Installation Hardware	PoE Injector with Built-in Surge Protection, DC Adapter, Ethernet Boot with Weatherproof Gasket, L-Bracket with KEP nuts and U-Bolt for Pole Mount, 3ft LMR400 Cable <sup>(4)</sup>				
Environmental Rating	IP67 and NEMA Type 4X				
Operating Temperature	-65°C to +60°C				
Storage Temperature	-40°C to +85°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 Class B, Industry Canada, CEI, EMC: EN 301 489, Safety: EN 60950, Radio: EN 302 213				
Warranty					

<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 .