

### All-in-One Mesh Router/Access Point/Gateway

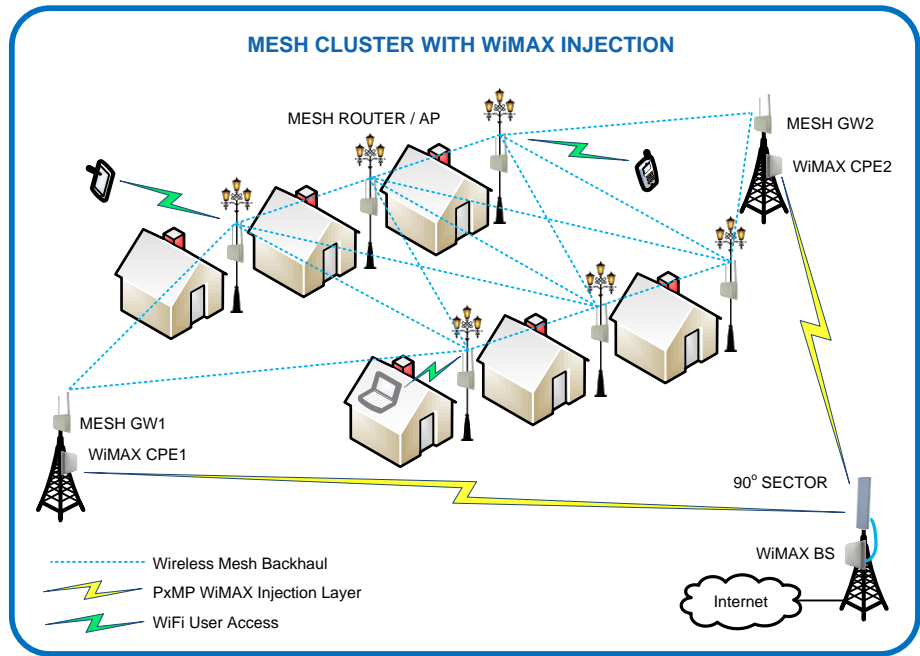
The **EN558** is Tranzeo's latest dual-band outdoor mesh router and access point featuring two high performance radios and employing Tranzeo's patented WirelessFabric™ mesh protocol technology. The dual-radio system serves as a WiFi access point with a dedicated 802.11a radio and as a mesh backhaul router/repeater with a dedicated 802.11a/b/g mesh-enabled radio. The **EN558** also serves as a Gateway via Ethernet to an Internet point of presence (POP). It intelligently repeats and routes data to extend network range and provide redundant routing in intermittent environments.

The **EN558** provides the lowest total cost of ownership (TCO) by leveraging omni-directional antenna for backhaul, and an integrated directional panel antenna for access point. This topology provides highly scalable network deployment that is self-forming for simplified installation and self-healing for reliable connectivity.

The **EN558** is also backed by Tranzeo's industry-leading **5-Year Parts and 3-Year Part & Labour Warranty** and unparalleled **Lifetime Technical Support** for worry-free network operation.

### Applications

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



### Key Features

- IEEE 802.11a/b/g Compliant
- Dual-Radio Mesh Router and Access Point
- Up to +23dBm Transmit Power with Adjustable Output
- 5, 10, or 20MHz Channel BW
- Integrated Access Point Directional Panel Antenna
- Included Omni-Directional Antenna for Mesh Backhaul
- WirelessFabric™ Mesh Protocol
- Up to 4 Virtual Access Points
- 802.11e WMM QoS
- WPA2-Enterprise Security
- NAT, PPPoE, VPN Pass-through
- Power-over-Ethernet (PoE)
- IP67 & NEMA Type 4X Enclosure
- 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.

Radio Interface and Model Information						
Standards	IEEE 802.11a/b/g					
Frequency Range	2412 - 2462 MHz / 5745 – 5805 MHz					
Channel Bandwidths	5MHz, 10MHz, 20MHz					
Radio Modes	Dual-Radio Mesh Router (Mesh) and Access Point (AP): 1 x Mesh (2.4Hz or 5.8GHz) and 1 x AP (5.8GHz), or 2 x AP's (2 x 5.8GHz) or (1 x 2.4GHz and 1 x 5.8GHz)					
Transmit Power	2.4/5.8GHz	+23dBm (max) with Adjustable Output				
Receiver Sensitivity	b-mode	-85 dBm @ 11 Mbps, -90 dBm @ 1 Mbps				
	g-mode	-72 dBm @ 54 Mbps, -89 dBm @ 6 Mbps				
	a-mode	-76 dBm @ 54 Mbps				
Data Rate & Modulation	b-mode	5.5/11 Mbps CCK, 2 Mbps DQPSK, 1 Mbps DBPSK				
	a/g-mode	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					
Internal Antenna Polarization	Vertical					
Antenna Options and Model Information						
Model No. <sup>(1)</sup>	Antenna/Connector Type	Frequency	Beamwidth		Wind Load (N)	
			Horizontal	Vertical	100 mph	125 mph
EN558-16f/W	16dBi Panel Antenna (internal)	5.8GHz	17°	18°	72	112
	N-Female Connector (external)	2.4GHz or 5.8GHz	N/A	N/A		
	7.25dBi Omni Antenna (included)	2.4GHz	Omni	21°		
	8.5dBi Omni Antenna (included)	5.8GHz	Omni	10°		
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), Tranzeo CLI (SSH), Import/Export/Save Settings Profiles					
Diagnostic Tools	Event Log, Statistics, Packet Capture, Ping, Traceroute, DHCP Relay Tester					
Client Information	Data Rate, Signal Level, Traffic Usage					
Routing	WirelessFabric™ Multi-Hop Routing (5+ hops), Static, Dynamic, IP-Masquerading NAT					
Roaming	Nomadic TCP and session persistence within the network					
Protocols	TCP/IP, UDP, NAT, DHCP Client/Server/Relay, PPPoE, VPN Pass-Through, Multiple MAC Bridging, 802.1Q VLAN per ESSID					
Quality of Service (QoS)	802.11e WMM and Tranzeo QoS (4 Primary Classes)					
Security	WEP/WPA/WPA2 (TKIP/AES/Enterprise), AES-129 Encryption (Mesh), Inter-Station Client Blocking, MAC Address Filtering (Whitelist/Blacklist), Custom Firewall Rules (iptables), Stateful Packet Inspection (SPI),					
Bandwidth Management	Bandwidth Allocation per ESSID					
Max ESSID's	Up to 4 Virtual AP's with the ability to hide ESSID's and support for multiple user classes					
Ethernet	1 x 10/100Base-T with Auto-Sense (Water-Tight RJ-45)					
Max DHCP Clients	255 per AP					
Power Supply						
Power Consumption	12 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						
Radio Dimensions	10.38" x 8.63" x 3.00" (22 cm x 26.5 cm x 7.6 cm)					
Radio Weight	1.75 lbs (0.8 Kg)					
Installation Hardware (included)	PoE Injector with Built-in Surge Protection, DC Adapter, Ethernet Boot with Weatherproof Gasket, L-Bracket with U-Bolt for Pole Mount					
Weather Rating	IP67 and NEMA Type 4X (Weatherproof)					
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	5-Year Parts / 3-Year Parts and Labour					

<sup>(1)</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.