

All-in-One Mesh Router & Access Point

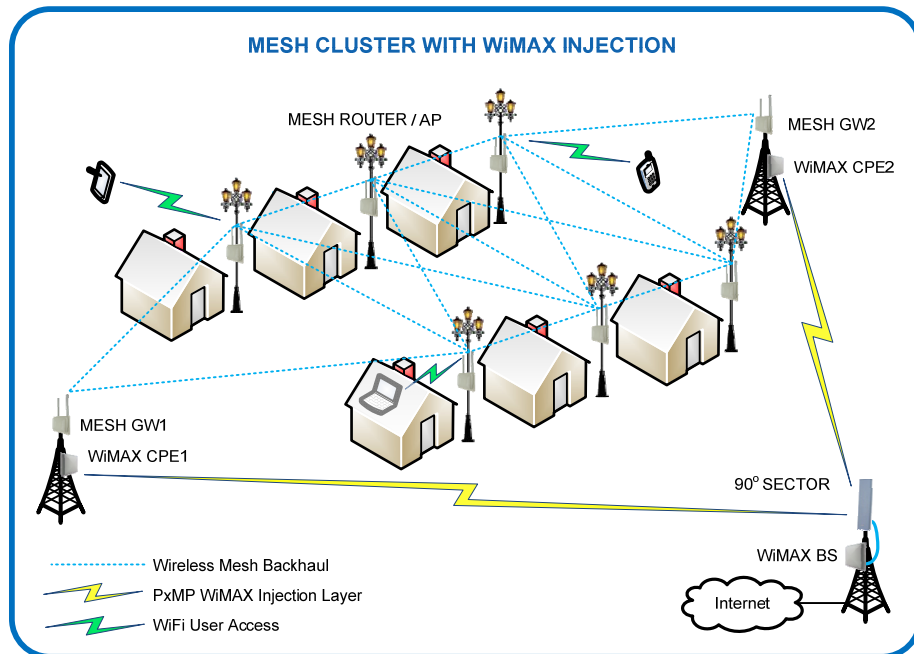
The **EN404** is Tranzeo’s Tri-Band outdoor mesh router featuring two high performance radios and employing Tranzeo’s patented WirelessFabric™ mesh protocol technology. The dual-radio system serves as a WiFi access point with a dedicated 802.11a/b/g radio and as a backhaul router/repeater with a dedicated 802.11a/b/g mesh-enabled radio. Both radios support tri-band operation, allowing the operator to choose different frequencies for backhaul and local access. The **EN404** 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 **EN404** provides the lowest total cost of ownership (TCO) by leveraging omni-directional radio links for both backhaul and local access. This topology provides highly scalable network deployment that is self-forming for simplified installation and self-healing for reliable connectivity.

The **EN404** 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
- Public Safety
- 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
- WirelessFabric™ Mesh Protocol
- Session Persistent Roaming
- Up to 4 Virtual Access Points
- 802.11e/WMM QoS
- WPA2-Enterprise Security
- NAT, PPPoE, VPN Pass-through
- Power-over-Ethernet (PoE)
- Omni-Directional Antennas for AP and Backhaul included
- 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 / 4941 - 4989 MHz ⁽¹⁾ / 5745 – 5805 MHz
Channel Bandwidths	5MHz, 10MHz, 20MHz ⁽²⁾
Radio Modes	Dual-Radio Mesh Router (Mesh) and Access Point (AP) 1 x Mesh (any frequency band) and 1 x AP (any frequency band), or 2 x AP (any combination of two frequency bands)
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
Antenna Type	2.4GHz 7.25 dBi Omni Directional (included)
	4.9/5.8GHz 8.5 dBi Omni Directional (included)
Antenna Connector	Two N-Female connectors to support alternate antenna options
Model No. ⁽³⁾	EN404f/W
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, WDS, 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 Auto-Sensing 10/100Base-T (Water-Tight RJ-45)
Max DHCP Clients	255 per AP
Power Supply	
Power Consumption	12 Watts (max)
Power Supply	Power over Ethernet (PoE) - PoE Injector with Surge-Protection included
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	
Dimensions (radio only)	10.38" x 8.63" x 3.00" (22 cm x 26.5 cm x 7.6 cm)
Dimensions (package)	21" x 13" x 4" (54 cm x 33 cm x 10 cm)
Weight (package)	4.65 lbs (2 Kg)
Installation Hardware	Mounting Bracket (1), Kept Nut/Washer (8), U-Bolt with 2 Nuts (1), Ethernet Boot (1)
Weather Rating	IP67 and NEMA Type 4X
Wind Load	69 N @ 100 mph and 108 N @ 125 mph
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, FCC Part 90, Industry Canada, CEI, EMC: EN 301 489, Safety: EN 60950, Radio: EN 302 213
Warranty	5-Year Parts / 3-Year Parts and Labour ⁽⁴⁾

⁽¹⁾ Operation in the 4.9GHz Public Safety band is restricted in the US, Canada, and Mexico. In the US, use of this band is restricted to entities that meet the requirements listed in the FCC Part 90.20 Public Safety Pool and are properly licensed to operate a transmitter in the Public Safety band in accordance with Part 90Y of the technical rules. ⁽²⁾ 5MHz, 10MHz, and 20MHz channels available in Firmware Version 5.0 or greater. ⁽³⁾ f: FCC Model (for use in the USA only), W: World Model (subject to local regulatory requirements). Specifications are subject to change without notice. ⁽⁴⁾ 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. Tranzeo and the Tranzeo logo are registered trademarks of Tranzeo Wireless Technologies Inc.