

# EN404

## Dual Radio Outdoor Wireless Mesh Router

**NOW AVAILABLE IN OUR IP67 / NEMA 4X CASE!!**

**The EN404: the most cost-effective solution for delivering broadband wireless applications in outdoor environments. The EN404 uses public safety 4.9 Ghz networking for maximum range and interoperability with WiFi enabled devices.**

Enabled by Tranzeo's **WirelessFabric™** network software, the **EN404** ensures maximum application bandwidth at the lowest total cost of ownership.

The **EN404** is a wireless mesh router specifically designed for outdoor applications. The dual-radio **EN404** serves as a WiFi access point with a dedicated 802.11b/g radio, an intra-network repeater and router with a dedicated 802.11a mesh enabled radio, and as a gateway via Ethernet to an Internet point of presence (POP). Tranzeo's patented technology separating the client access (in the crowded 2.4 GHz ISM band) from the mesh backhaul channel allows explicit control of the backhaul and enables an extremely reliable high throughput solution. The **EN404** product family provides the lowest total cost of ownership (TCO) by leveraging omni-directional radio links providing a highly scalable network deployment, a self-forming network topology that reduces installation costs by simplifying the installation procedures, and a self-healing network ensuring the best possible and most reliable connectivity. An advanced quality of service (QoS) mechanism is employed to provide priority to VoIP and other high priority traffic, and fairly distribute network bandwidth to connected clients.

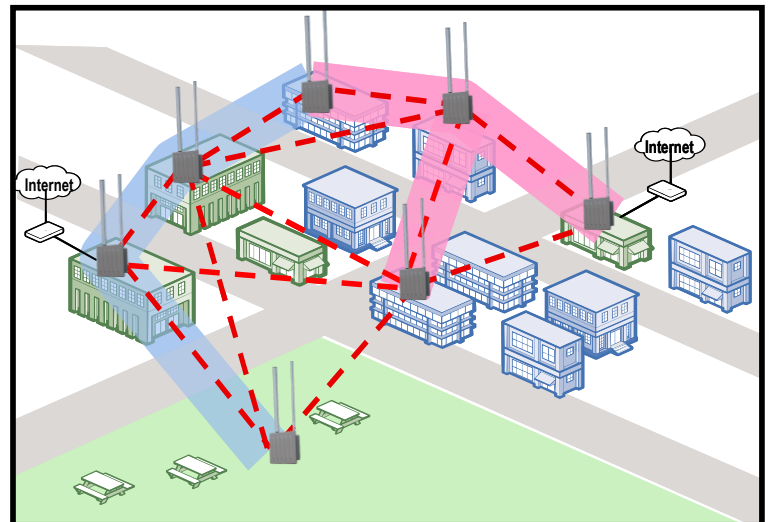


### ABOUT WIRELESSFABRIC™

Employing Tranzeo's **WirelessFabric™** network software, each **EN404** serves as a router and repeater, extending your network to wireless clients.

The **WirelessFabric™** network software:

- **Any Radio Any** role allows the operator to choose what frequency the backhaul and access radios operate (Either 2.4 or 5.8 Ghz in base model)
- Self-assembles upon power-up, eliminating field configuration or human intervention
- Self-heals to maintain optimal connectivity due to changes in the environment
- Intelligently repeats and routes data to extend network range beyond the radio range and provides redundant routing paths for network reliability in intermittent environments
- Prioritizes traffic with an advanced QoS for VoIP, video, and data
- Supports secure Virtual Private Networks (VPN)
- Supports multiple user classes with four ESSIDs
- Supports roaming clients throughout the network
- Optimizes broadcast data using an advanced multicast routing algorithm
- Enables remote element management and software upgrades with a Web-GUI, CLI, or SNMP



## EN404 Specifications

Radio Specifications		
<b>Radio</b>	IEEE 802.11a/b/g	
<b>Modes</b>	1 x Mesh (2.4, 5.8 or 4.9) and 1 x AP (22.4, 5.8 or 4.9) 2 x Aps or MESH/AP Combo	
<b>Frequency Band &amp; Channel Width</b>	2.412 - 2.462 GHz (5, 10 or 20 MHz Channels Available*) 4941-4989 GHz (5, 10 or 20 MHz Channels Available*) 5.745 - 5.805 GHz (5, 10 or 20 MHz Channels Available*)	
<b>Transmit Power</b>	23 dBm (2.4 or 5.8)	
<b>Receive Sensitivity</b>	<b>B Mode</b>	-85 dBm @ 11 Mbps, -90 dBm @ 1 Mbps
	<b>G Mode</b>	-72 dBm @ 54 Mbps, -89 dBm @ 6Mbps
	<b>A Mode</b>	-76 dBm @ 54 Mbps
<b>Antennas Included</b>	5 dBi 2.4 omni directional and 8.5 dBi omni directional Unit has 2 N-Connectors to support alternative Antennas options	
Network		
<b>WirelessFabric™</b>	Multihop routing (support 5+ hops)	
<b>Edge Routing</b>	Static, NAT/Masquerading, Dynamic routing	
<b>Protocol</b>	TCP/IP, UDP	
<b>IP Addressing</b>	DHCP server or relay	
<b>QoS</b>	802.11e WMM & Tranzeo QoS (4 primary classes)	
<b>Traffic Optimization</b>	Bandwidth allocation per ESSID	
<b>VLAN</b>	802.1Q (VLAN per ESSID)	
<b>Roaming</b>	Nomadic TCP & session persistence within the network	
Management		
Tranzeo Wireless Web-GUI element manager - software upgrade / Tranzeo CLI / SNMP V2c		
<b>Warranty</b>	5 year for parts /3 year for parts and labour**	
Security		
AP-WEP/WPA/WPA2 (PSK w/TKIP, EAP-TLS, EAP-PEAP TLS, EAP-PEAP MSChap/v2, EAP-TTLS)		
VPN / ESSIDs (4 ESSIDs - support multiple user classes; all ESSIDs selectable)		
Mesh backhaul - AES128 encryption / MAC address filtering		
Hardware Specifications		
<b>Ethernet</b>	Auto-sensing 10/100 BaseT	
<b>Power supply</b>	Power over Ethernet (POE)	
<b>Power</b>	12 W maximum	
<b>Dimensions</b>	9.8" x 7.8" x 2.5" (25 cm x 20 cm x 6 cm)	
<b>Weight</b>	3.25 lbs (1.48kg)	
Environmental Specifications		
<b>Operating Temperature</b>	-55 °C to +55 °C	
<b>Storage Temperature</b>	-40 °C to +85 °C	
<b>Weather rating</b>	IP67 and NEMA 4	
Approvals		
FCC CFR 47 Part 15, FCC Part 90, Class B, CEI, Industry Canada		

Specifications are subject to change without notice. f (FCC) and W (World) Models - Subject to local regulations.

\* 5, 10, 20 MHz channels available in firmware version 5.0 or greater.

\*\* 3 and 5 Year warranties only apply to radio products built after December 1, 2006 and December 31 2007, respectively.