

EN509

Dual Radio Outdoor Wireless Mesh Router

Finally 900 MHz with MESH.

The most cost-effective solution for delivering broadband wireless applications in outdoor environments.

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

In addition to this, Tranzeo has given the EN Series a new look that is very familiar, our tried and proven Slim Line case. This case allows for easier mounting of external antennas, discreet mounting options and comes with Status LED's which makes installation much easier.



The **EN509** is a wireless mesh router specifically designed for outdoor applications. Configurable to suit a variety of deployment scenarios. The EN509 is an excellent product for extending a mesh network into a wooded or other NLOS areas, with the backhaul operating on your choice of 900, 2.4 or 5.8, and offering client access via 900, 2.4 or 5.8. Suitable for use with our TR-902 or SL9 series of CPE radios.

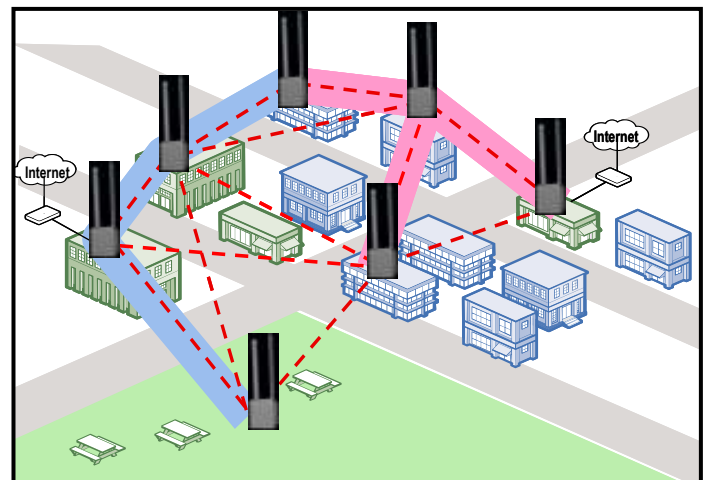
The **EN Series** product family provides the lowest total cost of ownership (TCO) by leveraging omni-directional or directional radio links providing a highly scalable network deployment, a self-forming network topology that reduces installation costs by simplifying the installation procedures, and 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, Video and Data traffic, and fairly distribute network bandwidth to connected clients.

ABOUT WIRELESSFABRIC™

Employing Tranzeo's **WirelessFabric™** network software, each **EN Series Radio** 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 900 MHz, 2.4 or 5.8 Ghz)
- Self-assembles upon power-up, eliminating field configuration
- Self-heals to maintain optimal connectivity due to changes in the environment
- Intelligently repeats and routes data to extend network 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 within the mesh using an advanced multicast routing algorithm
- Enables remote element management and software upgrades with a Web-GUI, CLI, or SNMP



EN509 Specifications

Wireless		
Backhaul & Access (B&A)	900MHz & IEEE 802.11a/b/g	
Frequency Band & Channel Width	1 x 902 MHz to 928 MHz (5, 10 or 20 MHz Channels Available*) 1 x 2.412 - 2.462 GHz or 5.745 - 5.805 GHz (5, 10 or 20 MHz Channels Available*)	
Transmit Power	900 MHz	+25 dBm average, +29 dBm peak
	IEEE 802.11a/b/g	23 dBm
Receive Sensitivity	A Mode	-76 dBm @ 54 Mbps
	B Mode	-85 dBm @ 11 Mbps, -90 dBm @ 1 Mbps
	G Mode	-72 dBm @ 54 Mbps, -89 dBm @ 6Mbps
Antenna	2.4 Ghz	5 dBi omni directional
	5.8 Ghz	8.5 dBi omni directional
Note: You can add your choice of 900 MHz Antenna, which not included.		
Network		
WirelessFabric™	Multihop routing (support 5+ hops)	
Edge Routing	Static, NAT/Masquerading, Dynamic routing	
Protocol	TCP/IP, UDP	
IP Addressing	DHCP server or relay	
QoS	802.11e WMM & Tranzeo QoS (4 primary classes)	
Traffic Optimization	Bandwidth allocation per ESSID	
VLAN	802.1Q (VLAN per ESSID)	
Roaming	Nomadic TCP & session persistence within the network	
Management		
Element Management System	Tranzeo Wireless Airsync manager	
Software Upgrades	Via Web Gui / Tranzeo CLI (Internet access required for upgrade)	
Security		
Access Encryption	WEP/WPA/WPA2 (PSK w/TKIP, EAP-TLS, EAP-PEAP TLS, EAP-PEAP MSChap/v2, EAP-TTLS)	
User Classification	VPN / ESSIDs (4 ESSIDs - support multiple user classes; all ESSIDs selectable)	
Backhaul Encryption	AES128 encryption / MAC address filtering	
Hardware Specifications		
Ethernet	Auto-sensing 10/100 BaseT	
Power supply	Power over Ethernet (POE)	
Power	12 W maximum	
Dimensions	9.8" x 7.8" x 2.5" (25 cm x 20 cm x 6 cm)	
Weight	3.25 lbs (1.48kg)	
Warranty	5 year for parts /3 year for parts and labor	
Environmental Specifications		
Operating Temperature	-55°C to +55°C	
Storage Temperature	-40°C to +85°C	
Weather rating	IP67 and NEMA 4x	
Approvals		
FCC CFR 47 Part 15, Class B		

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