

TR-MX-50 Series - Advanced All-in-One 802.11n MIMO 2x2

Tranzeo's new value priced MX50 Series of 5 GHz Wireless LAN products are 802.11a/n compliant, featuring 2x2 MIMO antennas, and boosting data rates of up to 300Mbps. These versatile and cost-effective units can be configured and deployed as an Access Point, CPE or as a high performance Point-to-Point link.

The MX50 series of products feature a high performance radio with up to 26dBm output power, and advanced networking and management capabilities including NAT Routing, DHCP Server, DHCP Relay, WMM QoS, WEP/WPA/WPA2 Security, Bandwidth Control, 4 Virtual Access Points (with multiple ESSID's), VLAN tagging and VLAN Pass-Through.

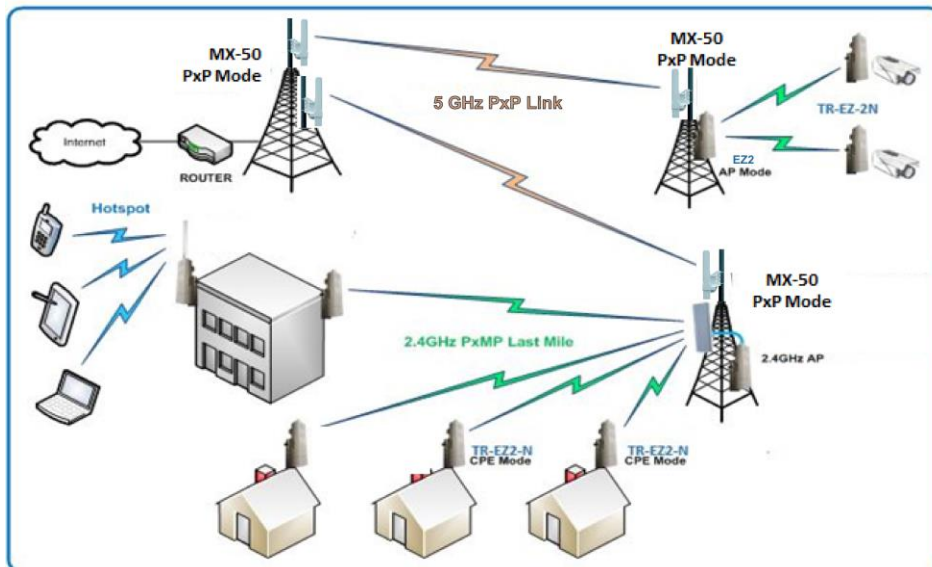
The all-in-one design Indoor/Outdoor design features integrated 15dBi 2x2 MIMO dual-polarity antennas and LED alignment for easy installation.

The weather resistant design meets IP55 environmental standards, requiring minimal installation and maintenance costs and is ideal for conditions ranging from -40°C to +70°C.

The MX50 is backed by **1-Year Parts and Labour Warranty** and **Lifetime Technical Support** for worry-free network operation.

Applications

Remote Data Acquisition	Private Networks	WISP
Security and Surveillance	Video Transmission	Long Range Links
Building to Building (P2P)	Back Haul For Hotspots	Marinas/RV Parks



About Tranzeo Wireless Technologies™

Tranzeo Wireless Technologies Inc. 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, distributors and customers worldwide.



Key Features

- IEEE 802.11a/n Compliant
- Operates in 5.2 & 5.8 GHz band
- Integrated 15dBm Antenna
- 2 x 2 MIMO support
- Dual Ethernet ports
- Low Power Draw / Solar Friendly
- AP/CPE/WDS/Bridge/Router Modes
- Up to 300 Mbps Data Rate
- +26dBm Transmit Power with Adjustable Power Control
- 20/40 MHz Channels
- Antenna Alignment LED's
- WEP/WPA/WPA2 Security and WMM QoS
- NAT Routing, VPN Pass-Through
- Traffic Shaping
- Power-over-Ethernet (PoE)
- HTTP/HTTPS Web Based Management Tools
- Enhanced Long Range Support
- Remote Upgrade Support
- Lifetime Tech Support

Specifications

Radio Interface					
Standards	IEEE 802.11a/n				
Frequency Range (FCC)	5180-5240 MHz, 5745-5825 MHz (Not Yet Approved for 5.4 Operation in USA)				
Frequency Range (Rest of World)	5180-5240 MHz, 5240-5320 MHz, 5500-5700 MHz, 5745-5875 MHz				
Channel Bandwidths	20MHz, 40MHz Selectable				
Radio Modes	Access Point (AP), Customer Premise Equipment (CPE), Access Point WDS, Station WDS				
Transmit Power	+26 dBm (Max)				
Receiver Sensitivity	a-mode	-75 dBm @ 54 Mbps	-80 dBm @ 36 Mbps	-88 dBm @ 18 Mbps	-92 dBm @ 9 Mbps
		-78 dBm @ 48 Mbps	-84 dBm @ 24 Mbps,	-90 dBm @ 12 Mbps	-95 dBm @ 6 Mbps
	n-mode	MCS	HT20	MCS	HT40
		MCS0/8	-90 dBm	MCS0/8	-88 dBm
		MCS7/15	MCS7/15	-70 dBm	
Modulation & Coding Rates	64-QAM $\frac{3}{4}$, 64-QAM $\frac{2}{3}$, 64-QAM $\frac{1}{2}$, 16-QAM $\frac{3}{4}$, 16-QAM $\frac{2}{3}$, QPSK $\frac{3}{4}$, QPSK $\frac{1}{2}$, BPSK $\frac{1}{2}$				
Antenna Polarization	Dual Polarity (2 x 2 MIMO)				

Antenna Options and Model Information			
Model No. ⁽¹⁾	Type	-3dB Beamwidth	
		Azimuth	Elevation
TR-MX50-15	15 dBi 2x2 MIMO (internal)	See charts below	

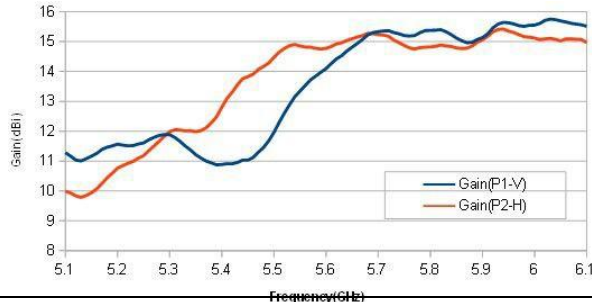
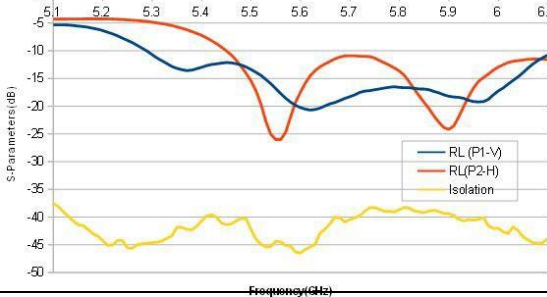
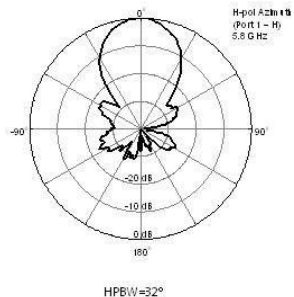
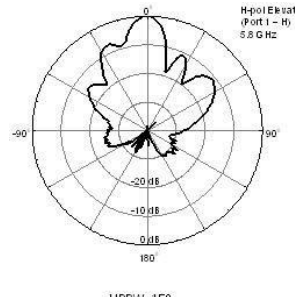
Networking and Management	
Device Management	Web-Based Management (HTTP and HTTPS Server), Remote Configuration and Firmware Upgrades (via IP), Backup/Restore Configuration, System Log, SSH, SNMP v2c
Protocols	TCP/IP, UDP, NAT, DHCP Client/Server, PPTP, WDS, STP, VPN Pass-Through, Management VLAN, Multiple MAC Bridging, Spanning Tree.
Quality of Service (QoS)	802.11e WMM
Bandwidth Management	Upload and Download Bandwidth Control
Security	64/128-bit WEP, WPA/WPA2 (PSK/EAP/TKIP/AES), Station Isolation, MAC Address Filtering, IEEE 802.1X
Multiple ESSID	Up to 4 Virtual Access Points with independent SSID and security control
Ethernet	2 x 10/100 ports with Auto-MDI/X
Max Clients	127

Electrical Specifications	
Power Requirement	6 Watts (max)
Power Supply	Power over Ethernet (PoE)
DC Adapter	24VDC/0.7A (INPUT: 100-240VAC~ 50-60Hz, 0.5A) f-Model: Fixed UL Plug (US only) W-Model: Snap-In Plugs for US, UK, and EU included
Reset Button	Reboot, Reset Factory Defaults
LED Indicators	Power (1), LAN (1), Signal Strength (4)
Processor	Atheros AR9342 (560MHz)
Memory	64MB DDR2 / 8 MB Flash

Mechanical and Environmental	
Radio Dimensions (HxWxD) ⁽²⁾	8.8" x 4.8" x 2.4" (223 x 123 x 60 (mm))
Radio Weight	0.9 lbs (420 g)
Installation Hardware (included)	Power Supply/PoE Injector, Mounting-Bracket with Straps for Pole Mount
Environmental Rating	IP55 (IP67 version available)
Operating Temperature	-40°C to +60°C
Storage Temperature	-40°C to +90°C

Compliance and Warranty	
Compliance & Approvals	RoHS, FCC Part 15, Industry Canada, CE0678!, EN 62311, EN 60950-1+A11+A1+A12, EN 301 489-1/-17, EN 301893, EN 302502
Warranty	1-Year Parts and Labor , 90 Days for POE
Export Control	HTC 8517.69.0000, ECCN 5A002 ENC, ECL 1-5.A.2.A.1

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Integrated 15dBi@5GHz Dual-Polarization Antenna	
Gain	15dBi
Radiation	Directional
Frequency Range	5.1-6.1 GHz
Polarization	Dual – Polarization
Azimuth -3dB Beamwidth	Horizontal(Port 1): 32 degrees Vertical(Port 2): 35 degrees
Elevation -3dB Beamwidth	Horizontal(Port 1): 15 degrees Vertical(Port 2): 17 degrees
Isolation	-37dB (Max)
Front-to-Back Ratio	-35dB (Max)
Gain Plot	
Return Loss & Isolation Plot	
Polar Plots (At 5.6GHz)	
H-Pol Azimuth (Port 1 - H)	H-Pol Elevation (Port 2 - V)
	
V-Pol Azimuth (Port 2 - V)	V- Pol Elevation (Port 1 - H)
