RAPIDUS

5 GHz 2x2 MIMO AP/WDS/CPE

The Rapidus Wireless RL-MX67 Series of 5 GHz Wireless LAN products are 802.11a/n compliant, featuring 2x2 MIMO internal antennas or models with optional external antenna N connectors. It supports 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 unit is powered by Rapidus Wireless proven firmware to provide enhanced performance capabilities, features and reliability.

The RL-MX67 series of products feature a high performance radio with up to 27dBm 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 (multiple ESSID's), VLAN tagging and VLAN Pass- Through.

The high quality design features models with both integrated 17 dBi 2x2 MIMO dual polarity antennas and models with the ability to connect to external antennas for longer range applications or sector antennas. All models feature visible LED alignment for easy installation. The weather resistant design meets high level IP67 environmental stand- ards, reducing installation and maintenance costs and is ideal for conditions ranging from -40oC to +70oC

Key Features

- IEEE 802.11a/n Compliant
- AP/CPE/WDS Radio Modes
- Up to 300Mbps Data Rate
- +26dBm of Total Transmit Power with Adjustable Output
- Integrated 2x2 MIMO Antenna (RL-MX67-17)
- 5/10/20/40MHz Channel Widths
- 8W Solar-Friendly Power Draw
- Up to 4 Virtual Access Points / SSID's
- WEP/WPA/WPA2 Security
- HTTP/HTTPS Web Server
- Telnet, SSH, SNMP v2c
- NAT, STP, DHCP Server/Relay
- Power-over-Ethernet (POE)
- Web-Based Management Tools
- Remote Firmware Upgrade
- Weatherproof Enclosure

Software Configurations

5 GHz Access Point
WDS / Point-to-Point
CPE

Model Ordering Options

RL-MX67-17: includes PoE, mounting bracket and integrat- ed 17 dBi 2x2 MIMO antennas.

RL-MX67-N: includes PoE, mounting bracket and dual N connectors to connect to an ex- ternal dual polarity antenna of your choice.

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Specifications

Radio Interface	
Standards	IEEE 802.11a/n
Frequency Range	5100 – 5900 MHz (Not approved for 5.4GHz operation in the USA)
Channel Bandwidths	5MHz, 10MHz, 20MHz, 20/40MHz Selectable
Radio Modes	Access Point (AP), Customer Premise Equipment (CPE), Access Point WDS, Repeater WDS, Station WDS
Transmit Power (Total)	+26 dBm

Receiver Sensitivity	a-mode				
		-80 dBm @ 54 Mbps	-87 dBm @ 36 Mbps	-94 dBm @ 18 Mbps	-97 dBm @ 9 Mbps
		-83 dBm @ 48 Mbps	-90 dBm @ 24 Mbps,	-96 dBm @ 12 Mbps	-97 dBm @ 6 Mbps
		MCS	**HT20**	**MCS**	**HT40**
	n-mode	MCS0/8	-97 dBm	MCS0/8	-92 dBm
		MCS1/9	-94 dBm	MCS1/9	-90 dBm
		MCS2/10	-92 dBm	MCS2/10	-87 dBm
		MCS3/11	-87 dBm	MCS3/11	-84 dBm
		MCS4/12	-84 dBm	MCS4/12	-82 dBm
		MCS5/13	-80 dBm	MCS5/13	-78 dBm
		MCS614	-79 dBm	MCS614	-76 dBm
		MCS7/15	-77 dBm	MCS7/15	-74 dBm

Modulation & Coding Rates	OFDM-52: 64-QAM ⅚, 64-QAM ¾, 64-QAM ⅔, 16-QAM ¾, 16-QAM ½, QPSK ¾, QPSK ½ , BPSK ½
Antenna Polarization	Dual Polarity (2 x 2 MIMO)

Antenna Options and Model Information					
Model No.	Type	Wind Load (N)		-3dB Beamwidth	
		100 mph	125 mph	Azimuth	Elevation
MX67-N	2 x N-Type Female Connectors	N/A	N/A	N/A	N/A
MX67-17	17 dBi 2x2 MIMO (internal)	105	165	30°	17°
MX67-17N	17 dBi 2x2 MIMO (internal) and 2 x N-Type Female Connectors (Autoselected when connected to external antennas)	105	165	30°/TBD	17°/TBD

Networking and Management	
Device Management	Web-Based Management (HTTP and HTTPS Server), Remote Configuration and Firmware Upgrades (via IP), Backup/Restore Configuration, System Log, Telnet, SSH, SNMP v2c
Protocols	TCP/IP, UDP, NAT, DHCP Client/Server/Relay, PPPoE, PPTP, WDS, Spanning Tree, VPN Pass-Through, VLAN Switch (Tag/UnTag/Pass-Through), Management VLAN, Multiple MAC Bridging
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 ESSID and security control
Ethernet	1 x 10/100Base-T (Water-Tight RJ-45)

Specifications

Electrical Specifications	
Power Requirement	8 Watts (max)
Power Supply	Power over Ethernet (PoE)
DC Adapter[1]	24VDC/0.5A (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
RF ESD Protection	15KeV
Processor & Memory	Atheros AR7130 300MHz, 32MB SDRAM, 4MB Flash
Mechanical and Environmental	
Radio Dimensions	13.22" x 10.28" x 3.50" (336 x 261 x 89 mm)
Radio Weight	1.79 lbs (0.81 kg)
LED Indicators	Power (1), LAN (1), Signal Strength (4)
Installation Hardware (included)	PoE Injector with Built-in Surge Protection, DC Adapter, Ethernet Boot with Weatherproof Gasket, and L-Bracket with U-Bolt for up to 20° Up/Down Tilt for Pole Mount
Environmental Rating	Weatherproof IP67 and NEMA Type 4X Enclosure
Operating Temperature	-40°C to +70°C
Storage Temperature	-40°C to +90°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 Subparts B/C, Industry Canada, CE! EN 301 893, EN 302 502
Warranty	3-Year Parts and Labor