RapidLink 54 PtMP

High-Data Rate, Point-to-Multipoint Wireless Network (5.8 GHz)

The RapidLink 54 PtMP

Delivering commercial grade high-speed, point-to-multipoint connectivity to service and manage the most demanding multipoint applications. Operating in the license-exempt 5.8 GHz ISM band, RapidLink 54 PtMP ensures a cost effective, reliable data transport for all secure corporate, military or commercial communication needs.

Product Highlights

- Operates in license-exempt 5.8 GHz band
- High-Capacity – Up to 108 Mbits/s per Base Station
- Effective TCP/IP throughput up to 20 Mbps
- OFDM modulation with integrated NLOS (Non-Line of Site) capability
- Symmetrical communication
- RapidLink NMC (Decentralized Network Management Center)
- 10/100Base-TX auto-sensing Ethernet interface
- Convenient PoE connectivity
- Embedded Web server

Versatile & Robust Point-to-Multipoint Solution

- Bandwidth allocation/rate limiting
- QoS (optional)
- VoIP (optional)
- BS (Base Station) Multiple antenna options:
- CPE (Customer Premise Equipment) options integrated antenna options: 22 dBi, 23 dBi, 26 dBi or external 28 dBi
- Weatherproof enclosures designed for harsh outdoor environments -40° to 70° C

Applications

- Corporate Point-to-Multipoint wireless networks
- WISP's last mile networks
- Metropolitan wireless voice and data networks
- Private campus data networks
- 802.11b, 2.4Ghz replacement
- Public Hot Spots-Backhaul
- Long-Range LAN extensions
- Military
- Telco VoIP implementation

Top Performance

RapidLink 54 PtMP system is based on 802.11a core technology and employs OFDM (Orthogonal Frequency Division Multiplexing) modulation, offering scalable symmetrical data rates from 6 to 108 Mbps, as well as faster packet recovery, leading to grater resistance to interference. Designed for the harshest environments and most demanding fixed wireless applications, RapidLink 54 PtMP is ideally suited for long distance (up to 18 miles), high-speed metropolitan wireless voice and data networks, private campus data networks and wireless Internet Service Providers looking to upgrade or expand their current offering. By enabling all wireless customers to cost effectively connect to the most remote locations, with the highest license-free data rate on the market, this solution offers a faster return on investment, while providing maximum network performance.
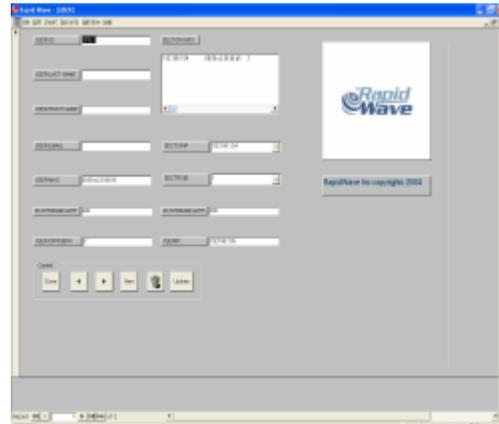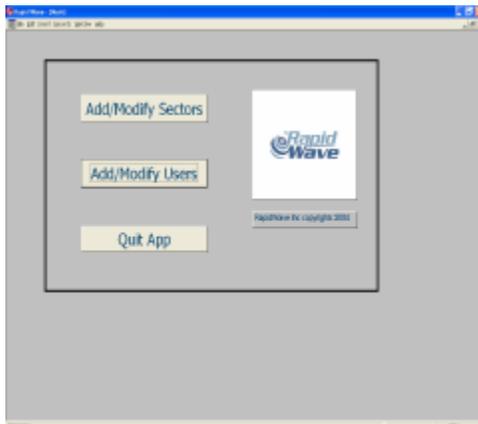
Easy to Install and Operate

This integrated Plug-&-Play deployment quickly installs with the convenient Power-over-Ethernet UTP connection and provides up to 108 Mbps aggregate capacity between locations. An integrated web server (pictured below) greatly simplifies the configuration process by allowing you to access all parameters and settings through a single, consistent user interface. Easley change frequencies, check signal strength, adjust security settings and much more…

RapidLink NMC (Network Management Center)

Manage all user accounts with RapidWave's proprietary, full featured decentralized wireless Network Management Center. Installed on a server anywhere on the network, the NMC complementary features add power and versatility to the entire infrastructure management – Allowing the MIS manager to administrate the entire network from one central point, while reducing the load on the Base Station, in turn minimizing the probability of remote accessibility issues. From anywhere on the network you can add users, adjust bandwidth allocation, and check QoS settings…basically, enjoy full access to administrate all aspects, of every user on the network!

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RapidLink 54 PtMP

High-Rate Point-to-Multipoint Wireless Network Specifications

Radio[1]	In Turbo Mode	In Standard Mode
Frequency Range	5.760 to 5.800 GHz	5.745 to 5.825 GHz
Frequency Channels	2 (non-overlapping)	5 (non-overlapping)
RF Output Power	Up to 16 dBm	Up to 16 dBm
Receiver Sensitivity	At 108 Mbps: -67 dB At 12 Mbps: -87 dB	At 54 Mbps: -70 dB At 6 Mbps: -90 dB

Interfaces	
Network Interface	10/100Base-TX Ethernet (RJ-45 connector)
Power Injector	48 VDC Power-over-Ethernet

Software	
Embedded Web server	For configuration, management, & antenna alignment
RapidLink NMC	User/CPE - Network Management Center
Firmware	Flash upgradeable via Web GUI

Security	
Authentication	ACL (Access Control List)
Encryption	WEP-128, TKIP

Ordering Information

Part Numbers	Antenna Type	Dimensions
RL54-SU-22 (CPE)	22 dBi Flat panel Integrated Antenna	12 x 12 x 5.0 in (30 x 30 x 14 cm)
RL54-SU-23 (CPE)	23 dBi Flat panel Integrated Antenna	12 x 12 x 5.4 in (30 x 30 x 14 cm)
RL54-SU-26 (CPE)	26 dBi Flat panel Integrated Antenna	18 x 18 x 5.4 in (46 x 46 x 14 cm)
RL54-SU-28 (CPE)	28 dBi Flat panel External Antenna	24 x 24 x 2 in (60 x 60 x 5.1 cm)
RL54-BS-1660 (Base Station)	16 dBi External 60° Degree Sector Antenna	Call for dimensions
RL54-BS-1790 (Base Station)	17 dBi External 90° Degree Sector Antenna	Call for dimensions

General Point-to-Multipoint Kit Includes:

- One Base Station, 60° or 90° Sector Antenna
- Indoor units (power injectors)
- Ethernet weather poof wire glend
- Universal power adapters (for indoor units)
- Mounting kits
- One user manual (Hard and Softcopy)
- User Management software (100, 250 or 450 Users)
- Two or more outdoor CPE units with integrated 22, 23, 26 or external 28dBi TX/RX gain antenna

[1] Radio and performance specifications apply to FCC version only. Please contact RapidWave for information on other regulatory domains.

[2] Range specifications should be used as guidelines only. Range depends on a variety of factors including antenna alignment, RF signal reflection, interference, and might differ quite significantly between different environments.

RapidWave, Inc. provides high-performance fixed wireless access systems to enable service providers, governments, and businesses to quickly, economically, and reliably build metropolitan area voice and data communication networks. Founded in July 2002, RapidWave is a privately held company headquartered in San Jose, California. RapidWave maintains sales and support offices in Europe and Latin America.
To learn more about RapidWave, visit our web site at http://www.rapidwaveinc.com.

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