

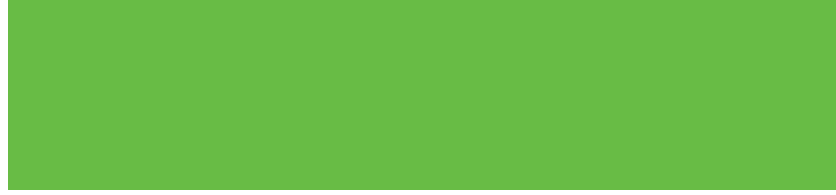


NetLink[®] MPL

A Breakthrough Offer for Wireless ISPs

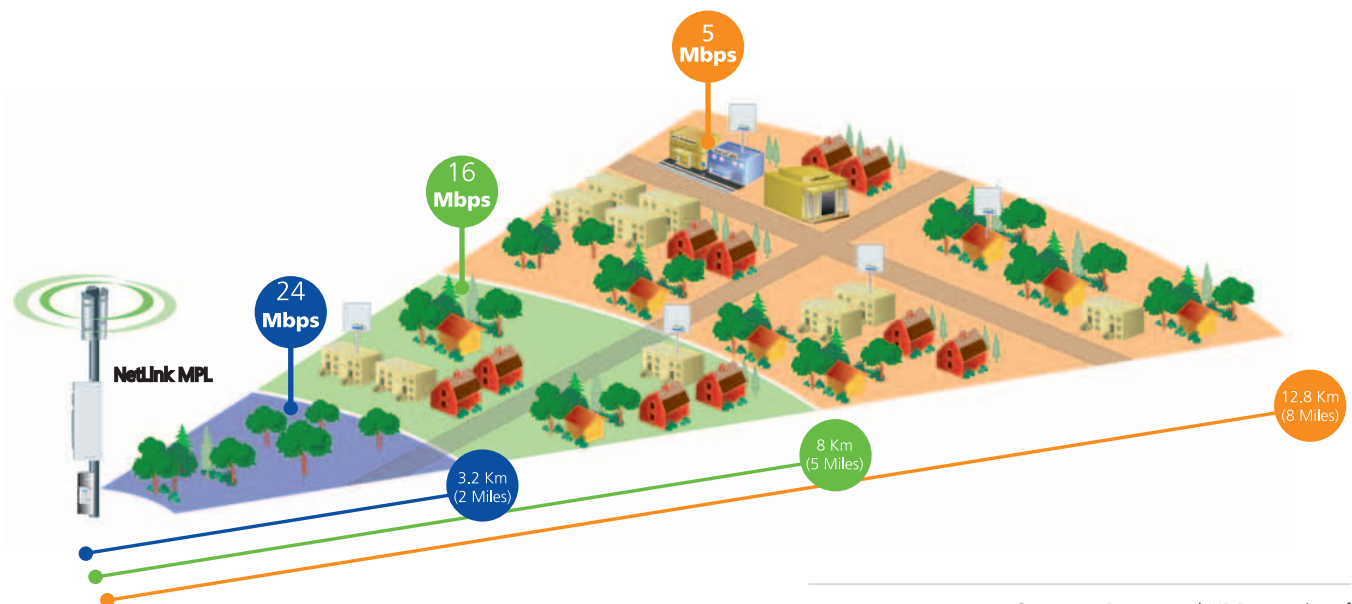
In a dynamic and demanding market, maintaining a competitive position is essential for customer acquisition as well as customer retention. Whether to expand existing networks or penetrate new markets, Wireless Internet Service Providers (WISPs) are continuously looking for cost-effective network solutions. Netronics NetLink MPL, presents the ideal solution, offering a breakthrough value to WISPs seeking affordability, without sacrificing robustness and performance.





Packaged for premium value, NetLink MPL offers a wide range of capabilities and benefits:

- Capacity of up to 24 Mbps per Access Unit (AU-MPL), and throughput of up to 12 Mbps per Subscriber Unit (SU-MPL), enable the delivery of powerful broadband services to more subscribers
- A range of over 12 Km (Up to 8 Miles), extends broadband anywhere and everywhere
- Cost effective and reliable solution secures improved business case and rapid return on investment
- Rapid and simplified deployment via non-line-of-sight (NLOS) technology, integral alignment navigation and intuitive Web-based management
- Instant network expansion with out-of-the-box solution and local available stock
- Cross-geographical solution with configurable bands and country codes
- Operational in license-exempt bands and optimized for residential services
- Hardware based encryption enables secured wireless links without sacrificing throughput



Coverage Range and UDP capacity of NetLink MPL under FCC regulations



Powerful and Reliable

Part of Netronics extended and field-proven product portfolio, NetLink MPL is an integral part of the NetLink family and one of the most widely deployed broadband wireless access systems in the world. With capacity of up to 24 Mbps per access unit, the MPL solution enables the delivery of powerful broadband services to more subscribers.

Extended Range at an Affordable Price

With a range of over 12 Km and lower equipment and deployment costs, NetLink MPL enables service providers to wirelessly extend their services to customers who were previously unable to afford them, while securing rapid ROI. Remote residential areas can now benefit from high-speed Internet access, Web browsing and email, and advanced applications such as multi-media services.

Quick and Simple Network Expansion

An out-of-the-box solution with immediate available local stock, NetLink MPL enables virtually instant network expansion and simplified deployment.

Communities Empowered by Broadband

Netronics has always taken an active role in encouraging community satisfaction. NetLink MPL presents a step forward in overcoming the digital divide by providing an affordable solution that offers vast opportunities for enhanced communication, education, business, social development and improved quality of life.

System Components

Netronics NetLink MPL solution consists of a central Access Unit (AU-MPL) serving access to multiple Subscriber Units (SU-MPL).

AU-MPL

Serving up to 24 Mbps of Internet access, an AU-MPL consists of a network interface/power supply indoor unit (IDU) and an outdoor radio unit with an interface for an external antenna. The modular design of AU-MPL enables flexibility in sectoring a covered area by using different external antennas. The following variety of antennas is available for the AU-MPL: 360, 120, 90 and 60 degrees.



SU-MPL

Each SU-MPL, connected wirelessly to an AU-MPL, provides an efficient platform for continuous broadband access. It consists of an outdoor wireless radio with integrated high performance 17 dBi flat panel antenna, and the same IDU as the AU-MPL for power supply and network interface.



The SU-MPL, designed for fast installation and configuration, includes complete mounting bracket, visual antenna alignment navigation and intuitive web-based user interface.



SU-MPL outdoor unit

Specifications

Radio and Modem

Frequency	4,900-5,875 GHz multi-band with automatic band and frequency detection in SU-MPL	
Media Access	Time Division Duplex (TDD)	
Channel Bandwidth	20 MHz	
Radio Technology	Orthogonal Frequency Division Multiplexing (OFDM)	
	Subscriber Unit MPL	Access Unit MPL
Max Throughput/Capacity	12 Mbps full duplex	23 Mbps aggregated capacity
Max Tx. Power @ Antenna Port Antenna	18dBm Integrated Flat Panel Antenna, 17dBi, 24°AZ x 18°EL	21dBm Choice of Detached Antennas: • 16dBi, 60°AZ x 10°EL • 17dBi, 90°AZ x 6°EL • 15dBi, 120°AZ x 6°EL • Omni 8dBi, 360°AZ x 4.5°EL* *Not available for 5.4/5.3 FCC
Sensitivity Range	From -86dBm @ 6Mbps to -68dBm @ 54 Mbps	From -89dBm @ 6Mbps to -71dBm @ 54 Mbps

Configuration and Management

Management Options	SU-MPL: Web-Based, Telnet, SSH, SNMP AU-MPL: Telnet, SNMP	
Management Access	Local via Ethernet Port or remotely over the Wireless Link	
IP Address Assignment	Automatic (DHCP Client), Manual	
Configuration File	Upload/Download via FTP/TFTP	
Software Upgrade	Download via FTP/TFTP with Backup Image File of running version for safe operation	Download via FTP/TFTP with Dual Image File allowing downgrade to previous version
Security	WEP 152, SSL 0.95A, SSH v2	WEP 152

Mechanical, Electrical and Environmental

	SU-MPL Outdoor Unit	AU-MPL Outdoor Unit	Indoor Unit
Size	195 x 190 x 74 mm	305 x 117 x 57 mm	140 x 66 x 35 mm
Weight	1.47 kg	1.8 kg	0.3 kg
Power	Typical: 10W Max: 40W	Typical: 12W Max: 25W	AC In: 85-265 VAC, 50-60 Hz DC Out: 55 VDC, 1 A max
Operating Temperature	33°C to 60°C	-40°C to 55°C	0°C to 40°C
Operating Humidity	5% to 95%, non-condensing. Ingress Protection for Outdoor Units: IP67		

Standards Compliance

Safety	UL/CUL (CSA60950-1, UL60950-1, UL-50) CE/CB (EN60950 include IPX4 /IEC 60950-1)
Radio	ETSI 301 893, 301 489 (DC power), FCC Part 15E 15.407
EMCCE	Class B (EN55022, EN55024) FCC Class B Part 15
Hazardous Substances	RoHS Compliant

About Netronics

Netronics® is a leading designer and manufacturer of networking and communications equipment based in Vancouver, Canada. Our product portfolio consists of data and voice communications and networking equipment based on the latest radio and wireless communication technologies.

Netronics have provided its market with high quality and highly reliable carrier class equipment serving the different market sectors from large government organizations, to enterprises in oil and gas and banking sector, to telecom service providers, and down to small Internet service providers.

As a provider of wireless communications and voice/data transmission equipment needed for today's bandwidth thirsty market, Netronics have successfully leveraged its technical knowledge in provision of connectivity to urban and rural areas in many developing countries, where wireless communications is the most suitable connectivity solution.

Our rich portfolio includes the performance leading NetMAX, the complete WiMAX solution with migration path from Wi-Fi to WiMAX.

The high throughput and extremely reliable NetLink F series and the low cost and feature-rich NetLink L series made it possible for our clients to provide high availability high speed solutions to their users with one of the best price/performance ratios in the market.



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