



POWERLINE MU
Technical Specifications
November 2006

Motorola Powerline MU is a new broadband solution that combines the Motorola Canopy[®] system with Broadband over Powerline (BPL) technology to deliver broadband services to homes, businesses and buildings that have been previously underserved or served only at high cost by other broadband access technologies.

Powerline MU solution allows service providers to deploy and manage a Broadband over Powerline network for Multi-Dwelling Unit or Multi-Tenant Unit buildings such as apartment buildings, hotels or retail outlets. Complementing and completing the MOTOwi4 portfolio, Powerline MU uses Canopy technology as the network backbone. Powerline MU provides a complete BPL solution from a leading manufacturer.

Please refer to Motorola's ordering instructions to select equipment best suited for the customer's electrical configuration.



Powerline MU Solution

Powerline Modem

Available Now!

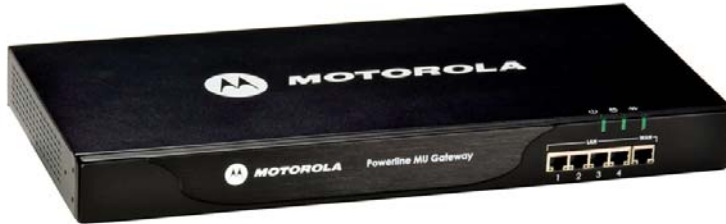


- Plugs into a standard AC power outlet to receive Internet signal
 - Performs Powerline to Ethernet conversion
 - Ethernet output connects to a computer or supplies broadband input to a home network router or gateway
 - Network Address Translation (NAT) for network isolation and protection
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- QoS Support: Maps Ethernet QoS to Powerline QoS using VLAN priority
 - Bandwidth management for service class differentiation
 - Authentication
 - 6 foot Ethernet cable provided

Part Number	US Plug: 0171486N01 Euro Plug: 0171486N03
Product Name	Motorola Powerline Modem
Description	Customer Premise Equipment in a Powerline MU solution
Modulation Type:	OFDM, QAM 256/64/16, DQPSK, DBPSK and ROBO mode (FSK)
Power Input:	100 – 240 VAC, 50/60 Hz
Network Management:	SNMP v2c
Powerline Interface	HomePlug v 1.01 Turbo
Data Interface	Ethernet IEEE 802.3 10/100 Base T
Powerline Encryption	56 bit DES
Network Security	Firewall/NAT
Connectors	RJ45, Input power/PLC, plug Type A-US or C-European available (other plug types available on demand)
LED Status Lights	Power on, Powerline, Ethernet, Authentication
Dimensions	1.6 in. x 2.6 in. x 3.75 in. (4.1 cm x 6.6 cm x 9.5 cm)
Weight	.394 lbs (178.6 g)
Operating temperature:	0°C to 50°C (32°F to 122°F)
Safety	UL/cUL/CE
Industry Canada	ICES-003 Class B
EN	CE Class B
FCC	Part 15 Class B

Powerline MU Gateway

Available Now!



- Injects the Internet signal into the building's electric distribution
- Performs Ethernet to Powerline conversion
- Ethernet input connects to Canopy Subscriber Module or other broadband source
- Four port Ethernet Switch
- Three Powerline outputs connect to three electrical phases via capacitive coupling cables
- QoS Support: Maps Ethernet QoS to Powerline QoS using VLAN priority
- Bandwidth management for service class differentiation
- Using BAM (Bandwidth Authentication Manager) provides authentication for associated Powerline Modems within its network
- Plugs into a standard AC power outlet with 6 foot power cord

Part Number	US: 0171486N11 Euro: 0171486N04
Product Name	Motorola Powerline MU Gateway
Description	Head End Controller Equipment in a Powerline MU solution
Modulation Type:	OFDM, QAM 256/64/16, DQPSK, DBPSK and ROBO mode (FSK)
Power Input:	100 – 240 VAC, 50/60 Hz
Network Management:	SNMP v2c
Powerline Interface	HomePlug v 1.01 Turbo
Data Interface	Ethernet IEEE 802.3 10/100 Base T
Powerline Encryption	56 bit DES
Connectors	5 RJ45, 3 AC coupling connections, Input power (plug Type A-US or C-European available)
LED Status Lights	WAN, 4 LAN, Power on, PLC, Collision
Dimensions	1.75 in. x 17.3 in. x 7.98 in. (4.44 cm x 44.0 cm x 20.3 cm)
Weight	5.99 lbs (2715 g)
Operating temperature:	0°C to 50°C (32°F to 122°F)
Safety	UL/cUL/CE
Industry Canada	ICES-003 Class B
EN	CE Class B
FCC	Part 15 Class B

Powerline MU Adapter



- A pair of Adapters perform telephone wiring to Ethernet conversion to transport data to the Powerline MU Gateway(s) from the Canopy Subscriber Module
- Provides greater flexibility for connecting Powerline MU Gateway(s) to the primary internet access point
- Plugs into a standard AC power outlet (US plug pictured, Euro plug also available)

Part Number	US Plug: 0171486N02 Euro Plug: 0171486N08
Product Name	Powerline MU Adapter
Description	Optional Powerline MU converter between telephone wiring and Ethernet
Modulation Type:	OFDM, QAM 256/64/16, DQPSK, DBPSK and ROBO mode (FSK)
Power Input:	100 – 240 VAC, 50/60 Hz
Data Interface	Ethernet IEEE 802.3 10/100 Base T
Flow Control	IEEE 802.3x
Twisted Pair	HomePlug v 1.01 Turbo
Connectors	1 RJ45, 1 RJ11, Input power (plug types A-US or C-European available)
LED Status Lights	Power on, Powerline, Ethernet
Dimensions	1.8 in. x 2.4 in. x 3.5 in. (4.57 cm x 6.1 cm x 8.89 cm)
Weight	.276 lbs (125 g)
Operating temperature:	0°C to 50°C (32°F to 122°F)
Safety	UL/cUL/CE
Industry Canada	ICES-003 Class B
EN	CE Class B
FCC	Part 15 Class B

Powerline MU Panel Extender



- Useful in mass-metered buildings such as hotels and corporate facilities which have a large distribution panel that distributes electricity to other smaller breaker panels
- Connect three phases from three breakers of one panel to the Powerline MU Panel Extender to couple up to three additional breaker panels
- Provides efficiency in signal distribution while mitigating signal loss

Part Number	0171486N07
Part Name	Powerline MU Panel Extender
Description	Optional Powerline MU panel to couple up to four breaker panels together
High Voltage Interface	Up to 277 VAC (phase-neutral), Up to 480 VAC (phase-phase), Accepts up to 14 AWG wires
Input current	1 mA @ 50/60 Hz
Connectors	4 blocks of 4-pin terminals, 1 block per electrical panel
Dimensions	1.8 in. x 7.9 in. x 3.8 in. (4.5 cm x 20 cm x 9.6 cm)
Weight	.85 lbs (385 g)
Operating temperature:	0°C to 50°C (32°F to 122°F)
Safety	CE