

# PLC

G.hn 1.2Gbps | 100MHz MIMO | Filtered Outlet

## PG-9083

# Powerline Ethernet Adapter



The PowerGrid 9083, ITU-T G.hn networking standard compliant Ethernet adapter, provides the best quality data transmission for truly high-speed 'connected home' experience. It allows users to extend a local area network via existing power lines, eliminating the need for extra wiring. Installation at home (or in a small office) is quick and easy as the PowerGrid 9083 comes with plug-and-play technology.

The PowerGrid 9083 supports the new generation of so-called G.hn wave2 tech, 100MHz MIMO operation with an AC filter female power socket and can be used with two fully programmable reception and transmission paths to attain up to 1.2Gbps PHY over powerline. The PowerGrid 9083 comes pre-configured for easy installation / configuration, and it features the most secure end-to-end encryption algorithms for safeguarding the network integrity, with advanced energy-saving features based on Ethernet link activity; automatic standby mode.

## FEATURES

### . MIMO Performance

Supports ITU-T G.hn baseband plans 50 and 100 MHz and MIMO techniques for powerline (based on G.9963) boosting PLC throughput up to 1.2Gbps PHY rate over powerline and having Robust Communication Mode (RCM) to prevent noise interference from other home appliances.

### . High Speed Data Transmission

High speed (around max 1000 Mbps) dramatically increases the performance of next-generation home entertainment applications such as multiple high definition (HD) TV over IP (IPTV), 3D TV and VoIP, digital video recorder (DVR) networking and media center PCs.

### . No Extra Wires Needed

The local area network can be extended without the hassle of having to install extra wiring because the power line network is already a commonplace fixture in most households.

### . Simple Pairing, Plug & Play

Quick and easy connections with embedded plug-and-play, no extra configuration required! PowerGrid 9083 can be paired easily by simply connecting Ethernet cables to routers and devices.

### . Extends Connecting Range & Eliminates Dead Spots

Unlike wireless, Power line technology is capable of actually covering more than 95% of a typical household area.

### . More Outlets than Other Wired Solutions

On average, there are 45 power outlets and only 3-5 cable or phone outlets in a household, therefore making power lines a more convenient solution for extending networks.

### . Security

With advanced data encryption capability, the power line networks are safer and more secure.

# PowerGrid Series PG-9083

G.hn |Data 1Gbps | 100MHz MIMO| Filtered Outlet

## SPECIFICATIONS

### Interface

- RJ-45 X 1 for Ethernet connection
- AC power plug X 1
- AC power socket X 1
- LED Indicators: G.hn, LAN, PWR, Security
- Buttons: G.hn pairing, Reset

### Ethernet

- Standard IEEE 802.3
- 10/100/1000 Mbps BaseT auto-sense
- Auto rate and duplex negotiation
- MDI/MDX support

### G.hn

- MaxLinear 88LX5152 + 88LX2720
- ITU-T G.9960 & G.9961 compliant
- G.hn 100MHz MIMO
- Up to 1000 Mbps at Phy rate
- NDIM support

### Modulations

- OFDM, FEC, Flexible frequency configuration

### Management

- HTTP Web-based (optional)
- TR-069 over IPv4/v6 dual stack

### Security

- AES 128 bits encryption ensures total data security

### Networking Protocols

- 802.1D Ethernet Bridge
- 802.1Q VLAN
- Quality of Service (QoS)
- IGMP(IPv4) Snooping & MLD(IPv6) Snooping

### Power

- 100-240 VAC, 50Hz/60Hz, 16A( for Outlet )
- Auto power saving mode max 0.5W (in standby mode)

### Environment Condition

- Operating temperature: 0 ~ 40 degrees Celsius
- Relative humidity: 8 ~ 95% (non-condensing)

### Dimensions

- 140mm(H)x70 mm(W) x 36.5mm (without plug)(D)

### Certifications

- FCC, cUL, CE, ITU-T G.hn Standard

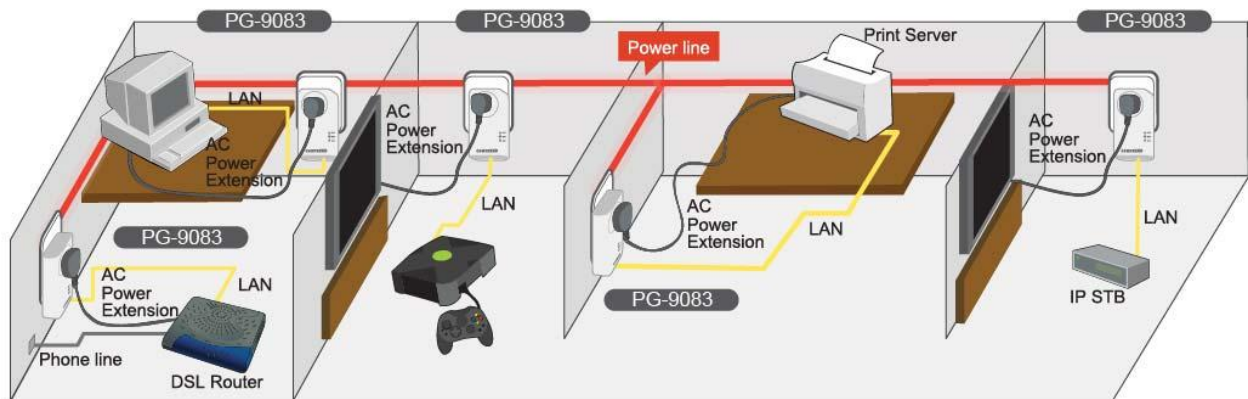
Note: Specifications are subject to change without notice.



### WARNING

Disconnect the PLC from the power source before servicing  
For indoor user only  
Do NOT open the casing  
Do NOT use near water  
Do NOT insert sharp objects into the adapter's socket  
Socket maximum output is 16A

## Applications Diagram



## COMTREND

### Taiwan:

3F-1, No.10, Lane 609, Chongxin Road, Section 5,  
Sanzhong Dist, New Taipei City 24159, Taiwan  
Tel: +886-2-29998261

### USA & Canada:

530 Technology Dr. Suite 100 Irvine, CA  
92618 USA  
Tel: +1-949-753-9640

### Spain:

C/ Proci3n, 7 portal 2, 1º C - Edif. Am3rica II  
28023 Madrid, Spain  
Tel: 34-917990403

### Czech Republic:

TOKOVO Jankovcova 1518/2, 170 00, Prague 7,  
Czech Republic  
Tel: 420-266-782040