PLC + PoE

G.hn 1.2Gbps | 100MHz MIMO | 802.3af/at PoE

PG-9181PoE
Powerline Ethernet + PoE Adapter

The PowerGrid 91812PoE complyies with ITU-T G.hn and IEEE 802.3af/at PoE standards, and provides up to 30W power output over two Giga Ethernet ports easily turning on PoE-enabled devices such as two IP Surveillance cameras and Hot-spot AP. It allows users to extend a local area network via existing power lines, eliminating the need for extra wiring, with no additional power supply required for Powered Device (PD). Installation at home (or in a small office) is quick and easy as the PowerGrid 9172PoE comes with plug-and-play technology.

The PowerGrid 9181PoE supports the new generation of so-called G.hn wave2 tech, 100MHz MIMO operation and can be used with two fully programmable reception and transmission paths to attain up to 1.2Gps PHY over powerline. The PowerGrid 9181PoE comes pre-configured allowing easy installation / configuration and it features 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**
  Support 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!

· **Extends Connecting Range & Eliminates Dead Spots**
  Unlike wireless, Power line technology is capable of actually covering more than 95% of a typical household area.

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

· **802.3af/at 30W power over Ethernet**
  Flexible PoE configuration of 802.3af x 2 or 802.3at x1.

PowerGrid Series PG-9181PoE

G.hn 1.2Gbps | 100MHz MIMO | 802.3af/at PoE

SPECIFICATIONS

Interface
· RJ-45 X 2, flexible PoE configuration of 802.3af x 2 or 802.3at x1
· AC power plug
· LED Indicators: G.hn, LANx2, PWR, Security. PoE x2
· 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 1200 M bps at Phy rate
· NDIM support

Modulations
· OFDM, FEC; Flexible frequency configuration

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

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

AC Power
· 100-240 VAC, 50Hz/60Hz

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

Dimensions
· 146mm (H) x 72 mm (W) x 39 mm (D, without plug)

Certifications
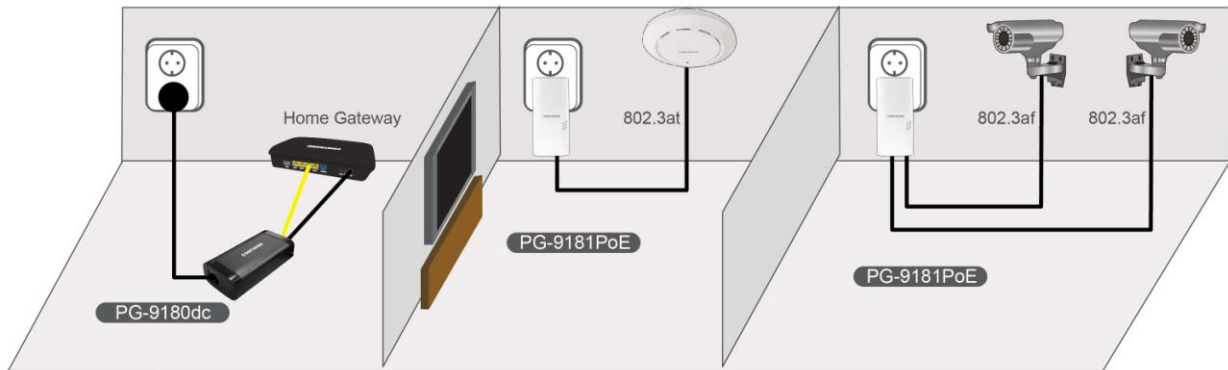· FCC, cUL, CE, ITU-T G.hn Standard, HomeGrid logo

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

Applications Diagram

Home Gateway

PG-9180dc

802.3at

PG-9181PoE

802.3af   802.3af

PG-9181PoE

COMTREND