PLC + WiFi 11ac dual-band

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

802.11ac | Concurrent DB 2T2R | WiFi Bridge

PG-9085

Powerline Ethernet WiFi Adapter

The PowerGrid 9085, ITU-T G.hn networking standard compliant Ethernet adapter, is designed to meet the growing demand for perfect connectivity and coverage across multiple devices connected concurrently throughout the home. The G.hn Powerline Wi-Fi Extender wall plugs allow users to take Wi-Fi with them anywhere throughout the home or backyard and enjoy a seamless wireless experience.

The PowerGrid 9085 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 1.2Gps PHY over powerline. Also, combining Realtek RTK8197FS and RTK8812BRH chips utilize the concurrent dual band Wi-Fi radios, driving the G.hn Powerline Wi-Fi Extenders, enabling them to leverage both the 2.4GHz and 5GHz bands to deliver a seamless wireless experience anywhere in the home. Realtek smart Wi-Fi technology Airtime fairness/QoS will also enable the virtualization of Wi-Fi resources, so that Wi-Fi capacity can be dynamically apportioned and provisioned to different devices, services and applications.

FEATURES

- **G.hn 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.
- **Concurrent Dual Band 11ac**
  Realtek RTK8197FS and RTK8812BRH chips utilizing concurrent dual band 2T2R Wi-Fi interfaces, leverage both the 2.4GHz and 5 GHz bands to deliver a seamless wireless experience anywhere in the home.
- **Seamless Load balance**
  Powered by Realtek band-steering technology, the G.hn Powerline Extender seamlessly balances devices amongst the dual Wi-Fi bands.

- **Smart Wi-Fi Technology**
  Airtime fairness/QoS ensures the higher capacity for a distributed home network with multiple nodes.
- **Simple PLC Pairing, Plug & Play**
  G.hn power line supports quick and easy connections with embedded plug-and-play, no extra configuration required!
- **Harmony Feature Enables Rapid Self-install**
  *Future support of Comtrend's Harmony family for rapid self-installation, including authentication of associated stations, and performs SSID and WiFi credentials from the main HGW.

PowerGrid Series PG-9085

G.hn | Data 1Gbps | 100MHz MIMO | Concurrent DB 2T2R 11ac | WiFi Bridge

SPECIFICATIONS

Interface
· RJ-45 X 1 for GE Ethernet
· LED Indicators: Security (PLC), G.hn, 2.4GHz, 5.0GHz, WPS, LAN, PWR
· Buttons: G.hn pairing, WPS, WiFi ON/OFF, RESET
· Internal WiFi DB Antenna X 2

G.hn (PLC)
· MaxLinear 88LX5152 + 88LX2720
· ITU-T G.9960 & G.9961 compliant
· G.hn 100MHz MIMO
· NDIM support

WLAN (WiFi)
· Realtek RTK8197FS + RTK8812BRH WiFi
· 802.11 b/g/n @2.4 GHz, BW 20/40M, 2T2R
· 802.11 a/n/ac @5GHz, Wave-2 compatible with MU-MIMO
· 2T2R, BW 20/40/80M, external PA
· Concurrent 2.4GHz & 5GHz
· Capable for DFS @5GHz

Management
· HTTP Web-based
· Single TR-069 entity for G.hn & WiFi functions
· TR-069 over IPv4/v6 dual stack

Security
· G.hn 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, Socket: 16A for CE, 15A for FCC/UL

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

Dimensions
· 164.5 mm(H)x 86 mm(W) x 40.5 mm(without plug)(D)

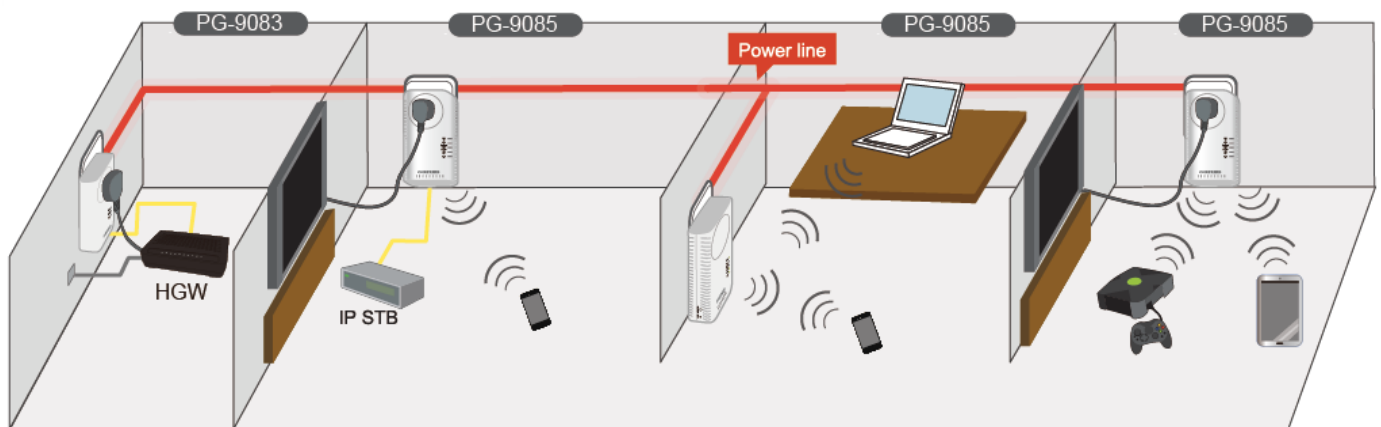### Certifications
· FCC, cUL, CE, ITU-T G.hn Standard

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