

# G.hn Wave2 Powerline PoE

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

## PG-9181PoE



The **PowerGrid 9181PoE** complies 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 powering on PoE-enabled devices such as two IP Surveillance cameras and Hot-spot APs. 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 a Powered Device (PD). Installation at home (or in a small office) is quick and easy as the PowerGrid 9181PoE 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 1.2Gbps PHY over powerline. The PowerGrid 9181PoE comes pre-configured allowing easy installation / configuration and it features the most secure end-to-end encryption algorithms for safeguarding network integrity with advanced energy-saving features based on Ethernet link activity; automatic standby mode.

### KEY FEATURES

- **MIMO Performance:** ITU-T G.hn baseband plans 100 MHz MIMO techniques boosting PLC throughput up to 1.2Gbps PHY rate over powerline.
- **High Speed Data Transmission:** High speed (around max 1000 Mbps) dramatically increases the performance of next-generation home entertainment applications.
- **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.

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## SPECIFICATIONS

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Interfaces	<ul style="list-style-type: none"><li>RJ-45 X 2, flexible PoE configuration of 802.3af x 2 or 802.3at x1</li><li>AC power plug</li><li>LED Indicators: G.hn, LANx2, PWR, Security. PoE x2</li><li>Buttons: G.hn pairing, RESET</li></ul>
Ethernet	<ul style="list-style-type: none"><li>Standard IEEE 802.3</li><li>10/100/1000 Mbps BaseT auto-sense</li><li>Auto rate and duplex negotiation</li><li>MDI/MDX support</li></ul>
G.hn	<ul style="list-style-type: none"><li>ITU-T G.9960 &amp; G.9961 compliant</li><li>G.hn 100MHz MIMO</li><li>Up to 1200 Mbps at Phy rate</li><li>NDIM support</li></ul>
Modulations	<ul style="list-style-type: none"><li>OFDM, FEC, Flexible frequency configuration</li></ul>
Management	<ul style="list-style-type: none"><li>HTTP Web-based (optional)</li><li>TR-069 over IPv4/v6 dual stack (Optional)</li></ul>
Security	<ul style="list-style-type: none"><li>AES 128 bits encryption ensures total data security</li></ul>
Networking Protocols	<ul style="list-style-type: none"><li>802.1D Ethernet Bridge</li><li>802.1Q VLAN</li><li>Quality of Service (QoS)</li><li>IGMP(IPv4) Snooping &amp; MLD(IPv6) Snooping</li></ul>
AC Power	<ul style="list-style-type: none"><li>100-240 VAC, 50Hz/60Hz</li></ul>
Dimensions	<ul style="list-style-type: none"><li>146mm (H) x 72 mm (W) x 39 mm (D, without plug)</li></ul>
Certifications	<ul style="list-style-type: none"><li>FCC, cUL, CE, ITU-T G.hn Standard, HomeGrid logo</li></ul> <p>Note: Specifications are subject to change without notice.</p>
ENVIRONMENT	
Operating Temperature	0 ~ 40 degrees Celsius
Relative Humidity	8 ~ 95% (non-condensing)



### WARNING

Disconnect the PLC from the power source before servicing  
For indoor user only  
Do NOT open the casing  
Do NOT use near water

# COMTREND

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Maximum performance, actual data rates, and coverage will vary depending on network conditions and environmental factors. Product specifications and design are subject to change without notice.