TECHNETIX G.HN POWERLINE

Platform guide for Wi-Fi and Bridge

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07/2020 - EN/V11

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Technetix G.hn Powerline Wi-Fi and Bridge

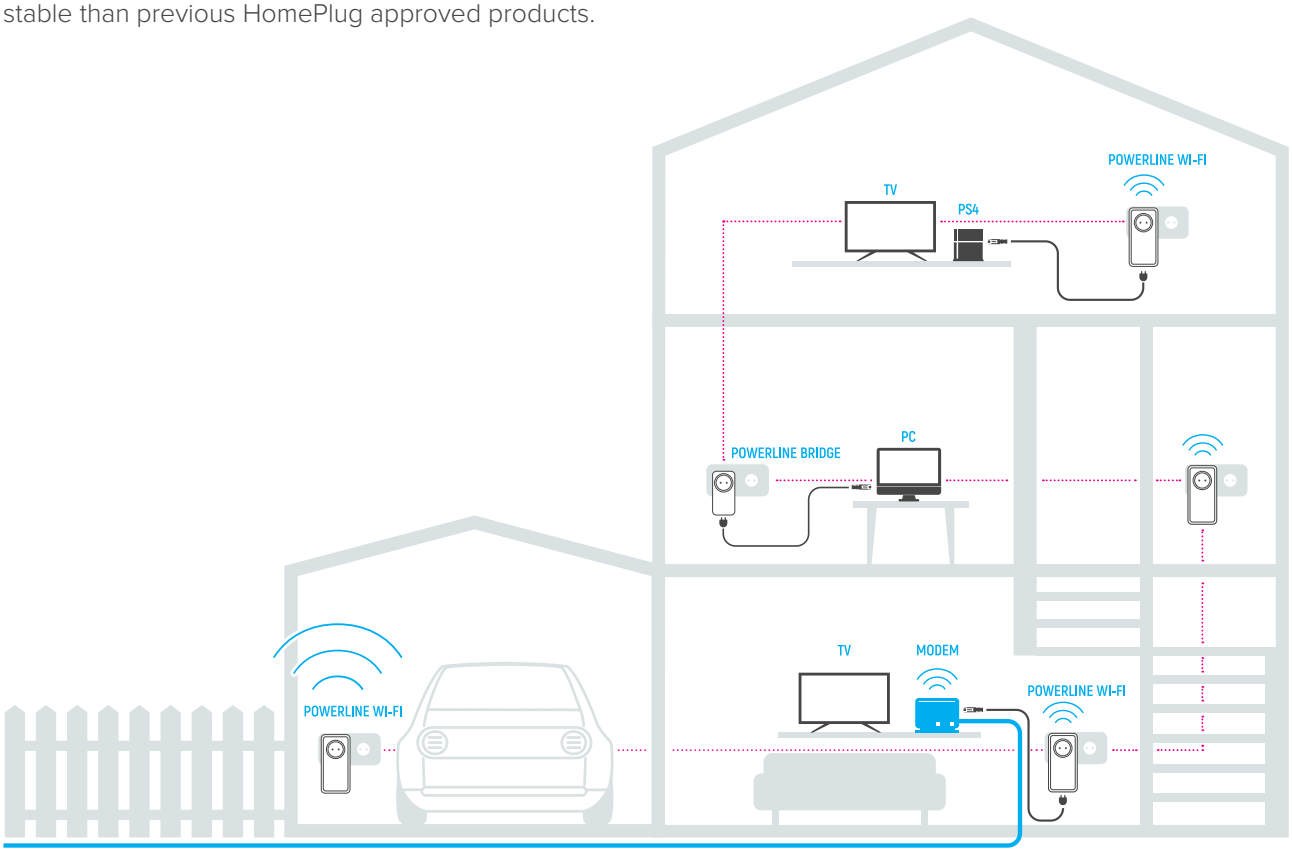
Introduction

In recent years Wi-Fi has become an essential part of the in-home network, with decent Wi-Fi coverage a high priority for most people. It is not always easy to get a high quality Wi-Fi signal in all areas of the home without putting ethernet cabling and access points in place.

Powerline technology enables you to establish an ethernet connection over existing mains electrical wiring. This ethernet connection can be used to connect a TV or PC and will also feed a Wi-Fi access point.

The Powerline products have been upgraded to G.hn, a new standard which allows for physical layer rates in excess of 1 Gbps and are much more stable than previous HomePlug approved products.

This solution is extremely easy to install and requires no technical knowledge - it will only take a couple of minutes. Plug one unit in next to an internet modem and connect it using the patch cable, then plug in the other unit in the room you want to connect, press the 'link button' and the installation is complete. It is a very flexible solution, the units can be relocated easily or you can add new units to the network keeping the same network SSID and password.



Technetix G.hn Powerline Bridge

Overview

The Powerline Bridge is used to create an ethernet connection point in a room. A bridge is placed next to an internet modem and the other bridges are placed in the rooms you need to connect. The units are linked by pressing the ‘link button’ for three seconds.

Features:

- Use to connect any Ethernet device over existing mains electrical wiring
- Plug & Play – three-minute setup – no technical knowledge required
- Connects devices including: Smart TV, personal computer, games console or access point
- Supports high internet speeds needed for 4K video streaming, gaming or smart TVs
- Create a group of up to 16 high-speed ethernet connections
- Can be used in combination with Technetix G.hn Powerline Wi-Fi
- 1 one-metre CAT6 cable included

Specifications

Item	Description
Product type	G.hn powerline ethernet adapter
RJ-45 port	1 GbE port
Power-line communication PHY rate	1 Gbps
Frequency band	2 MHz to 50 MHz
Access methods	CSMA/CA and TDMA
Modulation	4096/1024/512/256/128/64/32/16/ 8-QAM, QPSK, BPSK
Powerline feature	ITU-T recommendation G. 9960 - physical layer ITU-T recommendation G. 9961 - data link layer ITU-T recommendation G. 9962 - management specification ITU-T recommendation G. 9963 - MIMO ITU-T recommendation G. 9964 - power spectral density
Distance	AC wire: up to 300 metres
Computer OS	OS independent
Maximum number of units in a network group	16 (in the same single-phase powerline loop)
IGMP	Support for IPv4/IGMP v1, v2 and v3 snooping IPv6 transparent (not including multicast)
Encryption	128-bit AES link encryption with key management
LAN standards	1000/100/10 base-TX
Temperature	Ambient operating -10° C to 40° C; storage: -20° C to 60° C
Relative humidity	Operating: 10% - 85% (non-condensing) Storage: 5% - 90% (non-condensing)
Power source	AC 100 V-240 V, 50 Hz/60 Hz
AC pass-through	Yes

Technetix G.hn Powerline Wi-Fi

Overview

The Powerline Wi-Fi unit is used to create a powerful Wi-Fi network using the over existing mains electrical wiring. One Wi-Fi unit is placed by the internet modem and the additional Wi-Fi units should be located where the signal needs to be improved. The units are linked by pressing the ‘link’ button for three seconds. The Technetix Wi-Fi units will automatically create one Wi-Fi SSID with one password after they are linked. The units will work together and automatically move users to the best performing unit in real time.

Features:

- Creates a powerful Wi-Fi network over existing mains electrical wiring
- Plug & Play – simple five minute setup – no apps – no configurations – no registration
- Seamless roaming technology for automatic configuration of your second Wi-Fi unit SSID, moving users seamlessly between the two units
- Supports high internet speeds needed for 4K video streaming, gaming or using a smart TV
- Create a group of up to 16 high-speed Wi-Fi points
- Use in combination with the Technetix G.hn Powerline bridge
- Advanced Wi-Fi web interface available
- 1 one-metre CAT6 cable included.

Specifications

Item	Description
Product type	G.hn powerline ethernet adapter
RJ-45 port	1 GbE port
Powerline physical layer communication rate	1 Gbps
Frequency band	2 MHz to 50 MHz
Access methods	CSMA/CA and TDMA
Modulation	4096/1024/512/256/128/64/32/16/ 8-QAM, QPSK, BPSK
Powerline feature	ITU-T recommendation G. 9960 - physical layer ITU-T recommendation G. 9961 - data link layer ITU-T recommendation G. 9962 - management specification ITU-T recommendation G. 9963 - MIMO ITU-T recommendation G. 9964 - Power spectral density
Distance	AC wire: up to 300 metres
Computer OS	OS independent
Maximum number of units in a network group	16 (in the same single-phase powerline loop)
IGMP	Support for IPv4/IGMP v1, v2 and v3 snooping IPv6 transparent (not including multicast)
Encryption	128-bit AES link encryption with key management
LAN standards	1000 base-TX, 100 base-TX
Wireless physical layer	1200 Mbps
Wireless standard	IEEE 802.11 a/b/g/n/ac
Seamless roaming standards	802.11 k/v/r
Wireless frequency	2.4 GHz, 5 GHz
Antenna	2 x 2
Wireless features	Supports dual-band concurrent Supports IEEE 802.11 ac MIMO Supports TxBF
Temperature	Ambient operating -10° C to 40° C; storage: -20° C to 60° C
Relative humidity	Operating: 10% - 85% (non-condensing) Storage: 5% - 90% (non-condensing)
Power source	AC 100 V-240 V, 50 Hz/60 Hz
Wireless 5 GHz range	5 GHz 5.15 GHz - 5.25 GHz + 5.725 GHz - 5.85 GHz (US) 5.15 GHz - 5.25 GHz (Europe ETSI) 5.25 GHz - 5.35 GHz (US DFS band) 5.47 GHz - 5.725 GHz (US DFS band) 5.25 GHz - 5.35 GHz (EU DFS band) 5.47 GHz - 5.725 GHz (EU DFS band)
AC pass-through	Yes

Ordering information

Item code	Description
11201801	TECHNETIX POWERLINE ADAPTER G.HN BRIDGE AC EU PASSING SHOP BOX
11201901	TECHNETIX POWERLINE ADAPTER G.HN WIFI AP 2X2 AC EU PASSING SHOP BOX