Gigabit Over 2/3 Wire Converter

LanPOE

Model:
LP–2WGIP1–S

Type:
IP Ethernet over 2/3 Wire Transceiver

Installation Manual

The LP–2WGIP1–S is a true gigabit IP Ethernet over 2/3 Wire transceiver capable of powerful data streaming technology able to transport ultra–high speed HD signal in your network. It provides two data options: one for full data throughout and another for half data capacity. This flexibility allows users to choose the appropriate setting based on their specific requirements and preferences.

Full Data

- Speed: 2000 Mbps
- Port: 3 (+, – , B)
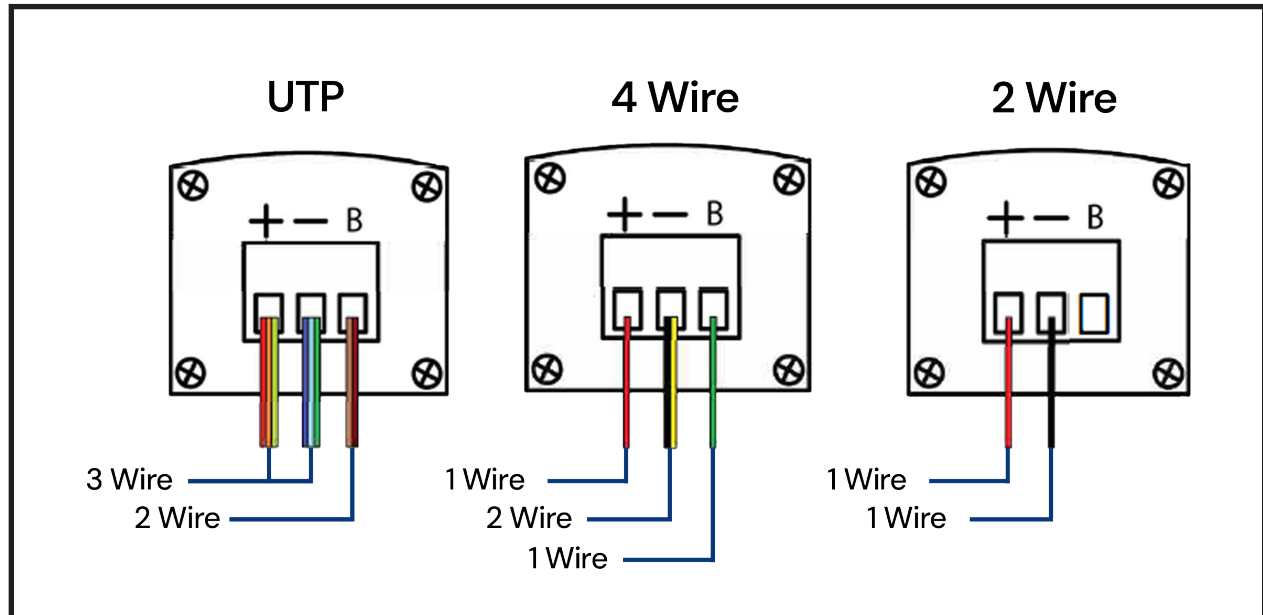- 'B' means 'Boost' port

Half Data

- Speed: 1000 Mbps
- Port: 2 (+, –)

Features

- It supports 1 Master to 4 Slave network topology to reduce installation costs.
- For secure networking, it supports 128bit–AES security encryption.
- Data transfer of up to 1000 feet.
- Suitable for HD applications and devices, such as:
    AV Device, Network TV, Gaming Console, PC, Notebook, VoiP, etc.
- Suitable in homes, residential buildings and large commercial buildings.
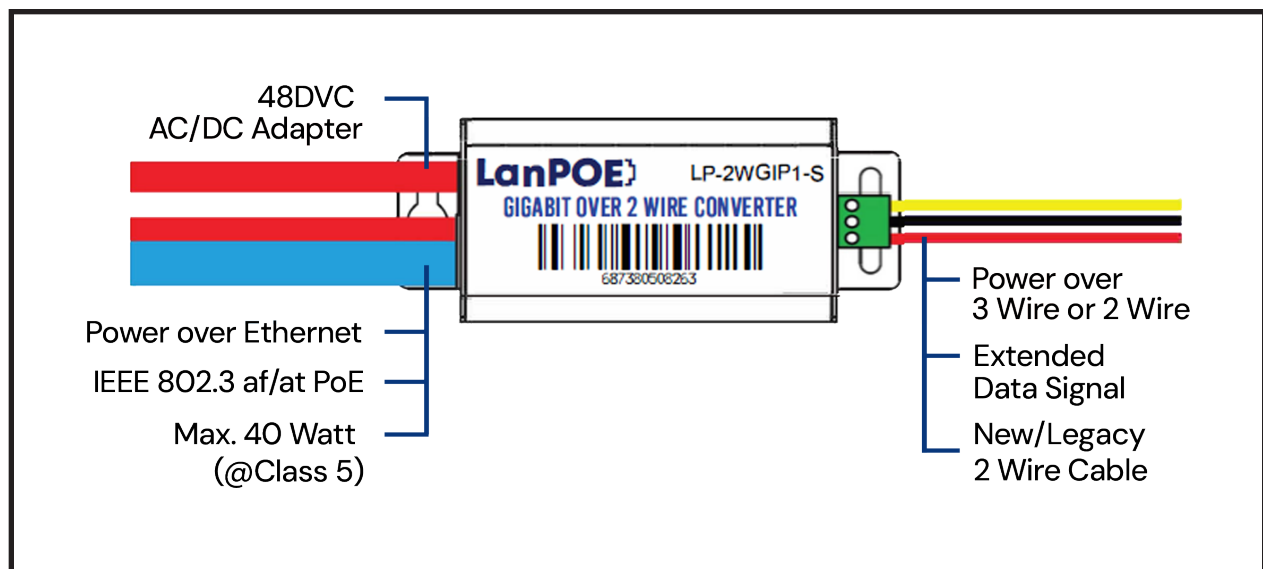
Gigabit Over 2/3 Wire Converter

Wiring

UTP

4 Wire

2 Wire

3 Wire
2 Wire

1 Wire
2 Wire
1 Wire

1 Wire
1 Wire

Note:
- Please observe the port wiring polarity when you plug the wire in to the port.
- If you put the wrong wire to wrong port, the product should be damaged.

Wiring Connection

48DVC
AC/DC Adapter

LanPOE LP-2WGIP1-S

GIGABIT OVER 2 WIRE CONVERTER

687380508263

Power over Ethernet

IEEE 802.3 af/at PoE

Max. 40 Watt
(@Class 5)

Power over
3 Wire or 2 Wire

Extended
Data Signal

New/Legacy
2 Wire Cable

LP–2WGIP1–S Installation Steps

1. Hardware Check & Preparation

- Please check the product physical defects. If you find any defects, do not use the product and return to distributor.
- Prepare:
    1. Network cables for the device.
    2. New or Existing 3 Wire or 2 Wire cables.
    3. (Please check the cable short Spec. and connection status).
    4. 48–56VDC AC/DC Adapter for the power supply.
    5. Paper Clip for Unjoining and Joining Process (Optional).
    6. 2.5mm '–' Screw Driver.

2. Product Installation

- Use one LP–2WGIP1 –S transceiver at each end of the 3 Wire or 2 Wire cable.
- Connect the UTP network cable to each side of the IP devices for operation of the entire network system.
  (IP devices such as: AV Device, Network TV, Gaming Console, PC, Notebook, VoiP etc.)
- Connect a 48–56V AC/DC Adapter into one of the transceivers to provide power to the entire system.
- All transceivers are in Join Mode.
- They will find each other and establish basic level encrypted communication.

Un–Joining and Joining Transceivers for Encrypted communication (Optional)

1. Un–Joining mode to build an enhanced encrypted network

- Do this by applying power, and pressing the small push–button (Grp) for about 15 seconds until the TWP and PoE LEDs illuminate and then go out (one second).
- The transceiver is now ready to be joined to build an encrypted Network Group.

2. Join Mode

- For more transceivers in an enhanced encrypted network:
    1. Disconnect the joined transceiver from the grouped 3 Wire cable/2 Wire cable.
    2. Connect the new un–joined transceiver.

- On the new un-joined transceiver:

    1. On the new un-joined transceiver, momentarily depress (two seconds) the small push-button (Grp) using the straightened paper clip.
    2. The PoE LED will blink.
    3. Depress the small push-button (Grp) on any transceiver within existing encrypted Network Group.
    4. Both transceivers are now in Joining mode.

- They will find each other and establish an encrypted communication.
- In about 10 seconds, the TWP LEDs on both transceivers will continuously blink, indicating a successful Join.

3. Adding Transceivers (if required)

- Disconnect one of the transceivers and replace it with a new un-joined transceiver.
- Repeat Step 2 to add additional transceivers to the same Network Group.
- All transceivers are in Join Mode.
- They will find each other and establish basic level encrypted communication.

AC/DC Power supply recommendation

- Input AC: 100 – 240 VAC, 50 – 60 Hz, 48–56V DC .83–1.7 Amp.

Power over Ethernet (PoE) Function

- Product supports IEEE 802.3 af/at PoE.
- Product supports 40 Watt (@Class5) local PoE for PoE Powered Devices (IP Camera, IP Intercom, VoiP, Wi-Fi AP etc.).

LP-2WGIP1-S Installation Warnings

- Do not use the transceiver in extreme temperature.
- If transceiver is flooded by water or other liquid, please turn off the power source and disconnect all of cables from transceiver and discontinue use.
- Do not use transceiver in temperatures over 158°F (70°C) for transceiver's best performance and longest lifetime.
- Do not disassemble transceiver.

Have a question?

For troubleshooting LanPoE Smart Networking Products, please reach out to our support team and provide detailed information for assistance.

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