



# PET-102GT++

## Industrial 2-port Gigabit High Power PoE++ Extender

### Features

- Support 1 port PoE P.D. input to 2 port POE P.S.E output with 10/100/1000 Base-T(X) for power and data extender
- Support P.S.E. based on IEEE 802.3af/at standard
- PoE P.D. input support 90watts max.
- PoE P.S.E. output support 90watts max. per port
- Multiple unit , daisy-chain installation support
- High reliability and rigid IP-30 housing
- DIN-Rail and wall mount design



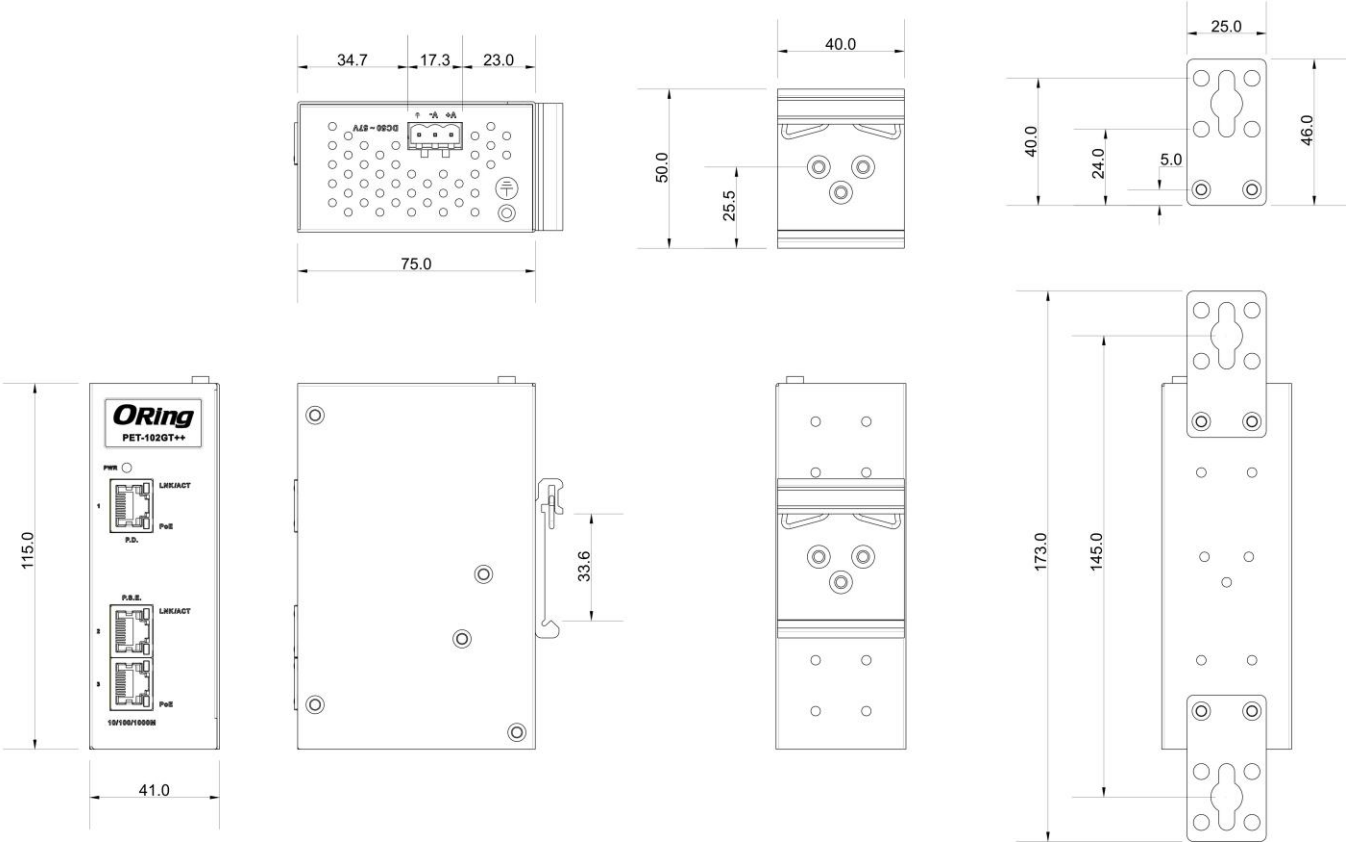
### Introduction

ORing PET-102GT++ is a high power PoE extender and compatible with IEEE802.3at/af<sup>[Note1]</sup> standard. With one 10/100/1000TxBase-T(X) P.D. input port and two 10/100/1000TxBase-T(X) P.S.E. output ports, the device not only pass on Ethernet data but also feed on and forward power from the previous PoE device to the next device. Furthermore, the PET-102GT++ can be powered by external DC power sources. By using external DC power to compensate for power losses caused by long-haul transmission, users can continue to use the PoE extender to enlarge the distance unlimitedly. With the ability to provide 90Watts<sup>[Note3]</sup> PoE power per port, the PET-102GT++ is surely a user-friendly and high-power PoE extender.

**Note1: The equipment being powered must be fully IEEE 802.3at/802.3af compliant in order for the power supply to be able to sense the PoE devices signature and apply power. Power is supplied on Ethernet pins 1/2 (V+) and 3/6 (V-).**

# Dimension

Dimension (Unit =mm)



## Connector and Pin Definition

### 1000 Base-T

| Pin | RJ-45 Input (Data Only) |             | RJ-45 Output (Data and Power) |   |
|-----|-------------------------|-------------|-------------------------------|---|
|     | Symbol                  | Description | Symbol                        | Description                                     |
| 1   | BI_DA+                  | Data BI_DA+ | BI_DA+<br>(Vdc1+)             | Data BI_DA+ and Feeding Power(+)                |
| 2   | BI_DA-                  | Data BI_DA- | BI_DA-<br>(Vdc1+)             | Data BI_DA- and Feeding Power(+)                |
| 3   | BI_DB+                  | Data BI_DB+ | BI_DB+<br>(Vdc1-)             | Data BI_DB+ and Feeding Power(-)                |
| 4   | BI_DC+                  | Data BI_DC+ | BI_DC+<br>(Vdc2+)             | Data BI_DC+ Feeding Power(+) <sup>[Note2]</sup> |
| 5   | BI_DC-                  | Data BI_DC- | BI_DC-<br>(Vdc2+)             | Data BI_DC- Feeding Power(+) <sup>[Note2]</sup> |
| 6   | BI_DB-                  | Data BI_DB- | BI_DB-<br>(Vdc1-)             | Data BI_DB- and Feeding Power(-)                |
| 7   | BI_DD+                  | Data BI_DD+ | BI_DD+<br>(Vdc2-)             | Data BI_DD+ Feeding Power(-) <sup>[Note2]</sup> |
| 8   | BI_DD-                  | Data BI_DD- | BI_DD-<br>(Vdc2-)             | Data BI_DD- Feeding Power(-) <sup>[Note2]</sup> |

### 10/100 Base-TX

| Pin | RJ-45 Input (Data Only) |               | RJ-45 Output (Data and Power) |   |
|-----|-------------------------|---------------|-------------------------------|---|
|     | Symbol                  | Description   | Symbol                        | Description                                       |
| 1   | Rx+                     | Data Receive  | Rx+<br>(Vdc1+)                | Data Receive and Feeding power(+)                 |
| 2   | Rx-                     | Data Receive  | Rx-<br>(Vdc1+)                | Data Receive and Feeding power(+)                 |
| 3   | Tx+                     | Data Transmit | Tx+<br>(Vdc1-)                | Data Transmit and Feeding power(-)                |
| 4   | NC                      | Not Connected | NC<br>(Vdc2+)                 | Not Connected Feeding power(+) <sup>[Note2]</sup> |
| 5   | NC                      | Not Connected | NC<br>(Vdc2+)                 | Not Connected Feeding power(+) <sup>[Note2]</sup> |
| 6   | Tx-                     | Data Transmit | Tx-<br>(Vdc1-)                | Data Transmit and Feeding power(-)                |
| 7   | NC                      | Not Connected | NC<br>(Vdc2-)                 | Not Connected Feeding power(-) <sup>[Note2]</sup> |
| 8   | NC                      | Not Connected | NC<br>(Vdc2-)                 | Not Connected Feeding power(-) <sup>[Note2]</sup> |

**Note2: Only valid for PoE++ connection**

## Specifications

| ORing Injector Model                   | PET-102GT++  |
|--|--|
| <b>Physical Ports</b>                  |  |
| RJ-45 Ethernet Port with P.D. Input    | 1  |
| RJ-45 Ethernet Port with P.S.E. Output | 2  |
| <b>Operating Voltage</b>               |  |
| Input Voltage                          | 50 ~ 57 VDC  |
| Output Power                           | 57V / 1579mA, 90 Watts max <a href="#">[Note3]</a> per port  |
| <b>LED Indicators</b>                  |  |
| Power Indicator                        | DC PWR / Ready : 1 x LED<br>Green On : Power is on and functioning Normally.   |
| PoE P.D. Input Port Indicator          | Green for Link/Act, Amber for PoE input enabled  |
| PoE P.S.E. outputs Port Indicator      | Green for Link/ACT, Amber for PoE output enabled   |
| <b>Protection</b>                      |  |
| Short Circuit Protection               | Present  |
| Over Load Protection                   | Present  |
| <b>Physical Characteristic</b>         |  |
| Enclosure                              | IP-30  |
| Dimension (W x D x H)                  | 41(W) x 75 (D) x 115 (H)mm (1.61 x 2.95 x 4.52 inch)   |
| Weight (g)                             | TBD  |
| <b>Environmental</b>                   |  |
| Storage Temperature                    | -40 to 80°C (-40 to 176°F)   |
| Operating Temperature                  | -20 to 70°C (-4 to 158°F)  |
| Operating Humidity                     | 5% to 90% Non-condensing   |
| <b>Regulatory Approvals</b>            |  |
| EMI                                    | FCC Part 15, CISPR (EN55022) class A   |
| EMS                                    | EN61000-4-2 (ESD), EN61000-4-3 (RS), EN61000-4-4 (EFT), EN61000-4-5 (Surge), EN61000-4-6 (CS), EN61000-4-8, EN61000-4-11 |
| Shock                                  | IEC60068-2-27  |
| Free Fall                              | IEC60068-2-31  |
| Vibration                              | IEC60068-2-6   |
| Safety                                 | EN60950-1 compliant  |
| <b>Warranty</b>                        | 5 years  |

**Note 3: LTPoE++™ PSE technology is applied on this product. Only when an LTPoE++™ Powered Device (PD) is attached can the PSE port deliver up to 90W of output power.**

## Ordering Information

### PET-102GT++

| Available Model | Model Name  | Description   |
|-----------------|-------------|---|
|                 | PET-102GT++ | Industrial 2-port Gigabit High Power PoE++ Extender |

## Packing List

- PET-102GT++ x 1
- QIG x 1
- DIN-Rail Kit x 1
- Wall-mount Kit x 1

## Optional Accessories

- DR-75-48 : 75 Watts DIN-Rail power supply
- DR-120-48 : 120 Watts DIN-Rail power supply