



Gigabit PoE Injector

w/DIN-Rail Mounting Kit

Model Number: *CG-POEIJ12V*

Installation Guide

Coolgear, Inc.

Version: 1.0

Date: 04/10/2024



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Revision History

Revision	Date	Comments
1.0	04/10/2024	First Release

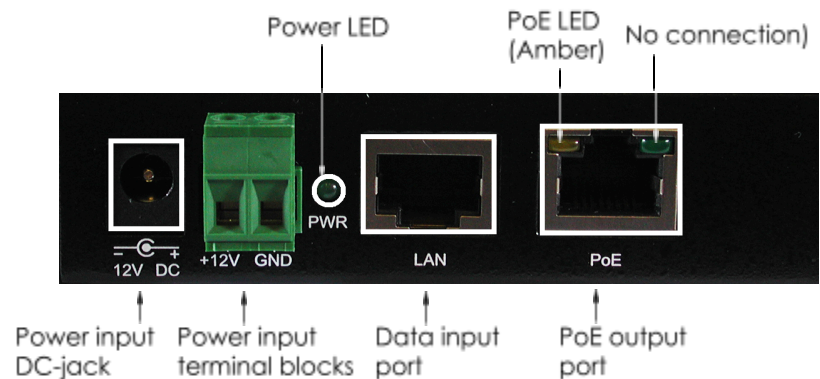
1. Introduction

Thank you for purchasing Coolgear’s Gigabit PoE Injector. Thank you for purchasing this Gigabit PoE Injector. It was designed to add 48 VDC power to an Ethernet port so you can deliver power and data over a single Ethernet cable to your Ethernet device in the field.

Features:

- ✓ Provides power to remote network devices
- ✓ Supports 10/100/1000 Base-T Ethernet standards
- ✓ Fully IEEE 802.3at compliant PoE (PSE) type 1 and 2 operation
- ✓ Maximum Power Delivered:
 - Type 1: 15.40W
 - Type 2: 34.20W
- ✓ One DC-Jack and one TB-2 for 12 VDC power input
- ✓ Supports one PoE power enabled LED indicator
- ✓ One Ethernet Data and one PoE RJ45 connectors
- ✓ Built in step-up converter from 12 VDC to 48 VDC
- ✓ Built in Isolated DC to DC converter
- ✓ Small Rugged Metal Housing for critical applications
- ✓ Provides direct panel and DIN Rail mounting methods

2. Connector Layout

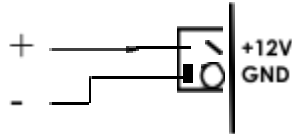


- **DC-jack and 2-pin terminator blocks for power input:** To inject the DC power to the Ethernet cable, the Injector needs a 12V DC power applied either on its DC jack or the 2-pin terminal blocks (but not both at the same time), its internal circuits will convert it to 48V DC to use for PoE.



Warning!!

Please make sure the polarity of the input power should correctly match the terminal block pins, otherwise it will damage the Injector.



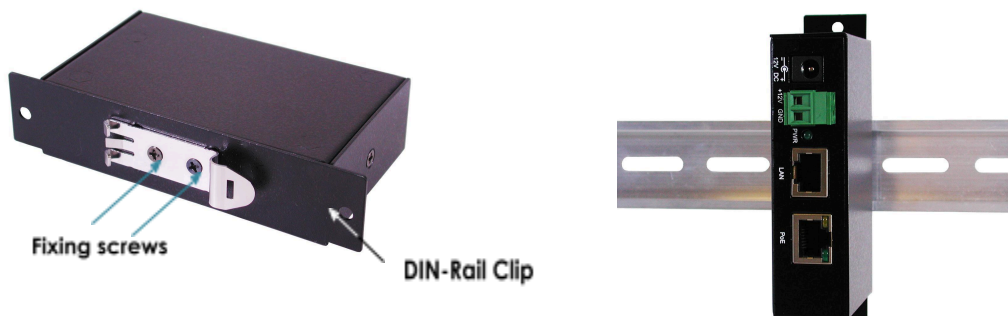
- **Power LED:** It Lights up when the 12V DC power is being applied. It is OFF when no power is applied on DC jack or terminal blocks.
- **LAN** Data input port: RJ45 connector for the data input. It accepts 10/100/1000Gbps Ethernet data cable.
- **PoE** output port: RJ45 connector that is able to add 48V DC power with the input Ethernet data. If a PoE PD is connected, the Injector will supply the PoE power and light up the Amber LED. Otherwise, it won't apply any power on the cable and the Amber PoE LED will NOT light up.

3. Hardware Installation

1. Connect data cable to RJ45 connector marked as “LAN”
2. Apply DC power (12V) to the DC jack or 2-pin Terminal Blocks Connector. The Power LED should light up. If you are applying the power on the 2-pin terminal blocks instead, please note its polarity should match the marking next to the terminal blocks' pins.
3. Connect your PoE PD device to the PoE port, the Amber PoE LED should light up if the PD was detected and powered by the Injector

4. Din-Rail Mounting

The metal DIN-Rail attachment clip should be used when you are mounting the Injector onto a DIN-Rail. The clip came with 2 screws to fix it on the rear side of the Injector.



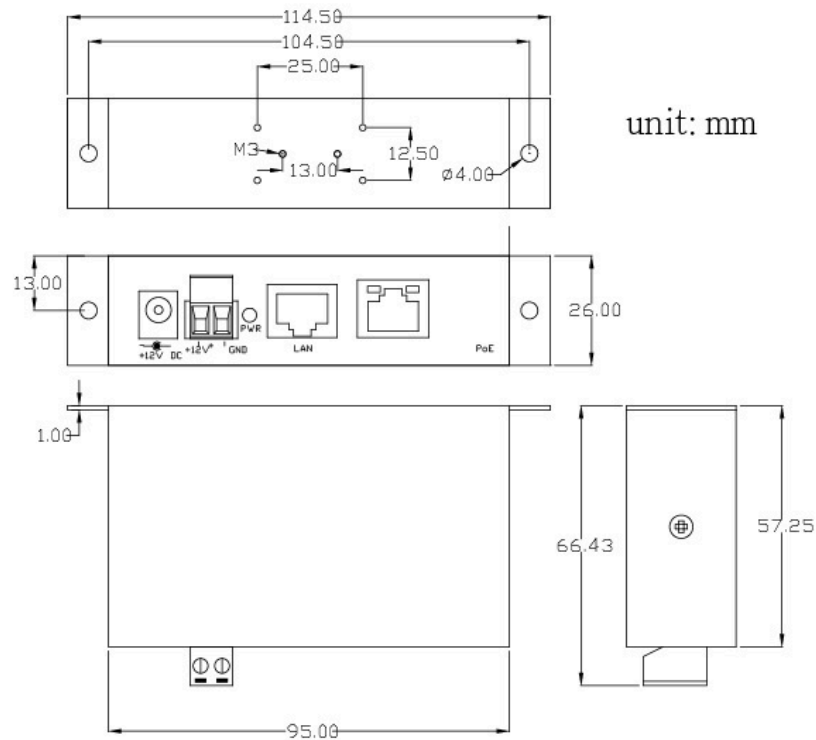
5. Environmental Specifications

Operating temp.: 0 to 55C (32 to 131F)

Operating humidity: 5 to 95% RH

Dimensions (LxWxH): 4.51 x 2.25 x 1.03 in
(114.60 x 57.26 x 26.20 mm)

6. Mechanical Drawings



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Safety

- Read the entire Installation Guide before implementing this product for your application. This guide contains important information about electrical connections that must be followed for safe and proper operation.
- Inspect the product closely for visual defects before putting it to use.
- Keep away from areas where moisture builds, this product contains electrical components that can be damaged by moisture build up, this can adversely affect your equipment connected to it.
- Do not disassemble the product. Handling the product's internal components can expose it to ESD (Electro-Static Discharge) hazards that can affect the function of the device.
- If this product is not functioning properly, email our support team at support@coolgear.com.

USB CHARGING & CONNECTIVITY EXPERTS

Within Every Great Machine

For over 20 years our rugged, off-the-shelf USB hubs, chargers, and serial products are ready to go for your next project. Based in the US, Coolgear has successfully engineered and deployed millions of connectivity solutions into industrial, medical, automotive, commercial, and aerospace industries.

We understand the importance of reliability, build quality, & consider all our customers' applications as critical, wanting to ensure long-lasting event-free integrations.

Compliance Statement

View compliance within the product's respective Technical Data Sheet, found on the product's online listing.

Technical Support

When you reach out to Coolgear support, you'll find yourself in the hands of a solution-oriented and knowledgeable expert ready to answer whatever question you throw at them. If you ever need help with your product, visit coolgear.com/support for support tickets, downloads, and other support resources. For the latest drivers, please visit coolgear.com/download.

Product Standard Warranty

One (1) Year Warranty from Date of Purchase Invoice. Coolgear will repair or replace any Product determined to be defective and which has been returned, at your risk and expense, to Coolgear. Where Coolgear determines in its sole judgment that repair or replacement of such Product is not reasonable, Coolgear will keep the non-conforming Product and refund to you the amount you paid for such Product. Returned Products shall be subject to the balance of the Warranty Period otherwise applicable. Any reconditioned parts used by Coolgear shall be subject to all the same provisions as otherwise applicable to new parts. THE FOREGOING DESCRIBES COOLGEAR'S SOLE LIABILITY, AND YOUR SOLE REMEDY, FOR ANY BREACH OF WARRANTY. IF YOU DO NOT AGREE WITH THE TERMS OF THIS LIMITED WARRANTY, YOU MUST RETURN THE PRODUCTS UNUSED AND IN THEIR ORIGINAL CONTAINERS TO YOUR ORIGIN OF PURCHASE.

Limitation of Liability

This Limited Warranty does not cover: (i) defects or damages resulting from natural causes, casualty, accident, misuse or abuse, neglect, alterations, service or repair by other than Coolgear, including without limitation by you; (ii) improper installation or de-installation, operation or maintenance, improper connections with peripherals or other causes not arising out of defects in the materials or workmanship of Products; (iii) any Product for which the warranty sticker has been removed, modified or defaced; (iv) normal wear and tear; (v) damage to or loss of repaired or replaced Products during shipping by Coolgear except when such damage or loss is caused by poor or inadequate packaging by Coolgear; or (vi) Products purchased outside the United States. UNDER NO CIRCUMSTANCES WILL COOLGEAR BE LIABLE FOR ANY LOSS OF USE, INTERRUPTION OF BUSINESS OR ANY INDIRECT, SPECIAL, INCIDENTAL, PUNITIVE OR CONSEQUENTIAL DAMAGES OF ANY KIND (INCLUDING LOST PROFITS) REGARDLESS OF THE FORM OF ACTION WHETHER IN CONTRACT, TORT (INCLUDING NEGLIGENCE), STRICT PRODUCT LIABILITY OR OTHERWISE, EVEN IF COOLGEAR HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN NO EVENT SHALL THE TOTAL LIABILITY OF COOLGEAR HEREUNDER EXCEED THE GREATER OF \$50.00 OR THE AMOUNT YOU ACTUALLY PAID FOR THE PRODUCT GIVING RISE TO SUCH LIABILITY, REGARDLESS OF THE CAUSE OF ACTION, IN CONTRACT, TORT, STRICT LIABILITY OR OTHERWISE. NOT ALL JURISDICTIONS ALLOW SUCH LIMITATIONS OF DAMAGES SO THE FOREGOING LIMITATIONS MAY NOT APPLY TO YOU.

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