



4 Port Mini USB 3.2 Gen 1 Industrial Wide Temperature Range Hub

Model Number: *CG-G1M4PHT*

Product Manual

Coolgear, Inc.

Version: 1

Date: 2023-12-06



Table of Contents

1. Introduction	2
2. Connector Layout	3
3. Hardware Installation	4
4. Environmental Specifications	5

Revision History

Revision	Date	Comments
1.0	2023-12-06	First Release

1. Introduction

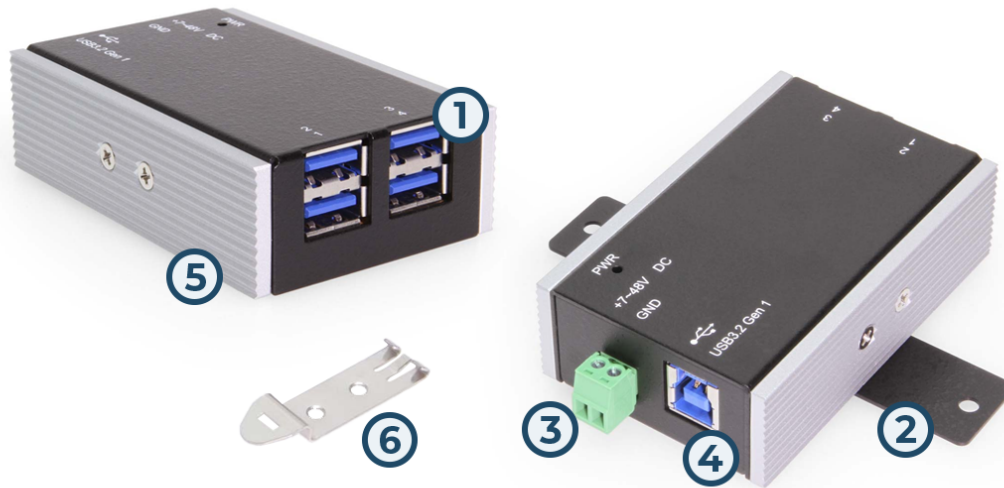
Thank you for purchasing the Coolgear 4 Port Mini USB 3.2 Gen 1 Industrial Wide Temperature Range Hub, a cutting-edge solution designed to thrive in extreme environments. Engineered to withstand temperatures ranging from -40 to 85 degrees Celsius, this industrial-grade USB hub ensures uninterrupted connectivity in the harshest conditions. Whether you're in Arctic exploration, metal casting operations, or any industry facing extreme temperature challenges, our hub delivers reliable and resilient performance, making it an indispensable tool for mission-critical applications.

Features:

- ✓ **Temperature Resilience:** Withstands an operating temperature range from -40 to 85 degrees Celsius, providing robust performance even in diverse environmental conditions.
- ✓ **Industrial-Grade Durability:** Constructed with a rugged steel shell, ensuring durability and longevity in challenging settings such as manufacturing plants, military applications, and more.
- ✓ **4 Port Connectivity:** Offers four USB 3.2 Gen 1 ports, providing ample connectivity for a variety of devices, instruments, and peripherals simultaneously.
- ✓ **Plug-and-Play Convenience:** Simple and hassle-free installation, allowing for quick integration into your existing setup without the need for complex configurations.
- ✓ **Reliable Data Transfer:** Maintains consistent and reliable data transfer even in extreme temperature fluctuations, ensuring seamless communication between connected devices.

- ✓ Versatile Industry Applications: Ideal for use in oil and gas operations, military applications, mining, aerospace, and other industries where extreme temperature resistance is paramount.
- ✓ Compact and Space-Efficient Design: Streamlined form factor makes it suitable for space-restricted environments while maintaining high-performance standards.
- ✓ LED Power Indicator: An Intuitive LED indicator provides a visual cue for power status, enhancing user convenience and troubleshooting capabilities.
- ✓ Optional surface mounting and DIN-Rail brackets included to mount it your way.

2. Connector Layout



1	Downstream Device Ports	4x USB 3.2 Gen 1 Female Type-A
2	Surface Mounting Bracket	Fixed Non-Removable
3	Power Connector	2-Pin Terminal Block
4	Upstream Host Port	USB 3.2 Gen 1 Female Type-B
5	Heat Sink	Removable
6	DIN-Rail Clip	Optional

3. Hardware Installation

1. **Use static electricity discharge precautions.** Remove possible static discharge potential from any objects that the hub may come in contact with before installation. This can be accomplished by touching a bare metal chassis rail after you have turned off the power.
2. Apply DC power via the 2-Pin Terminal Block. +7~48V DC Input.
3. Connect USB Host cable: The host cable is a standard Screw-Locking A-to-B USB 2.0 cable. Please connect the Type-A end connector of the cable to your USB Host or PC, then connect the Type-B end connector to this hub. Since the USB hub is plug-and-play, you don't have to turn off your host computer when installing the hub.
4. Connect USB devices to the downstream ports of this hub.
5. **(OPTIONAL)** Mount your hub on the desired surface using the optional surface mounting plate. Or, mount your hon on a DIN-Rail using the included clips.

3.1 Surface Mounting

1. Attach the included mounting plate to the backside of the hub.
2. Mount your hub where needed through the included mounting plate. **Screws for surface mounting not included*



3.2 DIN-Rail Mounting

1. Attach DIN-Rail clip with the included screws.
2. Clip hub onto DIN-Rail.



4. Environmental Specifications

Operating Temperature: -40°C to 85°C (-40°F to 185°F)

Humidity: 5% ~ 95% (non-condensing)

Notes

This product requires an external power source to function. If the power LED is not illuminating after connecting, check that the power source is connected to the hub correctly, and is powered on.

Safety

- Read the entire Product Manual before implementing this product for your application. This manual 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.

© 2022 Coolgear, Inc. All Rights Reserved. All products and accompanying digital documentation including images are the property and / or trademarks of Coolgear Inc. Coolgear Inc. are continuously improving upon its products. Product specifications are subject to change without notice.