



# USB-C 4 Port Power Delivery Hub with 2 Type C PD Ports and 3 USB 3.1 Type A Ports

## Product Manual



Coolgear, Inc.

Version 1.1

September 2017

Model Number: CG-UC31PD4H

## Revision History

---

Revision	Date	Author	Comments
1.1	10/25/2017	Coolgear	New Manual Format

## About this document

---

This product manual outlines installation and features of the CG-UC31PD4H USB-C 4 Port Power Delivery Hub with 2 Type C PD Ports and 3 USB 3.1 Type A Ports.

## Scope

---

The scope of this manual is to give the user of the product an understanding of its use with detailed diagrams and verbiage. The manual allows the users to apply the product to their application.

## Intended Audience

---

This product is intended for use in numerous industries including but not limited to applications such as; Automotive, Machine Equipment, Kiosk, Office, and others.

## Product Support

---

[support@coolgear.com](mailto:support@coolgear.com)

---

## Table of Contents

---

<b>1. Introduction</b> .....	<b>4</b>
1.1 Features .....	4
1.2 Connector Layout.....	5
1.3 Supported USB Devices.....	6
1.4 I/O Hardware .....	6
1.5 Environmental Specifications .....	6
<b>2. Notes, Tips, Warnings, and Safety</b> .....	<b>7</b>
<b>3. Supporting References</b> .....	<b>8</b>

## Table of Figures

Figure 1 – Connector Layout.....	5
----------------------------------	---

## 1. Introduction

4-Port USB-C PD hub includes 2 USB-C PD-source ports and 3 USB-A USB 3.1 port to give you a multi-function hub. This hub can be used while connected to your MacBook, Chromebook, or other Type-C enabled laptop to provide charging power to mobile devices.

WEIGHT	.656 lbs
DIMENSIONS	5.98" (7.05" with ears)(L) x 2.35"(W) x.93"(H)
UPC	045079159150
WARRANTY	1 year from date of purchase
COLOR	Black
DOWNSTREAM PORTS	4 (1 USB 3.1 Type-C Port and 3 USB Type-A)
UPSTREAM PORTS	1 (USB 3.1 Gen1 Type-C Port)

### 1.1 Features

<ul style="list-style-type: none"> <li>Compliant with USB 3.1 Gen 1 specification</li> <li>Metal Case with for Industrial Critical Applications</li> <li>Mounting Options: Wall Surface and DIN Rail</li> <li>Upstream Facing Port: USB-C with PD Source</li> <li>Downstream Facing Ports: 1 x USB-C with PD Source and 3 x USB-A connectors</li> <li>Supports Type-C and Type-B Screw Lock Cables</li> <li>Supports Fast USB Battery Charging: CDP and DCP modes</li> </ul>	<ul style="list-style-type: none"> <li>Provides 4 PD Source PDOs (Power Data Object): 20V/5A, 14.5V/2A, 12V/3A and 5V/3A</li> <li>Detects Flip-able/Reversible Plugging</li> <li>Supports 5Gbps (Super-speed), 480Mbps (High-speed), 12Mbps (Full-speed) and 1.5Mbps (Low-speed) Speed</li> <li>Supports 15KV ESD Surge Protection</li> <li>Multi Transaction Translators (TT) per Hub</li> <li>Supports 18~20V Self-power Input Power Supply</li> <li>Supports Fast USB Battery Charging: CDP and DCP modes</li> </ul>
--	---

## 1.2 Connector Layout

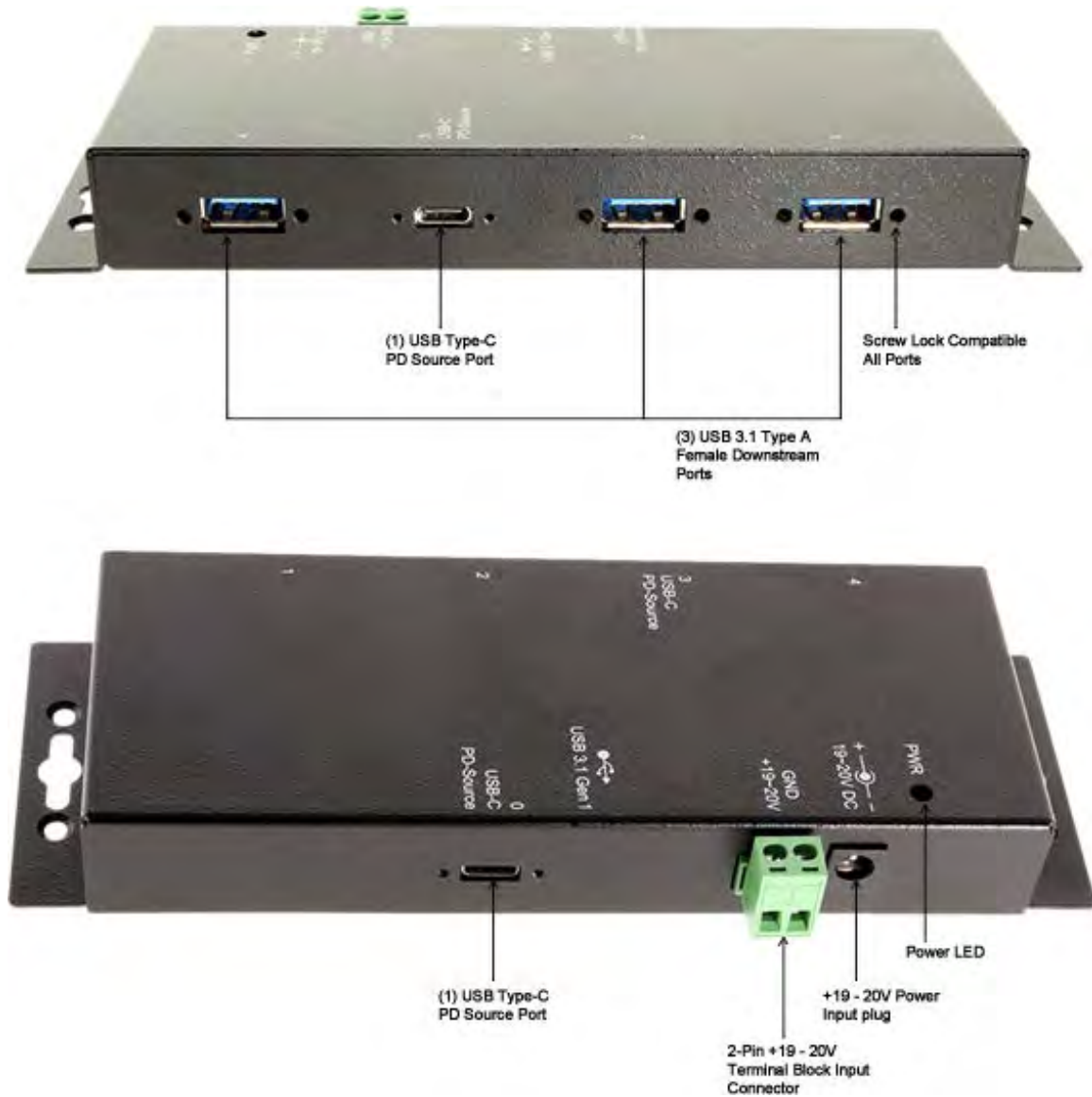


Figure 1

Self Power	Power Delivery Support	Terminal Block Power
A unique self-power mode supports fast USB charging by converting standard downstream ports (SDP) into Charging Downstream Port (CDP) or Dedicated Charging Ports (DCP).	PD Supports power source: 20V/5A, 14.5V/2A, 12V/3A and 5V/3A through the reversible USB Type-C port connection.	<b>Input:</b> 18~20V DC From DC Jack or Terminal Blocks for self power mode.

### 1.3 Supported USB Devices

- Supports keyboard, mouse, monitor, scanner, printer, PC Camera, telephone, DVD drive, joystick, virtual reality helmet, modem, PBX and many more USB devices

### 1.4 I/O Hardware

- Supports 1 USB-C PD Upstream Port Connector, 1 USB-C and 3 USB-A Downstream Port Connectors.
- Supports a 2-pin Terminal Block Connector for external power input from AC adapter

### 1.5 Environmental Specifications

Specification	Data
Operating Temperature:	0-55°C (32 to 131°F)
Storage Temperature:	-20 to 85°C (-4 to 185°F)
Operating Humidity:	5 to 95% RH

## 2. Notes, Tips, Warnings, and Safety

**Note**

For Systems with USB3.1, USB2.0, or USB1.1 Ports

**Tip**

N/A

**Warning**

N/A

**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](mailto:support@coolgear.com).

### 3. Supporting References

Document	Link
Website Product Page	<a href="https://www.coolgear.com/product/usb-c-4-port-hub-wpower-delivery-15kv-esd-surge-protection-usb-3-1-gen1">https://www.coolgear.com/product/usb-c-4-port-hub-wpower-delivery-15kv-esd-surge-protection-usb-3-1-gen1</a>

© 2017 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.