



4 Port Type-C USB 3.1 Gen2 Hub VLI Chip with DIN Rail Mounting Kit

Product Manual

Coolgear, Inc.

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Model Number: CG-4P31CHUB



Revision History

Revision	Date	Author	Comments
1.1	10/18/2017	Coolgear	New Manual Format

About this document

This product manual outlines installation and features of the CG-4P31CHUB 4 Port Type-C USB 3.1 Gen2 Hub VLI Chip with DIN Rail Mounting Kit.

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

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1. Introduction

The CG-4P31CHUB is a USB3.1 Plastic Hub that complies with the Universal Serial Bus (USB) Specifications Revision 3.1 Gen 2 and works up to 10Gbps. It provides 1 USB-C upstream port and 4 downstream facing ports with 2 USB-C and 2 USB-A connectors. It supports simultaneous operation of any combination of Super-Speed Plus (SS+), Super-Speed(SS), High-Speed(HS), Full-Speed(FS), and Low-Speed(LS) devices. It is backward compatible with USB1.1, 2.0, USB3.1 Gen1 legacy devices.

WEIGHT	.7 lbs
DIMENSIONS	5.95”(L) x 2.44”(W) x 1.33”(H) (151.1 x 62.0 x 34.0 mm)
UPC	045079159402
WARRANTY	1 year from date of purchase
COLOR	White
DOWNSTREAM PORTS	4 USB 3.1 Gen2 Ports (2 Type-C and 2 Type-A)
UPSTREAM PORTS	1 USB 3.1 Gen2 Type-C Port

1.1 Features

<ul style="list-style-type: none"> • Compliant with USB3.1 Gen 2 Specification • Plastic Case with DIN RAIL Mounting Kit for both Desktop and Industrial Critical Applications • Upstream Facing Port: USB-C Connector • Downstream Facing Ports: 2 x USB-C and 2 x USB-A • Supports Type-C and Type-A Screw-Lock Cables • Detects Flip-able/Reversible Plugging 	<ul style="list-style-type: none"> • Supports 10Gbps (SS+), 5Gbps (SS)480Mbps (HS), 12Mbps (FS) and 1.5Mbps (LS) Speed • Multi Transaction Translators (TT) per Hub • Built-in Port Status Indicator LED for Each Port • Supports BC 1.2: SDP, CDP and DCP modes • Charges all 4 USB Ports up to 0.9A Each Simultaneously • Supports Wide Range (+7~24V DC) Self-power Input
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1.2 Connector Layout

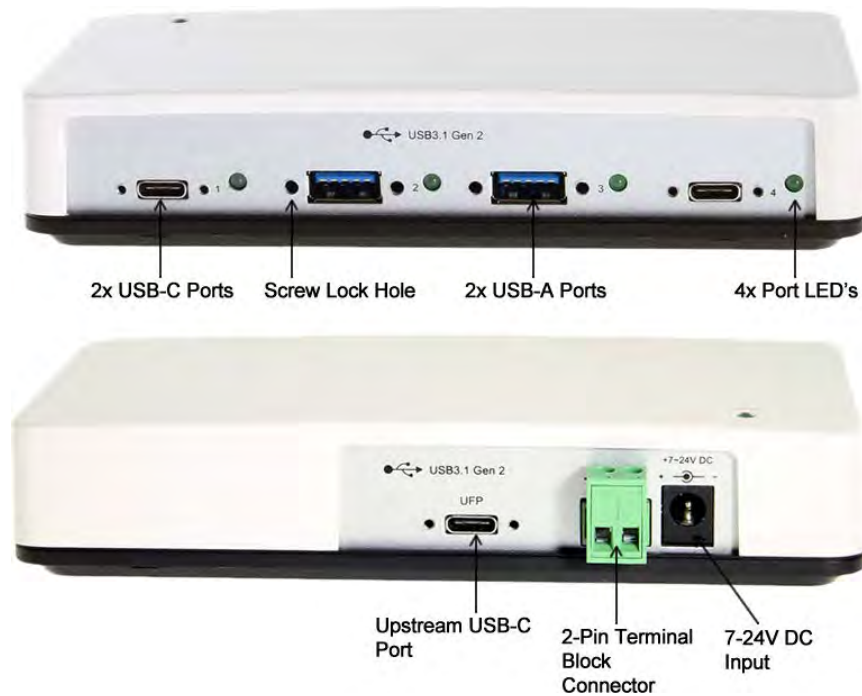


Figure 1

USB A Downstream Port	USB C Ports	7 – 24V DC Input
<p>Provides 2 USB 3.1 Gen2 Type-A downstream ports with screw lock compatible connections, both working up to 10Gbps data transmission.</p>	<p>2 USB-C downstream ports can be used in combination with the USB-A ports via a RISC-Like USB Controller.</p> <p>1 Upstream USB-C port from the hub to a USB-C to C or C to A host.</p>	<p>Input DC power from its DC Jack or 2-pin terminal blocks. Supports USB charging specifications by turning its downstream ports (SDP) into Charging Downstream Port (CDP) or Dedicated Charging Ports (DCP).</p>

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.



Figure 2

1.4 I/O Hardware

- Supports 1 USB-C Upstream Port Connector, 2 USB-C and 2 USB-A Downstream Port Connectors.
- Supports a DC Jack and 2-pin Terminal Block Connectors 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 Gen 1, Gen 2, 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.

3. Supporting References

Document	Link
Website Product Page	https://www.coolgear.com/product/4-port-type-c-usb-3-1-gen2-hub-with-din-rail-mounting-kit

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