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USB-C to USB-B Power Delivery USB 3.1 Adapter w/Mounting Kit

Product Manual

Coolgear, Inc.
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Model Number: CG-UCUSBPDB

Revision History

Revision	Date	Author	Comments
1.0	3/20/2017	Coolgear	Original format
1.1	10/9/2017	Coolgear	New Manual Format

About this document

This product manual outlines installation and features of the CG-UCUSBPDB USB-C to USB-B Power Delivery USB 3.1 Adapter w/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

support@coolgear.com

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1. Introduction

The CG-UCUSBPDB USB3.1 Type-C to Type-B Gen1/Gen2 adapter is designed to add the Type-C featured Devices for Type-B Host. It allows the new USB Type-C devices to be added to the legacy type-B Host. Type-C can deliver power at up to 100 watts at 20 volts. This means that larger devices can now be charged from USB, including laptops and monitors. Supports Default 4 Source PDOs: 20V/5A, 14.5V/2A, 12V/3A and 5V/3A.

WEIGHT	.162 lbs
DIMENSIONS	3.24"(L) x 1.74"(W) x.87"(H)
UPC	045079158900
WARRANTY	1 year from date of purchase
COLOR	Gray
DOWNSTREAM PORTS	1 USB 3.1 Type-C Port
UPSTREAM PORTS	1 USB 3.1 Gen1 Type-B Port

1.1 Features

- Compliant with USB 3.1 Gen 1 and Gen2 Specifications
- One Type-C Connector Supports DFP Devices
- One Type-B USB3.1 Gen 1/Gen 2 UFP Connector for Host
- Supports USB PD (Power Delivery), work as a Source
- Detachable Mounting Kit for Wall or DIN Rail Mounting Options
- Supports Type-C and Type-B Screw Lock Cables
- DC Power Input: 18~20V DC, from DC Jack or TB
- Provides Negotiated Power Output over TB
- Detect USB Cable Plug Attach
- Cable Orientation and Role Detection
- Assign CC and VCONN Pins
- Supports USB Screw-Lock Cable Mechanism
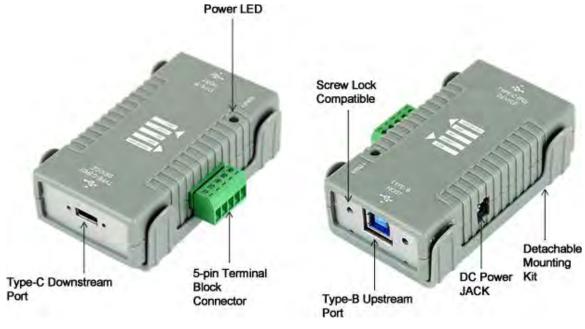- Provides 4 Source PDOs (Power Data Object)

1.2   Connector Layout

Figure 1

System	Power Delivery Support	Power Input / Output
For USB3.1 Type-C Devices and Type-B USB3.1 Gen 1, Gen 2, USB2.0 and USB1.1 Host Ports	Supports Default 4 Source PDOs: 20V/5A, 14.5V/2A, 12V/3A and 5V/3A	**Input**: 18~20V DC From DC Jack or Terminal Blocks **Output**: Negotiated Power over Terminal Blocks

1.3   Supported USB Devices

- Supports tablets, laptops, keyboards, mice, monitors, printers, scanners, PC Cameras, Smartphone, hard drives, joysticks, virtual reality helmets, modems, PBX and many more USB devices

1.4   I/O Hardware

- Downstream: Type-C connector x 1 (supports PD).
- Upstream: Type-B connector x 1.
- 5-pin Terminal Blocks: Power input and negotiated power output.
- DC Jack: Power input connector

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 USB3.1 Type-C Devices and Type-B USB3.1 Gen 1, Gen 2, USB2.0 and USB1.1 Host 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/usb-c-usb-b-power-delivery-adapter-wmounting-kit