USB 3.0 7-Port Industrial Hub Metal Case with Din-Rail Mount

Product Manual

Coolgear, Inc.
Version 1.1
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Model Number: USBG-7U3ML

Revision History

Revision	Date	Author	Comments
1.0	10/7/2014	Coolgear	Original format
1.1	10/3/2017	Coolgear	New Manual Format

About this document

This product manual outlines installation and features of the USBG-7U3ML USB 3.0 7-Port Industrial Hub Metal Case with Din-Rail Mount.

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 USBG-7U3ML is a USB 3.0 Hub that complies with Universal Serial Bus 3.0 (USB 3.0) Specifications Revision 1.0 and works with up to 5Gbps. It provides 7 downstream facing ports with standard Type-A USB 3.0 connectors.

WEIGHT	1.2 lbs
DIMENSIONS	6.37"(L) x 2.60"(W) x 1.42"(H) (16.20 x 6.60 x 3.61 cm)
UPC	729440691479
WARRANTY	1 year from date of purchase
COLOR	Black
DOWNSTREAM PORTS	7 USB 3.0 Type-A Ports
UPSTREAM PORTS	1 USB 3.0 Type-B Port

1.1 Features

- Compliant with USB3.0 Specification Revision 1.0
- Built-in RISC-like USB3.0 Hub Controller Chips
- Metal Case, Ideal for Critical Applications
- One Up-stream Port (Type-B) Support Super-speed,
- 7 Down-stream Ports (Type-A) Support Super-Speed,
- High-speed , Full-speed and Low-speed Traffic
- Supports 5Gbps (Super-speed), 480Mbps (High-speed),
- 12Mbps (Full-speed) and 1.5Mbps (Low-speed) Speed

- Supports 7 Concurrent Non-periodic Transactions
- Supports Self-powered and Bus-powered Mode
- Supports 900mA USB Bus Power for Each Port
- Support USB Battery Charging: CDP and DCP modes
- Supports 350-Watt Surge Protection for Each Port
- Supports DC-Jack for 5V DC Power Input
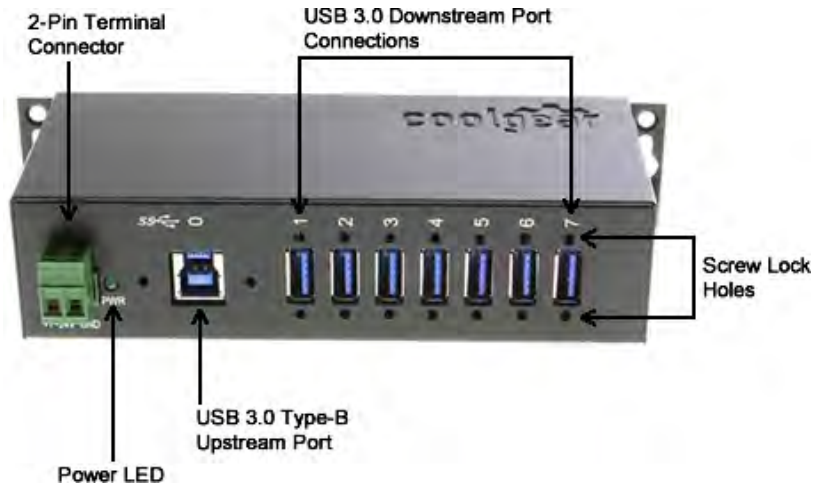- Optional DIN RAIL Mounting Kit

1.2 Connector Layout

Figure 1

USB 3.0 Upstream Port	USB 3.0 Downstream Port	Self Power Input
Type-B connector from upstream USB 3.0 port. It is connected from host or another USB 3.0 hub. Supports both normal and screw-lock type USB cables.	There are 7 Type-A connectors for USB 3.0, USB 2.0 or USB 1.1 devices. They support both normal and screw-lock type USB cables.	This 2-pin (one pin for positive voltage and the other pin is GND) terminal block connector is used to connect strong power to self-power the hub; the voltage can be in the range from +7V to 24VDC.

Figure 2

1.3   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 (range from +7V to 24V) to the 2-pin Terminal Block Connector**. The hub is self-powered by this connector.
3. **Connecting USB Host cables:** The host cable could be either a standard A-to-B USB 3.0 cable or an optional A-to-B USB 3.0 screw-lock cable. Please connect the Type-A end connector of the cable to your PC's host USB 3.0 port, then insert 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 the USB Devices to the downstream ports of this hub.**
5. **Mount your hub on the wall or DIN RAIL if required.** Mounting options are pictured in figure 2 above.

1.4   Checking the Hub Installation

To check the USB hub installation in Windows device manager, please follow the following steps:

1. Click **Start**
2. Click Control Panel
3. Click **System**
4. Click **Device Manager** button
5. Double Click **Universal Serial Bus Controller**
6. Double click **Generic USB Hub**, the message will show that this device is working properly
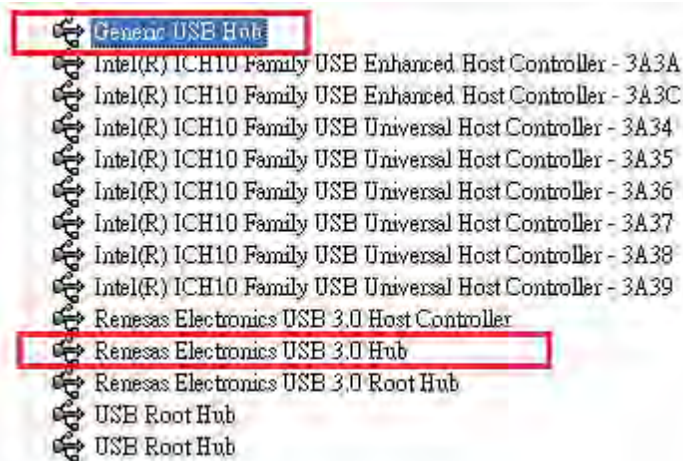

Figure 3

1.5 Environmental Specifications

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

2. Notes, Tips, Warnings, and Safety

Note	N/A

Tip	N/A

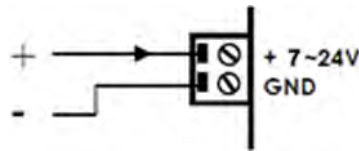| Warning	Please make sure the polarity of the input power should be correctly matched with the terminal block pins to function properly. Figure 4

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/usb3-0-7-port-industrial-hub-metal-case-with-din-rail-mount