Surge Protected Metal 7-Port USB 2.0 Hub – DIN RAIL Mount Kit NEC Chip

Product Manual

Coolgear, Inc.
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Model Number: USBG-7DU2i

Revision History

Revision	Date	Author	Comments
1.0	07/14/2015	Coolgear	Original format
1.1	10/4/2017	Coolgear	New Manual Format

About this document

This product manual outlines installation and features of the USBG-7DU2i Surge Protected Metal 7-Port USB 2.0 Hub – DIN RAIL Mount Kit NEC Chip.

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; ATM, Kiosk, Warehouse, Data Center, Office devices and others.

Product Support

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1. Introduction

The USBG-7DU2i is a 7-Port USB 2.0 Hub with Surge Protection and very appealing for light power consumption USB peripheral devices. This is an ideal USB Hub that provides a unique feature to work in bus-powered mode without an external AC power adapter. This hub is very convenient for light power consumption with USB devices, yet rugged enough to handle industrial environments with 350-Watt Surge Protection for each port.

WEIGHT	.631 lbs
DIMENSIONS	5.23”(L) x 2.42” (W) x 1.43” (H) (13.30 x 6.15 x 3.63 cm)
UPC	729440625153
WARRANTY	1 year from date of purchase
COLOR	Black
DOWNSTREAM PORTS	7 USB Type-A Ports
UPSTREAM PORTS	1 USB Type-B Port
SYSTEM REQUIREMENTS	Compatible with all USB enabled operating systems.

1.1 Features

• Compliant with USB Specification Revision 2.0 • Rigid and Din Rail-Mountable Metal Case • Supports High-speed and or Full-speed Packet Protocol Sequencer for Endpoint 0/1 • Provides 7 Downstream Facing Ports	• Optional ESD Surge Protection Over All USB Signal Pins • Supports USB Screw Lock Mechanism to Increase Reliability • Supports 480Mbps, 12Mbps, and 1.5Mbps Speed • Supports Self-powered and Bus-powered Mode

1.2 Connector Layout

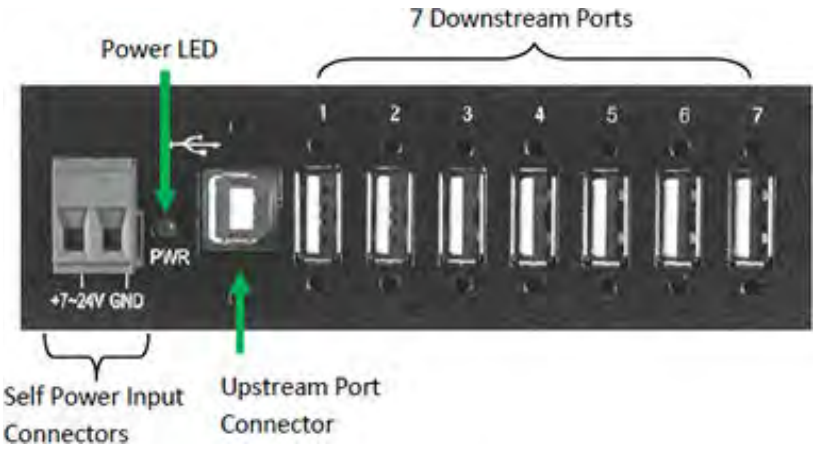


Figure 1

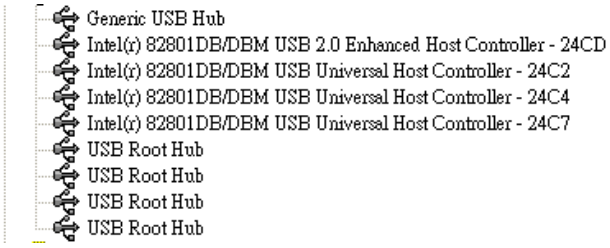
Upstream Port Connector	Self Power Input Connector
Type-B connector from upstream USB 2.0 port. It is connected from host or another USB 2.0 hub.	This 2-pin (one pin plus voltage and the other pin is ground) terminal block connectors are used to connect strong power to self-power the hub, the voltage can be in the range from +7V to 24VDC.

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 bus-powered by the upstream USB port; this terminal block connector is to add power to ensure enough power for the 4 downstream ports.
3. **Connecting USB Host cable**: The host cable is a standard A-to-B USB 2.0 cable. Please connect the type-A end connector of the cable to your upstream USB port, 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 the USB Devices to the downstream ports of this hub**.
5. **Mount your hub on the wall or DIN RAIL if required**.

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 2

1.5 Environmental Specifications

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

1.6 Drawing

Figure 3

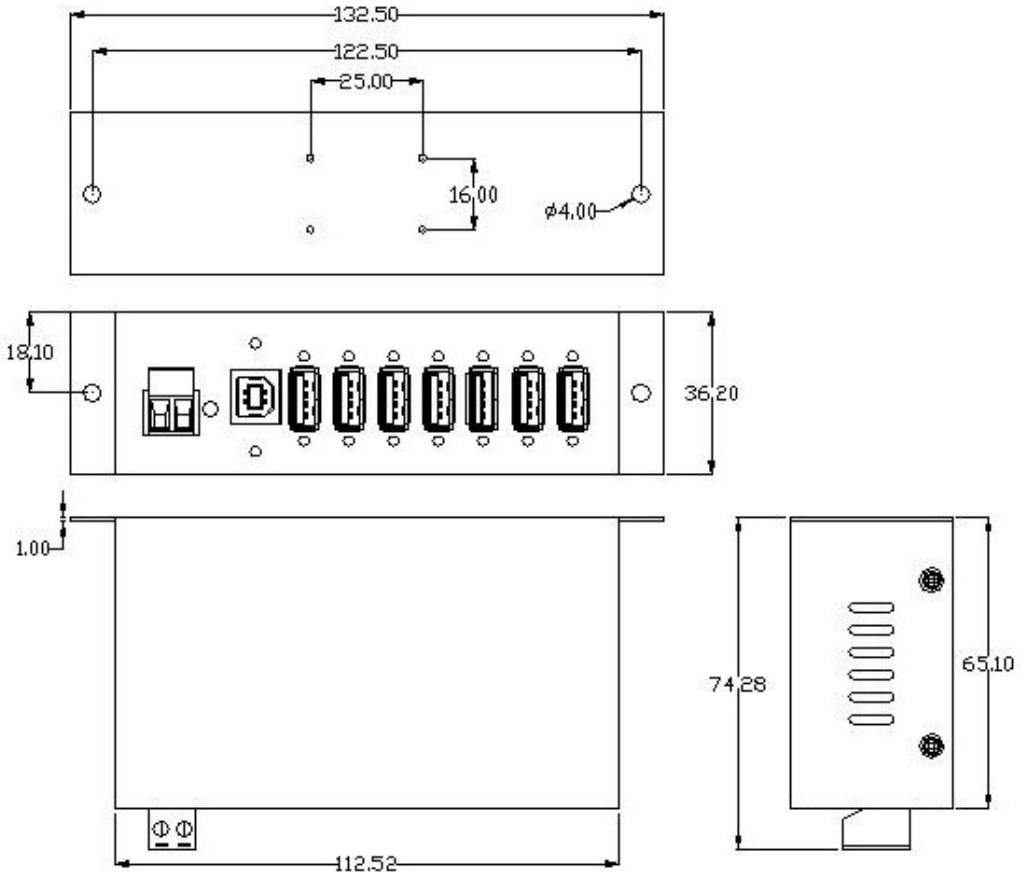


Figure 4

2. Notes, Tips, Warnings, and Safety

Note	In some cases, you will see an error message said that the USB Hub caused the USB bus power over the current limit, please ignore this message since the hub is hot plug and its power capacitor will cause a very short period of current. It will NOT affect your USB function.

Tip	N/A

Warning	Please make sure the polarity of the input power should be correctly match the terminal block pins, otherwise it will damage the hub.

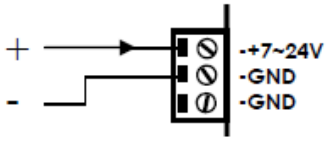


Figure 5

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/surge-protected-metal-7-port-usb-2-0-hub-w-din-rail-mounting-kit-japan-nec-chip