10-Port USB2.0 Metal Hub

with 15KV ESD Surge Protection and Rack/DIN-RAIL Mounting Kit Installation Guide

1. Introduction

Thank you for purchasing this high-speed 10-port USB2.0 hub. It provides an ideal solution to expand 10 USB2.0 ports from one single USB2.0 host port. It provides a wide range self power source (+5~24VDC from the 2-pin Terminal Blocks or DC Jack) to supply enough power on USB2.0 buses.

Features:

- ✓ Compliant with USB Specification 2.0
- Metal Case, DIN Rail and wall mountable \checkmark
- ✓ Provides 10 Downstream USB2.0 Facina Ports
- ✓ Supports USB Screw-Lock Mechanism for Both Type-B and **Type-A Cables**
- ✓ Supports 480Mbps (High speed), 12Mbps (Full-speed) and 1.5Mbps (Low-speed) Speed
- ✓ Supports 15KV ESD Level 4 Protection for Each Port
- ✓ Supports +5~24V DC Wide Range Input Power
- ✓ Power Inputs: DC-Jack or Terminal Blocks

2. Connector Layout

+5~24V DC Power Input DC Jack and Terminal Blocks

10 USB2.0 Downstream Port Connectors



USB2.0 Upstream Port Connector

- USB2.0 Upstream Port Connector: Type-B connector from upstream USB2.0 port. It is connected from host or another USB2.0 hub. Supports both normal and screw-lock type USB cables.
- USB2.0 Downstream Port Connectors: There are 10 Type-A connectors for USB2.0 or USB1.1 devices. They support both normal and screw-lock type USB cables.
- Self Power Input Connectors: This 2-pin (one pin plus voltage and the other pin is GND) terminal block connector and DC Jack are used to connect external power to self-power the hub, the voltage can be in the range from +5V to 24V DC.



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



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 +5V to 24V) to the 2-pin Terminal Block Connector or DC Jack. The hub was bus-powered by the upstream USB port, and was self-powered by either of the 2 connectors to add power to ensure enough power for the 10 downstream ports.
- **3. Connecting USB Host cable:** The host cable is either a standard A-to-B USB2.0 cable or a screw-lock type A-to-B 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.

Note: In some cases, you will see an error message said 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.

- 4. Connect the USB devices to the downstream ports of this hub.
- 5. Mount your hub on the wall or DIN RAIL (with optional mounting kit) if required.

DIN RAIL Mount (horizontal):



Mounted on the DIN RAIL vertically

4. Checking the Hub Installation

To check the USB2.0 hub installation in Windows device manager, please follow the following steps:

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

Generic USB Hub Generic USB Hub Here is your USB2.0 Hub Intel(r) 82801DB/DBM USB 2.0 Enhanced Host Controller - 24CD Intel(r) 82801DB/DBM USB Universal Host Controller - 24C4 Intel(r) 82801DB/DBM USB Universal Host Controller - 24C4 USB Root Hub USB Root Hub USB Root Hub USB Root Hub

5. Environmental Specifications

0 to 60°C (32 to 140°F)
5 to 95% RH (non-condensing)
7.78"(L)x2.18"(W)x1.22"(H) (19.77x5.55x3.1cm)