# USB-4630

# 4-Port Isolated USB 3.0 SuperSpeed Hub

# Packing List

Before installation, please make sure that you have received the following:

- 1 x USB-4630 Module with DIN-rail mounting kit
- 1 x Shielded USB 3.0 Cable (1.8 m)

If anything is missing or damaged, contact your distributor or sales representative immediately.

#### User Manual

For more detailed information on this product, please refer to the USB-4630User Manual on the DVD (PDF format). CD:\ Documents\Hardware Manuals\USB\USB-4630

# **Declaration of Conformity**

## FCC Class A

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause interference in which case the user is required to correct interference at his own expense.

#### CE

This product has passed the CE test for environmental specifications when shielded cables are used for external wiring. We recommend the use of shielded cables. This kind of cable is available from Advantech. Please contact your local supplier for ordering information.

# Overview

The USB-4630 is a 4-port isolated USB. It supports 4 downstream USB 3.0 SuperSpeed ports.

Each channel is equipped with an LED indicator that shows the working status.

Notes		
For more information on this and other Advantech products, please visit our websites at:		
http://www.advantech.com/contact		
This startup manual is for USB-4630.		
Part No: xxxxxxx	1st Edition	
	May 2016	

# Specifications

# Connectivity

Ports	Upstream	1 (Type-B)	
	Downstream	4 (Type-A)	
Compatibility		USB 3.0 SuperSpeed	
Transfer Speed		5 Gbps shared by all down- stream ports	
	External power	900 mA max. per port	
	USB bus power	700 mA max. shared by all ports	

#### General

Plastic (ABS + PC)
132 x 80 x 32 mm
10 ~ 30 V <sub>DC</sub>
760 mW (no load)
0 ~ 60°C (32 ~ 140°F)
-20 ~ 70°C (-4 ~ 158°F)
5 ~ 95 % RH (non-condensing)

#### Protection

Isolation Protection		2,500 V <sub>DC</sub>
ESD Protection	Contact Discharge	±4 kV (level 2)
	Air Discharge	±8 kV (level 3)

#### Notes:

(1) Due to USB 3.0 isolation requirements, when the USB 4630 is connected to a USB 2.0 host, downstream ports do not accept USB 3.0 devices.

In addition, cascading two USB-4630 is not supported.

 $(2)\;$  Refer to the following "Derating Curve" for load current using USB bus power.



## Hardware Installation

You can install the USB-4630 module in any USB port.

- Follow the steps below to install the module on your system:
  Touch the metal part on the surface of your computer to neutralize the static electricity that might be in your body.
- Plug your USB module into the selected USB port. Hold the module only by its edges. Plug the module firmly into place. Use of excessive force must be avoided; otherwise the module might get damaged.

# LED Definitions

The USB Module is equipped with an LED indicator to show the current status of the device. When you plug the USB device into the USB port, the LED indicator will blink five times and then stay lit to indicate that it is on. Please refer to the following table for detailed LED indicator status information.

LED Status	Description
ON (Blue)	Device ready for work with USB 3.0
ON (Green)	Device ready for work with USB 2.0
ON (Red)	Over-current
OFF	Device not ready to work

#### **USB** Assembly

#### Removing the Casing

You may need to remove the modules' outer casing to access the jumpers inside the module. To remove the casing, you'll have to first remove the rubber padding covering the screws, and then remove the two screws holding the casing in place, as shown below.



#### Attaching the Optional Wallmount Bracket (Part number: 1960004544)

To attach the wallmounting bracket, remove all 4 rubber pads on the rear of the module, and secure it by attaching the two screws into the holes shown below.



#### Attaching the DIN-rail Bracket

Advantech's USB DAQ modules come with a bracket that facilitates industry standard DIN-rail mounting. To attach, simply place the bracket firmly on the back, and secure it by attaching the two screws into the holes shown below.

# Attaching the Optional VESA Bracket Part number: 1960005788)

Use the VESA bracket to mount your module to VESAready appliances, such as Advantech's TPC series. To attach, remove all 4 rubber pads on the back, and secure it by attaching the two screws into the holes as shown below.

