

USH304

4-Port Isolated USB 3.0 SuperSpeed Hub

Packing List

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

- 1 x USH304 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.

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 B+B SmartWorx. Please contact your local supplier for ordering information.

Overview

The USH304 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.

Specifications

Connectivity

Ports	Upstream	1 (Type-B)
	Downstream	4 (Type-A)
Compatibility	USB 3.0 SuperSpeed	
Transfer Speed	5 Gbps shared by all downstream ports	
Load Current	External Power	900 mA max. per port
	USB Bus Power	700 mA max. shared by all ports

General

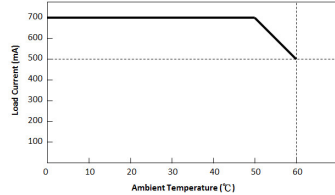
Housing	Plastic (ABS + PC)
Dimensions	132 x 80 x 32 mm
Power Input	10 ~ 30 V _{DC}
Power Consumption	760 mW (no load)
Operating Temperature	0 ~ 60°C (32 ~ 140°F)
Storage Temperature	-20 ~ 70°C (-4 ~ 158°F)
Storage Humidity	5 ~ 95 % RH (non-condensing)

Protection

Isolation Protection	2,500 V _{DC}	
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 USH304 is connected to a USB 2.0 host, downstream ports do not accept USB 3.0 devices. In addition, cascading two USH304 is not supported.
- (2) Refer to the following "Derating Curve" for load current using USB bus power.



Hardware Installation

You can install the USH304 module in any USB port.

Follow the steps below to install the module on your system:

1. Touch the metal part on the surface of your computer to neutralize the static electricity that might be in your body.
2. 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

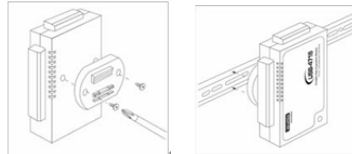
The USB module is equipped with an LED indicator to show the current status of the device. When you plug the USB device into the USB port, the LED indicator will blink five times and then stay lit to indicate that it is on. Please refer to the following table for detailed LED indicator status information.

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

Attaching the DIN-Rail Bracket

Simply place the bracket firmly on the back, and secure it by attaching the two screws into the holes shown below.



Notes

For more information on this and other Advantech B+B SmartWorx products, please visit our website at:

www.advantech-bb.com

This quick start guide is for USH304.

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