UPort[™] 200A Series Quick Installation Guide

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Technical Support Contact Information www.moxa.com/support



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P/N: 1802002004001

Overview

The UPort[™] 200A Series general-purpose USB 3.2 Gen 1 hubs expand 1 USB port to 4 or 7 ports. The hubs provide true USB 3.2 SuperSpeed 5 Gbps data transmission through each port and are USB-IF compatible products. Besides providing ESD level 4 protection from static damage and surge protection level 2 for power input, the UPort[™] 200A Series offers a power jack power input solution for general environments.

The following models comprise the UPort[™] 200A Series:

UPort[™] 204A: 4-port general-purpose USB hub, standard temperature 0 to 60°C (32 to 140°F), adapter included

Features

- SuperSpeed USB 3.2 Gen 1 for up to 5 Gbps USB transmission
- Provides level 4 ESD protection and level 2 surge protection for power input
- Rugged metal housing
- Side-mount DIN Rail and wall mountable

Package Checklist

The UPort $^{\rm M}$ 200A Series package should contain the following items. If any of these items are missing or damaged, please contact Moxa for replacement.

- UPort 200A USB hub
- USB 3.2 Gen 1 cable: CBL-USB3-BA-BLK-120, 1.2 m
- 100 to 240 VAC, 0 to 40°C (32 to 104°F) power adapter suitable for your region
- Quick installation guide (printed)
- Warranty card

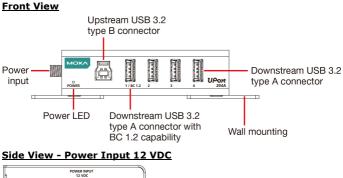
Optional Accessories (can be purchased separately)

- Standard USB cable: CBL-USB3-BA-BK-120, 1.2 m
- WK-UP200A-BAK-SI: Wall-mounting kit for the back side of the UPort 200A with 2 plates (60 x 27 x 2 mm/2.36 x 1.06 x 0.08 in) and 6 screws (M3x5mm)
- WK-UP200A-BOT-SI: Wall-mounting kit for the bottom side of the UPort 200A with 2 plates (43 x 30 x 2 mm/1.69 x 1.18 x 0.08 in) and 6 screws (M3 x 5 mm)
- DK-UP-42A: Side-mount DIN Rail (107 x 29 mm/4.21 x 1.14 in) with 4 screws (M3 x 5 mm).
- **NOTE** The operating temperature of the power adapter in the box is from 0 to 40°C (32 to 104 °F). If your application is not in this range, please use a power adapter supplied by UL Listed External Power Supply (The power output meets SELF/ES1 and LPS and rated 12 VDC, 4.5 A @ 12 VDC minimum for the UPort 207A models, 2.65 A @ 12 VDC minimum for the UPort 204A models), highest minimum temperature 60°C (140°F). If using a Class I adapter, the power cord must be connected to a socket-outlet with an earthing connection.

UPort[™] 207A: 7-port general-purpose USB hub, standard temperature 0 to 60°C (32 to 140°F), adapter included

Hardware Introduction

An example of the UPort[™] 204A front panel:





Installation Guide

Power Input Supply

The UPort 200A comes with self-power, minimum required 12 V input, 4.5 A @ 12 VDC minimum for the UPort 207A models, 2.65 A @ 12 VDC minimum for the UPort 204A models.

LED Indicators

The LED indicators on the front panel are used to display status as follows:

Туре	Color	Definition	
Power	Green	Power on	
	Off	Unit is not powered or out of operation	

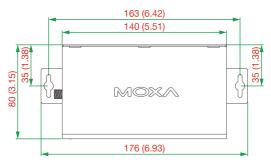
Wall Mounting

The UPort^{m} 200A Series comes with two options of wall mounting, and both have metal attachment plates to allow installation on a wall.

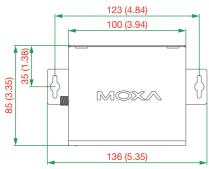
Option 1 – Bottom-mounting with WK-UP200A-BOT-SI

<u>UPort[™] 207A</u>

Unit: mm (inches)

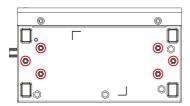


<u>UPort™ 204A</u>

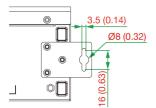


The mounting kit is 2 mm in height, and the two centers of the mounting kit on each plate is 163 mm (UPort 207A) and 123 mm (UPort 204A) apart.





First, attach the brackets at the bottom of the UPort[™] 200A with the screws, as the circles show. The recommended screw tightening torque: 4.5 kgf-cm +/- 0.5, screw type: type F, PH2. Next, mount the unit to a wall with the screws.

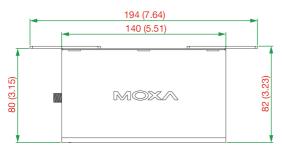


The wall screws should use the M3 type, and the length should no less than 7 mm.

Option 2 – Rear-mounting with WK-UP200A-BAK-SI

<u>UPort™ 207A</u>

Unit: mm (inches)



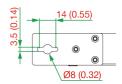
<u>UPort™ 204A</u>



First, attach the brackets at the rear of the UPort[™] 200A with the screws, as the circles show. The recommended screw tightening torque: 4.5 kgf-cm +/- 0.5, screw type: type F, PH2. Next, mount the unit to a wall with the screws.



The wall screws should use the M3 type, and the length should be no less than 7 mm.



The mounting kit is 2 mm in height, and the two centers of mounting kit on each plate is 168 mm (for UPort 207A) and 128 mm (for UPort 204A) apart.

<u>UPort™ 207A</u>

Unit: mm (inches)



<u>UPort™ 204A</u>



DIN-Rail Mounting

The UPort[™] 200A Series has a DIN-rail kit option (DK-UP-42A) to allow installation on a DIN Rail. DIN-rail attachments can be purchased separately to attach the product to a DIN Rail. The DIN-rail attachments should be oriented with the metal springs on top.

First, attach the DIN-rail attachments to the rear of the UPortTM 200A with screws, showed by the circles. The recommended screw tightening torque: 4.5 kgf-cm +/- 0.5, screw type: type F, PH2.

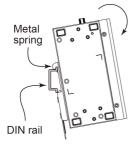


UPort[™] 204A

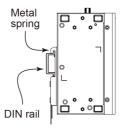


Next, mount the UPort[™] 200A onto the mounting rail.

STEP 1: Insert the upper lip of the DIN-rail kit into the mounting rail.



STEP 2: Press the UPort[™] 200A towards the mounting rail until it snaps into place.



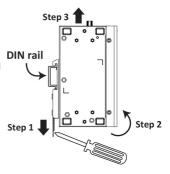
To remove the UPort[™] 200A from the DIN Rail, do the following:

STEP 1:

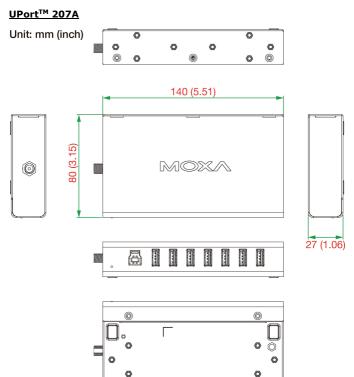
Pull down the latch on the DIN-rail kit with a screwdriver.

STEP 2 & 3:

Slightly pull the UPort $^{\rm TM}$ 200A forward and lift it up to remove it from the mounting rail.



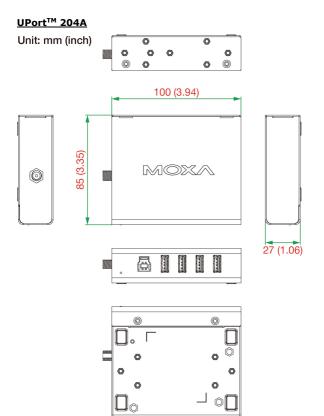
Dimensions



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Specification

USB Interface				
Compliance	USB 3.2/2.0/1.1, BC 1.2 compatible			
Upstream	1 USB Type-B port			
Downstream	UPort™ 204A: 4 USB Type-A ports			
	UPort™ 207A: 7 USB Type-A ports			
Speed	5 Gbps (SuperSpeed USB), 480 Mbps (Hi-speed			
	USB) and 12 Mbps (Full-speed USB)			
Physical Characteristics				
Housing	Metal			
Dimensions	UPort™ 204A: 85 x 27 x 100 mm (3.35 x 1.06			
	x 3.94 in)			
	UPort™ 207A: 80 x 27 x 140 mm (3.15 x 1.06			
	x 5.51 in)			
Environmental Limits				
Operating	0 to 60°C (32 to 140°F)			
Temperature				
Operating Humidity	5 to 95% RH			
	(For use in Pollution Degree 2 environments)			
Storage Temperature	-20 to 75°C (-4 to 167°F)			

Power Requirements				
Input Voltage	12 VDC (external power)			
Power Consumption	UPort™ 204A: 2650 mA @ 12 VDC			
	UPort™ 207A: 4500 mA @ 12 VDC			
Warranty				
Warranty Period	5 years			
Details	See www.moxa.com/warranty			

Compliance Notice



CE Warning

This is a Class A product. In a domestic environment, this product may cause radio interference in which case the user may be required to take appropriate measures.

Federal Communications Commission Statement

FCC - This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.



FCC Warning

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 harmful interference in which case the user will be required to correct the interference at his own expense

사용자안내문 (User Guide)

이 기기는 업무용 환경에서 사용할 목적으로 적합성평가를 받은 기기로서가정용 환경에서 사용하는 경우 전파간섭의 우려가 있습니다.

(This equipment has KC approval for use in industrial environments and could possibly interfere with household equipment.)

기 종별	사용자안내문
Type of Equipment	User Guide
A 급 기기 (업무용 방송	이 기기는 업무용 (A 급) 전자파 적합
통신기 자재)	기기로서 판매자 또는 사용자는 이
	점을 주의하시기 바라며 가정 외의
Class A Equipment (Broadcasting and	지역에서 사용하는 것을 목적으로
Communication Equipment for	합니다.
Industrial and Commercial Use)	This equipment is the EMC conformity equipment (Class A) for Industrial and Commercial Use. The seller or user should take note of this as this equipment can be used in places that exclude homes.
B 급 기기 (가정용 방송 통신	이 지기는 가정용 (B급) 전자파적합
기자재)	기기로서 주로 가정에서 사용하는
	것을 목적으로 하며,모든 지역에서
Class B Equipment (Broadcasting and	사용할 수 있습니다.
Communication Equipment for Home Use)	This equipment is the EMC conformity equipment (Class B) for Home Use and can be used mainly at homes, as well as in other areas.

FAQ

Q: Does the UPort[™] 200A require a software driver?

A: UPort[™] 200A is USB-IF compatible; it works with major operation systems and does not require an additional driver.

Q: How many USB devise cascade can the UPort 200A support?

A: Five layers. By the definition of USB-IF, there should be seven layers for USB device cascading. The host computer and the UPort 200A have each taken one layer already; therefore, five layers remain available for cascading. There are some cases the host computer design may take more than one layer; the availability of cascading layers may vary.

Q: When I plug my USB device into the UPort 200A, why cannot it be detected by the host computer or recognized as an USB 2.0 device?

- A: Interoperability issues can arise among devices made by different manufacturers. The chance of this happening is higher if your USB device is over/under SPEC design.
 - 1. Please ensure the UPort 200A is recognized by the host computer first.
 - Plug your device to different USB port on the hub to rule out USB port being damaged.
 - 3. Please check if it is a cable-related issue; change to a different cable to rule out a broken cable issue.
 - Unplug the USB device or restart the device in computer management like Windows Driver Manager.

Q: What is the output power of each port?

A: Port 1 provides 1.5 A if your USB device supports BC 1.2; otherwise, each port provides 0.9 A power.

Q: What is BC 1.2 shown in port 1? What does it do?

A: BC 1.2 AKA Battery Charging v1.2, defined by USB-IF, is designed to charge mobile devices and support up to 1.5 A if the mobile device supports CDP or DCP mode.

Q: What if I require a USB hub with a firm cable connection and higher protection level?

A: You may consider the UPort 400A Series that comes with a latching cable. The UPort 400A also comes with surge level 3 protection, providing you peace of mind in terms of reliability.