# **UPort® 404/407**

# -4 and 7-port industrial-grade USB hubs



- > Hi-Speed USB 2.0 for up to 480 Mbps USB transmission
- > USB-IF certification
- > Dual power inputs (power jack and terminal block)
- > 15 kV ESD Level 4 protection for all USB ports
- > Rugged metal housing
- > DIN-Rail and wall mountable
- > Comprehensive diagnostic LEDs
- > Choose bus power or external power (UPort 404)



# **Introduction**

The UPort® 404 and UPort® 407 are industrial-grade USB 2.0 hubs that expand 1 USB port into 4 and 7 USB ports, respectively. The hubs are designed to provide true USB 2.0 Hi-Speed 480 Mbps data transmission through each port, even for heavy-load applications. The UPort® 404/407 have received USB-IF Hi-Speed certification, which is an indication that both products are reliable, high quality USB 2.0

#### **USB-IF** Certification

The UPort® 404 and UPort® 407 USB 2.0 industrial-grade USB hubs have passed USB-IF (USB Implementers Forum) certification. USB-IF verifies a number of strict electrical requirements for the high-speed USB operation of USB hubs designed to the USB 2.0 specification.

# **ESD Level 4 Protection**

Electrostatic discharge (ESD) could be as severe as having more than one thousand volts of ESD with a high rise time (dv/dt) break through the junction layer of protective devices. In order to avoid serious

**Specifications** 

#### **USB** Interface

Compliance: USB 1.1/2.0 compliant Upstream: 1 USB port, Type B connector Downstream: UPort 404: 4 USB ports, Type A connectors UPort 407: 7 USB ports, Type A connectors Speed: 480 Mbps (Hi-Speed USB) and 12 Mbps (Full-Speed USB) Supply Current: 500 mA max. per channel

#### Physical Characteristics

Housing: Aluminum Weight: (product only) UPort 404: 850 g (1.87 lb) UPort 407: 950 g (2.1 lb) Dimensions: UPort 404: 80 x 35 x 130 mm (3.15 x 1.38 x 5.12 in) UPort 407: 100 x 35 x 192 mm (3.94 x 1.38 x 7.55 in) hubs.In addition, the hubs are fully compliant with the USB Plug & Play spec and provide a full 500 mA of power per port, ensuring that your USB devices will function properly. The UPort® 404/407 hubs' support of 12-40 VDC power makes them ideal for mobile applications. Externally powered USB hubs are the only way to guarantee the broadest compatibility with USB devices.

This means that the UPort® 404/407 support Hi-Speed USB 2.0 for up to 480 Mbps USB transmission, which is fully compliant with interoperability requirements, is enough power for devices to function, and provides for a successful transition back to high-speed operation from the suspend state.

damage, Moxa's UPortB 404/407 USB hubs provide ESD level 4 (contact 8 kV, air 15 kV) protection, which increases the quality and value of the user's end-product.

### **Environmental Limits**

Operating Temperature: Standard Models: 0 to 60°C (32 to 140°F) Wide Temperature Models: -40 to 85°C (-40 to 185°F) Storage Temperature: Standard Models: -20 to 75°C (-4 to 167°F) Wide Temperature Models: -40 to 85°C (-40 to 185°F) Ambient Relative Humidity: 5 to 95% (non-condensing) Altitude: Up to 2000 m Note: Please contact Moxa if you require products guaranteed to function properly at higher altitudes. Standards and Certifications Safety: UL 508, LVD EMC: CE, FCC

EMI: EN 61000-3-2, EN 61000-3-3, EN 61000-6-2, EN 61000-6-4, FCC Part 15 Subpart B Class A EMS: EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN 61000-4-8, EN 61000-4-11 Green Product: RoHS, CRoHS, WEEE

# Power Requirements

 Power Consumption:

 UPort 404: 1300 mA @ 12 VDC, 690 mA @ 24 VDC,

 470 mA @ 36 VDC

 UPort 407: 2300 mA @ 12 VDC, 1130 mA @ 24 VDC,

 790 mA @ 36 VDC

 Input Voltage: 12 to 40 VDC external power

#### MTBF (mean time between failures) Time: UPort 404: 1,490,340 hrs UPort 407: 1,111,361 hrs Database: Telcordia (Bellcore). GB

Warranty

Warranty Period: 5 years Details: See www.moxa.com/warranty



# **Crdering Information**

#### **Available Models**

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UPort 404: 4-port industrial USB hub, adapter included, 0 to 60°C operating temperature UPort 407: 7-port industrial USB hub, adapter included, 0 to 60°C operating temperature UPort 404-T: 4-port industrial USB hub, -40 to 85°C operating temperature UPort 407-T: 7-port industrial USB hub, -40 to 85°C operating temperature Optional Accessories (can be purchased separately) Wall Mount Kit: Metal plates and screws

Wall Mount Kit: Metal plates and screws DK35A: Mounting Kit for 35-mm DIN-Rail DIN-Rail Kit: Din-Rail kit for the UPort 400 Series PWR-12300-WP-S1: 100-240 VAC to 12 VDC @ 3 A power adapter (Note: Power cords not included with power adapter) PWR-Plug-USJP-01: US /JP plug, 2-pin power cord PWR-Plug-UK-01: UK plug, 2-pin power cord PWR-Plug-EU-01: EU plug, 2-pin power cord PWR-Plug-AU-01: SAA plug, 2-pin power cord PWR-Plug-CN-01: CN plug, 2-pin power cord

#### Package Checklist

- 1 UPort 404 or UPort 407 industrial-grade USB hub
- USB-IF certified cable
- Power adapter (UPort 404/407 only)
- Quick installation guide (printed)
- Warranty card