

# Four & Seven Port Industrial USB Hubs

## UHR204 & UHR304, UHR207 & UHR307

B+B SMARTWORX

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### PRODUCT FEATURES

- 4 kV Isolation (UHR304, UHR307)
- High Retention USB Port Connectors
- Rugged Metal Case
- Wide Operating Temperature (-40 to 80°C)
- USB 2.0 – Refer to Specification Table
- Heavy Industrial EMC Specifications

Models UHR204, UHR304, UHR207 and UHR307 are industrial-grade four and seven-port USB hubs. Models UHR304 and UHR307 include 4 kV isolation.

These hubs are designed and tested to meet heavy industrial EMC specifications allowing operation where standard office-grade hubs fail – such as near variable frequency drives, motor control centers, welding and other large electrical loads.

High retention USB connectors hold standard USB cables tight and are perfect for high vibration applications – requiring up to 3.2 lbs-force to disconnect them.

4 kV isolation (UHR304, UHR307) between the upstream and downstream USB ports protects expensive equipment from dangerous ground loops and helps ensure data integrity.

These USB hubs are powered from an external 10 to 30 VDC source. Two power connectors are provided – terminal block or threaded/lockable barrel plug. (Refer to ordering information for power supply recommendation.) Each downstream port provides up to 500 mA of power to connected USB devices.

### ORDERING INFORMATION

| MODEL NUMBER | DOWNSTREAM PORTS | UPSTREAM PORTS | ISOLATION? |
|--------------|------------------|----------------|------------|
| UHR204       | 4                | 1              | -          |
| UHR304       | 4                | 1              | 4kV        |
| UHR207       | 7                | 1              | -          |
| UHR307       | 7                | 1              | 4kV        |

### ACCESSORIES

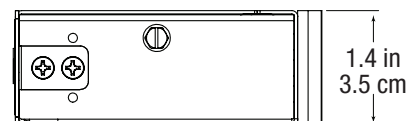
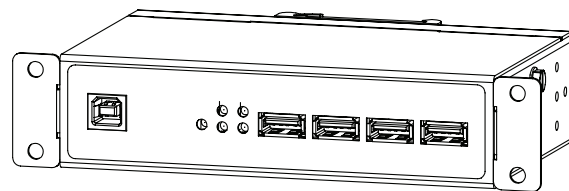
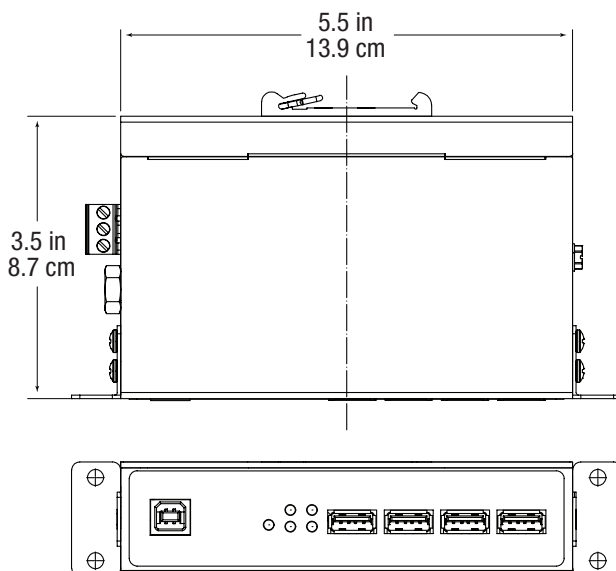
**PS12VLB-INT-MED** - Power Supply 12VDC, Medical Grade - US, EU, UK Blades

**MDR-20-24** - DIN Rail Mount Power Supply 24VDC, 1.0A

**USBAMB-3F** - Type A Male to Type B Male, 3 ft. (0.9 m) (Grey)

**USBAMB-6F** - Type A Male to Type B Male, 6 ft. (1.8 m) (Grey)

### MECHANICAL DIAGRAM - UHR204, UHR304



All product specifications are subject to change without notice.

UHRx04 & UHRc07\_1217ds

# Four & Seven Port Industrial USB Hubs

## UHR204 & UHR304, UHR207 & UHR307



### SPECIFICATIONS

| USB INTERFACE    |  |
|------------------|--|
| Standards        | USB 1.1 & 2.0  |
| Upstream Port    | (1) Type B Female – High Retention   |
| Downstream Ports | (7) Type A Female – High Retention (UHR207, UHR307)<br>(4) Type A Female – High Retention (UHR204, UHR304) |
| Speed            | 12 Mbps (UHR304, UHR307)<br>480 Mbps (UHR204, UHR207)<br>Multi-transaction Translator, 1 per port          |
| Isolation        | 4 kV – Upstream to Downstream (UHR304, UHR307)   |
| Surge Protection | +/- 0.5 kV DC Ports, +/- 1 kV Signal Ports   |
| ESD              | 15 kV Air, 8 kV Contact  |
| High Retention   | USB ports require 15 N (3.2 lbs-force) withdrawal force using standard USB cable                           |
| POWER            |  |
| Source           | External - required for UHR304, UHR307, UHR207<br>Bus Powering - optional for UHR204                       |
| Power Connector  | Terminal Block or Threaded Barrel Jack   |
| Input Voltage    | 10 to 30 VDC   |
| Power            | 16 Watts (UHR304, UHR204)<br>30 Watts (UHR307, UHR207)   |
| Power TB         | 3 Position, 5.08 mm Spacing, 28-12 AWG, Solid Wire   |
| Barrel Jack      | Locking / Threaded, 5.5 mm, Center Positive  |
| Downstream Power | 500 mA per port  |
| INDICATORS       |  |
| Power            | Green LED  |
| Port Ready       | Green LED  |

| MECHANICAL                      |  |
|---------------------------------|--|
| Dimensions                      | 20.3x12.1x3.49 cm (8 x 4.75 x 1.38 in)   |
| Enclosure                       | IP 30, Metal   |
| Weight                          | 1.4 lbs – 0.64 kilograms   |
| Mean Time Before Failure (MTBF) | UHR304 - 190999 Hours<br>UHR204 - 211773 Hours<br>UHR307 - 143330 Hours<br>UHR207 - 151173 Hours   |
| MTBF Calc. Method               | MIL 217F Parts Count Reliability   |
| ENVIRONMENTAL                   |  |
| Operating Temperature           | -40 to 80 °C<br>0 to 40 °C when using wall plug power supply   |
| Storage Temperature             | -40 to 85 °C   |
| Operating Humidity              | 0 to 95% Non-condensing  |
| APPROVALS/CERTIFICATIONS        |  |
| Emissions                       | FCC Class B, CE<br>EN55022 + AC: Information Technology Equipment - Radio Disturbance Characteristics - Limits & Methods of Measurements<br>2004/108/EU - Electromagnetic Compatibility Directive<br>2011/65/EU - Reduction of Hazardous Substances Directive<br>EN61000-6-2 (Heavy Industrial)<br>EN61000-4-2 (ESD) +/- 8kV contact, +/-15 kV air<br>EN61000-4-3 (RI) 10 V/m, 80-1000 Mhz; 3 V/m 1.3 to 2.7 GHz<br>EN61000-4-4 (EFT Burst) +/- 2kV DC ports; +/- 1 kV signal ports<br>EN61000-4-5 (Surge) +/- 2 kV com; +/- 1 kV differential<br>EN61000-4-6 (CI) 10 Vrms, 0.15 to 80 MHz<br>EN61000-4-8 (Magnetic) 10 A/m, 50 Hz & 60 Hz |
| Other                           | IEC60068-2-27 (Shock)<br>IEC60068-2-6 (Vibration)<br>IEC60068-2-32 (Drop)  |
| UL                              | Class 1 Division 2 Listed File: E245458  |

### MECHANICAL DIAGRAM - UHR207, UHR307

