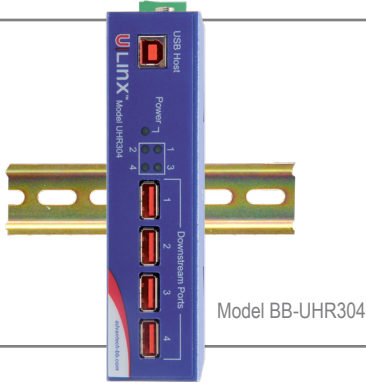


# Four & Seven Port Industrial USB Hubs

Models BB-UHR204, BB-UHR304, BB-UHR207, BB-UHR307



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## PRODUCT FEATURES

- Expands one USB port to 4 or 7 USB ports (USB 2.0, see specification table)
- 4 kV isolation (Models BB-UHR304, BB-UHR307)
- 15 kV air, 8kV contact ESD protection
- Data rates: 12 Mbps at full speed or 480 Mbps at high speed (model specific)
- Wide operating temperature: -40 to +80 °C
- Rugged metal case - desk, DIN rail or panel mount (brackets included)
- FCC, CE, UL, EMC heavy industrial
- High retention USB port connectors
- Includes USB cable
- External power source required (not included, sold separately)

Models BB-UHR204, BB-UHR304, BB-UHR207 and BB-UHR307 are industrial-grade four and seven-port USB hubs. Models BB-UHR304 and BB-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.

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

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.

These USB hubs are powered from an external 10 to 30 VDC source (not included, sold separately). Two power connectors are provided – terminal block or threaded/lockable barrel plug. Each downstream port provides up to 500 mA of power to connected USB devices. Model BB-UHR204 can also be bus-powered. (Refer to ordering information for power supply requirements and recommendation.)

## ORDERING INFORMATION

| MODEL NUMBER      | DOWNSTREAM PORTS | UPSTREAM PORTS | SPEED                | ISOLATION? |
|-------------------|------------------|----------------|----------------------|------------|
| <b>BB-UHR204*</b> | 4                | 1              | 480 Mbps, High speed | -          |
| <b>BB-UHR304</b>  | 4                | 1              | 12 Mbps, Full speed  | 4kV        |
| <b>BB-UHR207</b>  | 7                | 1              | 480 Mbps, High speed | -          |
| <b>BB-UHR307</b>  | 7                | 1              | 12 Mbps, Full speed  | 4kV        |

\* Bus powering option

## ACCESSORIES - sold separately

**BB-PS12VLB-INT-MED** - 12VDC Power Supply, Medical Grade; US, EU, UK Blades (Class 2)

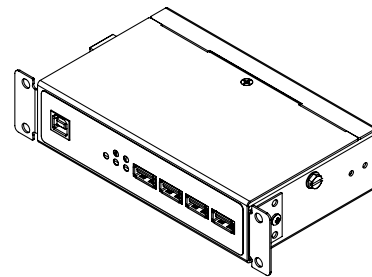
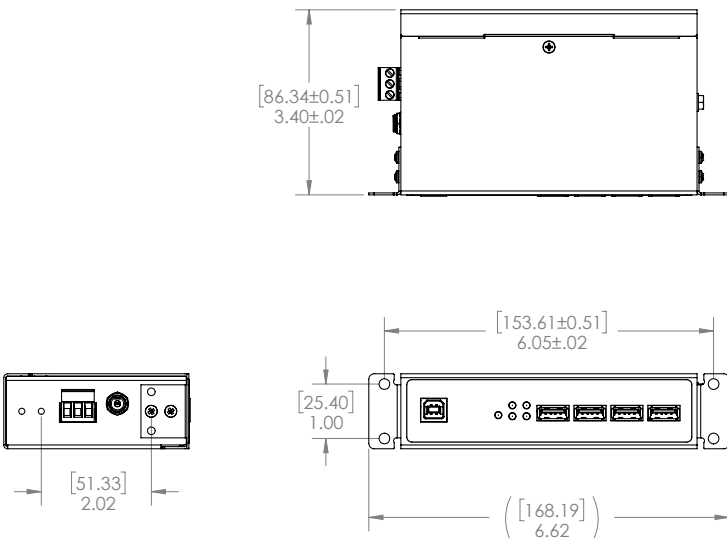
**BB-MDR-20-24** - 24VDC Power Supply, 1.0A, DIN Rail Mount (Class 2)

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

**BB-USBAMB-6F** - Type A Male to Type B Male, Gray, 1.8 m (6 ft.) one (included w/product)

## MECHANICAL DIAGRAM - BB-UHR204, BB-UHR304

Units = inches [mm]



All product specifications are subject to change without notice.  
BB-UHRx04 & BB-UHRx07\_2719ds



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# Four & Seven Port Industrial USB Hubs

Models BB-UHR204, BB-UHR304, BB-UHR207, BB-UHR307

Model BB-UHR207



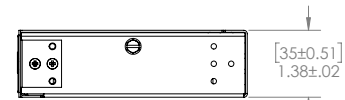
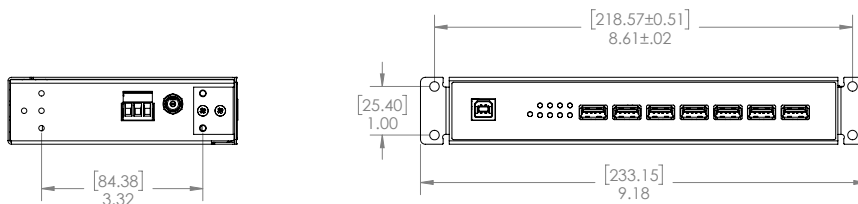
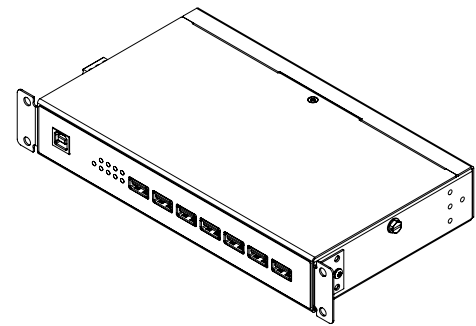
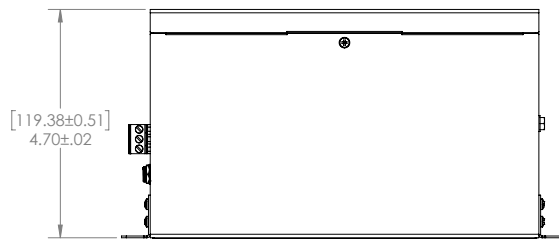
## SPECIFICATIONS

| USB INTERFACE    |   |
|------------------|---|
| Standards        | USB 1.1 & 2.0   |
| Upstream Port    | (1) Type B Female – High Retention  |
| Downstream Ports | (7) Type A Female – High Retention (BB-UHR207, BB-UHR307)<br>(4) Type A Female – High Retention (BB-UHR204, BB-UHR304)                            |
| Speed            | 480 Mbps, High speed (BB-UHR204, BB-UHR207)<br>12 Mbps, Full speed (BB-UHR304, BB-UHR307)<br>Multi-transaction Translator, 1 per port             |
| Isolation        | 4 kV – Upstream to Downstream (BB-UHR304, BB-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 BB-UHR304, BB-UHR307, BB-UHR207<br>(Power supply not included, sold separately.)<br>Bus Powering - optional for BB-UHR204 |
| Power Connector  | Terminal Block or Threaded Barrel Jack  |
| Input Voltage    | 10 to 30 VDC  |
| Power            | 16 Watts (BB-UHR304, BB-UHR204)<br>30 Watts (BB-UHR307, BB-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 (enclosure with brackets) | BB-UHRx04: 16.82 x 8.63 x 3.50 cm (6.62 x 3.40 x 1.38 in)<br>BB-UHRx07: 23.32 x 11.94 x 3.50 cm (9.18 x 4.70 x 1.38 in)  |
| Enclosure                            | IP30, metal  |
| Mounting                             | Desk, DIN rail or panel mount  |
| Weight                               | 0.64 kg (1.4 lbs)  |
| Meantime Before Failure (MTBF)       | BB-UHR304 - 190999 hours<br>BB-UHR204 - 211773 hours<br>BB-UHR307 - 143330 hours<br>BB-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, DIRECTIVES, STANDARDS     |  |
| Approvals                            | FCC, Class B, CE   |
| Directives (EU)                      | 2014/30/EU - Electromagnetic Compatibility Directive<br>2011/65/EU - Reduction of Hazardous Substances Directive (RoHS)<br>2012/19/EU - Waste Electrical and Electronic Equipment (WEEE)   |
| Standards (EMC)                      | EN 55032: Class B - Electromagnetic Compatibility of Multimedia Equipment - Emission Requirements<br>EN 55024 - Information Technology Equipment - Immunity Characteristics - Limits and Methods of Measurement<br>EN 61000-6-3+A1 (Class B) - Generic Emission Standard for Residential, Commercial and Light Industrial Environments<br>EN 61000-6-2 - Generic Immunity Standard for (Heavy) Industrial Environments |
| UL                                   | Class 1/Division 2 Listed.   |

## MECHANICAL DIAGRAM - BB-UHR207, BB-UHR307

Units = inches [mm]



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