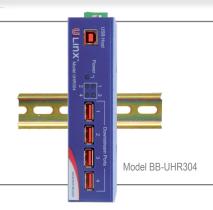
# Four & Seven Port Industrial USB Hubs

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



www.advantech.com



#### **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.

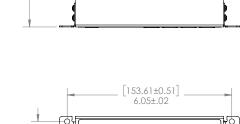
High retention USB connectors hold standard USB cables tight and are perfect for high vibration applications – requiring up to 3.2 lbs force to disconnect them.

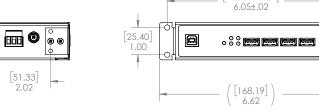
These USB hubs are powered from an external 10 to 30 VDC source (not included, sold separately). Two power connectors are provided – terminal block or threaded/lockable barrel plug. Each downstream port provides up to 500 mA of power to connected USB devices. Model BB-UHR204 can also be bus-powered.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

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

[86.34±0.51]

Units = inches [mm]





#### ORDERING INFORMATION

ORDERING INFORMATION					
MODEL NUMBER	DOWNSTREAM PORTS	UPSTREAM PORTS	SPEED	ISOLATION?	
BB-UHR204*	4	1	480 Mbps, High speed	-	
BB-UHR304	4	1	12 Mbps, Full speed	4kV	
BB-UHR207	7	1	480 Mbps, High speed	-	
BB-UHR307	7	1	12 Mbps, Full speed	4kV	

<sup>\*</sup> Bus powering option

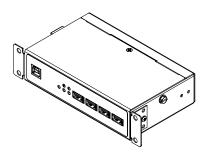
#### **ACCESSORIES - sold separately**

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

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





All product specifications are subject to change without notice. BB-UHRx04\_BB-UHRx07\_4419ds



# 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) (4) Type A Female – High Retention (BB-UHR204, BB-UHR304)			
Speed	480 Mbps, High speed (BB-UHR204, BB-UHR207) 12 Mbps, Full speed (BB-UHR304, BB-UHR307) 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 (Power supply not included, sold separately.) 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) 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			

MECHANIC	AL			
Dimensions (enclosure		BB-UHRx04: 16.82 x 8.63 x 3.50 cm (6.62 x 3.40 x 1.38 in)		
with brackets	s)	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 BB-UHR204 - 211773 hours BB-UHR307 - 143330 hours BB-UHR207 - 151173 hours		
MTBF Calc. Method		MIL 217F Parts Count Reliability		
ENVIRONMENTAL				
Operating Temperature		-40 to +80 °C (0 to +40 °C when using wall plug power supply)		
Storage Temperature		-40 to 85 °C		
Operating Humidity		0 to 95% Non-condensing		
APPROVAL	APPROVALS, DIRECTIVES, STANDARDS			
Approvals	FCC, Class B, CE, KCC (Model#s BB-UHR207, BB-UHR307)			
Directives (EU)	2014/30/EU - Electromagnetic Compatibility Directive 2015/863/EU - Reduction of Hazardous Substances Directive (RoHS-3) 2012/19/EU - Waste Electrical and Electronic Equipment (WEEE)			
Standards (EMC)	EN 55032: Class B - Electromagnetic Compatibility of Multimedia Equipment - Emission Requirements EN 55024 - Information Technology Equipment - Immunity Characteristics - Limits and Methods of Measurement EN 61000-6-3+A1 (Class B) - Generic Emission Standard for Residential, Commercial and Light Industrial Environments 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]

