

# Single Port, Compact USB Isolator

## Model BB-UH401-2KV

ADVANTECH

www.advantech.com



### PRODUCT FEATURES

- 4kV Isolation Protection for PCs, Laptops, Equipment
- 15 kV ESD Protection
- Full (12 Mbps) USB Speed
- Wide Operating Temperature: -40 to +80 °C
- Ultra-Compact Size with Quick Inline Installation
- High Retention USB Connector
- USB Bus Powered
- USB Cable Included - 0.9 m (3 ft) length

At just 4.32 x 5.08 x 2.03 cm (1.7 x 2.0 x 0.8 in), this little isolator packs a powerful punch against electrical noise, surges and spikes with 4kV isolation. Protect expensive PCs and equipment from damaging electrical storms, power surges and other high EMI/RFI disturbances. The isolation barrier also eliminates ground loops which are disruptive in measurement applications.

As a general note, always select a model compatible with your USB peripheral devices. Use a full speed isolator like BB-UH401-2KV with full-speed USB devices. Data rate is preconfigured at the factory.

### ADDITIONAL DETAILS:

- BB-UH401-2KV is USB bus-powered and provides up to 100mA of current to attached downstream devices when they are attached to a full power (500 mA) USB host port.

- One USB cable (0.9m / 3ft) is included with the isolator. An additional cable may be required to connect the downstream device to the isolator.

- If the full 500 mA is required to power downstream devices, select Advantech isolator model BB-UHR401 or BB-UHR402.

- If low-speed (1.5 Mbps) isolation is needed, consider Advantech isolated USB 3.0 hub, model# BB-UHR401.

- If high-speed (480 Mbps) isolation is needed, consider Advantech isolated USB 3.0 hub model# BB-USH304.

### ORDERING INFORMATION

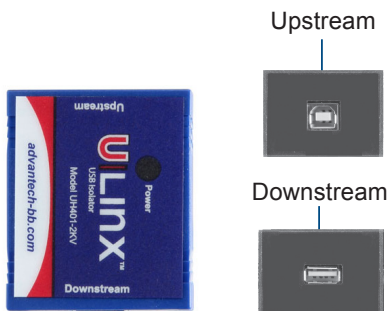
MODEL NUMBER *	USB SPEED	ISOLATION
BB-UH401-2KV	Full (12 Mbps)	2 kV

\* Isolator includes: (1) one USB cable, Type A male/Type B male, 0.9 m (3 ft), Model# BB-USBAMB-3F

### ACCESSORIES - sold separately

BB-USBAMB-3F - USB Cable, 0.9 m (3 ft), Type A Male/Type B Male (Grey)  
(one included)

BB-USBAMB-6F - USB Cable, 1.8 m (6 ft), Type A Male/Type B Male (Grey)



All product specifications are subject to change without notice.  
BB-UH401-2KV\_2320ds

ADVANTECH

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### SPECIFICATIONS

TECHNOLOGY	
Standards	USB 1.1 12 Mbps Note: Device is transparent to the operating system, does not require software drivers, and will not be enumerated in device manager.
INTERFACE	
USB Ports	High retention USB Type B (upstream), High retention USB Type A (downstream), Minimum withdrawal force of 15 Newtons (~3.4 lbs force)
LED Indicators	Power for USB bus
POWER	
Input Voltage	Standard USB bus power (5 VDC)
Downstream Power Provided	Up to 100mA with full-power upstream connection
Isolation	2KV
ENVIRONMENTAL	
Operating Temperature	-40 to +80 °C (-40 to +176 °F)

MEANTIME BETWEEN FAILURES (MTBF)	
MTBF	1049851 hours
MTBF Calculation	MIL 217F Parts Count Reliability Prediction
MECHANICAL	
Enclosure	IP30 plastic case
Dimensions	4.32 x 5.08 x 2.03 cm (1.7 x 2.0 x 0.8 in)
APPROVALS, DIRECTIVES, STANDARDS	
FCC Class A, CISPR 32, CE	
CE – Directives	2014/30/EU – Electromagnetic Compatibility Directive 2011/65/EU amended by (EU) 2015/863 Reduction of Hazardous Substances Directive (RoHS) 2012/19/EU – Waste Electrical and Electronic Equipment Directive (WEEE)
CE – Standards	<b>EMC:</b> EN 55032 Class A - Electromagnetic compatibility of multimedia equipment – Emission requirements EN 55024 - Information Technology Equipment – Immunity Characteristics – Limits and methods of measurement

### MECHANICAL DIAGRAM

