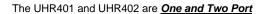
UHR401 & UHR402

One and Two Port Ruggedized USB Isolators

- √ 4 kV Isolation
- ✓ High Retention USB Connectors
- ✓ ESD Protection 15 kV Air
- ✓ Heavy Duty Case Panel Mount with DIN Rail Adapters
- ✓ USB 2.0 Full Speed
- ✓ One and Two Port Version



Ruggedized Isolators. They are designed and tested to meet heavy industrial EMC standards. 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. They have 4 kV Isolation between the upstream and downstream USB ports to protect expensive equipment from dangerous ground loops and to help ensure data integrity. They are also suitable for integration into medical applications requiring 60601-1 certification.

The Heavy Industrial EMC specifications allow these isolators to operate in unfriendly electrical environments – such as near variable frequency drives, motor control centers, welding, and other large electrical loads.

They are powered from an external 10 to 30 VDC power supply unit. The product comes with an international power supply that has US, EU, and UK blades.

The downstream port(s) provides up to 500 mA of power to connected USB devices.

Remember B&B Electronics when it comes to USB applications in harsh electrical environments.



Specifications

	USB Interface		
Standards	USB 1.1 & 2.0 (12 Mbps)		
Upstream Port	(1) Type B Female – High Retention		
Downstream Port	(1 or 2) Type A Female - High Retention		
Speed	12 Mbps		
	Multi-transaction Translator, 1 per port		
laciation	4 kV Unotroom to Downstroom		

Isolation 4 kV – Upstream to Downstream

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

Power Connector Threaded barrel jack
Input Voltage 10 to 30 VDC

PSU Input:110 – 240 VAC, 50 / 60 Hz
US, EU, UK Blades Included

Output: 12 VDC

Barrel Jack Barrel Jack, Center Positive
Power UHR401 – 4 Watts (External Source)

UHR402 – 7 Watts (External Source) Locking / Threaded, Center Positive

Downstream Power 500 mA per port

Power Green LED Port Ready Green LED

 Mechanical

 Dimensions
 3.1 x 2.1 x 1.1 in (7.9 x 5.4 x 2.7) cm)

 Enclosure
 IP 30, Plastic

 Weight
 0.15 lbs (80 g)

 MTBF UHR401
 375842 Hours

 MTBF UHR402
 353807 Hours

MTBF Calc. Method MIL 217F Parts Count Reliability

Environmental

Operating Temperature 0 to 50° Storage Temperature -40 to 85°C

Operating Humidity 0 to 95% Non-condensing

Ordering Information

UHR401 1 Port Rugged USB Isolator
UHR402 2 Port Rugged USB Isolator

PSPT-LB Stripped and Tinned Power connector

for use with industrial power supply.

Locking Barrel Connector.

Sold Separately.

DRAD35 DIN Rail Adapter - Sold Separately



Approvals / Certifications			
Emissions	FCC Class B, CISPR Class B (EN55022)		
CE	EN61000-6-2:2005	(Heavy Industrial)	
	EN61000-4-2:2008	(ESD)	+/- 8kV contact, +/-15 kV air
	EN61000-4-3:2006	(RI)	10 V/m, 80-1000 Mhz; 3 V/m 1.3 to 2.7 GHz
	EN61000-4-4:2004	(EFT Burst)	+/- 2kV DC ports; +/- 1 kV signal ports
	EN61000-4-5:2005	(Surge)	+/- 2 kV com; +/- 1 kV differential
	EN61000-4-6:2008	(CI)	10 Vrms, 0.15 to 80 MHz
	EN61000-4-8:2001	(Magnetic)	10 A/m, 50 Hz & 60 Hz
Other	IEC60068-2-27	(Shock)	50G Peak, 11 ms, 3 axes
	IEC60068-2-6	(Vibration)	140-500 Hz, 4G, 3 axes
	IEC60068-2-32	(Drop)	10 total drops from sides, corner, edges

