# **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

#### The UHR401 and UHR402 are One and Two Port

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 3.4 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.

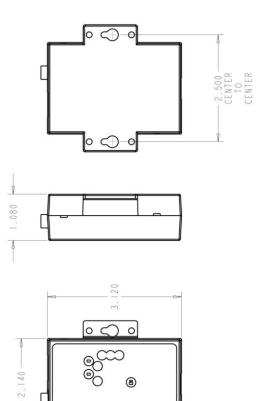


## Specifications USB Interface

	USB Interface				
Standards Upstream Port Downstream Port Speed	USB 1.1 & 2.0 (12 Mbps) (1) Type B Female – High Retention (1 or 2) Type A Female – High Retention 12 Mbps Multi-transaction Translator, 1 per port				
Isolation ESD High Retention	4 kV – Upstream to Downstream 15 kV Air, 8 kV Contact USB Ports require 15 N (3.4 lbs-force)				
	withdrawal force using standard USB Cable				
Power					
Source Power Connector Input Voltage PSU	ver Connector Threaded barrel jack ut Voltage 10 to 30 VDC J Input :110 – 240 VAC, 50 / 60 Hz US, EU, UK Blades Included				
Barrel Jack Power	Output: 12 VDC Barrel Jack, Center Positive UHR401 – 4 Watts (External Source) UHR402 – 7 Watts (External Source) Locking / Threaded, Center Positive				
Downstream Power					
Indicators					
Power Green LED   Port Ready Green LED					
Mechanical					
Dimensions Enclosure Weight MTBF UHR401 MTBF UHR402 MTBF Calc. Method	······································				
Environmental					
Operating Temperature Storage Temperature Operating Humidity	re -40 to 85°C 0 to 95% Non-condensing				
Ordering Information					
UHR401 UHR402 PSPT-LB	1 Port Rugged USB Isolator 2 Port Rugged USB Isolator 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	



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