USB Galvanic Isolator, Up To 6KV, Electrical Noise Isolator, IP40, DIN Rail Mount, Isolated Power Filter, USB 2.0/1.1, 5V/250mA, Plug-and-Play, TAA

Product ID: U1-USB-ISOLATOR



Safeguard sensitive computing equipment and USB devices from harmful voltage spikes, ground loops, and electrical interference with this USB Galvanic Isolator.

Protect mission-critical devices from potential electrical hazards with 6,000V isolation for up to 1 minute. The voltage isolator is engineered to provide galvanic isolation even in harsh environments, with an operating temperature range of -22 to 167F (-30 to 75C), IP40 housing, and Level-4 ESD protection (15kV air, 8kV contact).

With its in-line design, the electric filter enables straightforward plug-and-play installation with no additional setup or software configuration. Connect the isolator between the USB device and the host computer for immediate protection. The isolator is compatible with USB 2.0 (12Mbps) and USB 1.1 devices and supports up to 5V 250mA. For devices with higher power needs, it can provide up to 5V 500mA using an external power adapter (not included).

Using this electrical noise isolator helps ensure stable data transmission and extended device lifespan, minimizing the risk of performance drops, downtime, or costly repairs on mission-critical devices. Using a galvanic isolator is essential to ensure safe and reliable connectivity in various critical applications such as industrial automation, test labs, and telecommunications.

The compact footprint (3.5x2.2x0.9inches / 89x55x24mm) makes the TAA-compliant USB isolator ideal for installations with space constraints. It can be mounted on a DIN rail or used as a stand-alone device, offering flexible installation options.

Additionally, the small housing features IP40-rated protection and meets certifications such as CE/LVD (2014/35/EU) and IEC/EN 62368-1, ensuring that it complies with electrical regulations for safe and reliable operation.

Certifications, Reports and Compatibility





Applications

Features

• USB ISOLATOR: Protect USB devices and peripherals from ground loops and voltage spikes up to 6,000V with this galvanic isolator; Compact plug-and-play in-line isolator supports up to USB 2.0 (12Mbps) devices and 5V/250mA; DIN rail mountable; TAA-compliant

• PROTECT CRITICAL EQUIPMENT: Protect the host computer & connected device in automation, testing labs, & manufacturing; Suitable for mission-critical devices that need isolated protection from voltage fluctuations, electrical noise, & interference

• DURABLE CONSTRUCTION: Enhanced durability, wear protection, & flame retardancy with UL rated PC-ABS housing; Rated IP40 for dust/water resistance; Level-4 ESD protection (15kV air, 8kV contact); Extended temp range -22 to 167F (-30 to 75C)

• SPECIFICATIONS: 6000V DC isolation up to 1 min; 5V 250mA or 5V 500mA (optional power supply); 3ft (0.9m) USB-B to USB-A cable; USB 1.1 (1.5Mbps) & 2.0 (12Mbps); Type M barrel plug; CE/LVD (2014/35/EU) & IEC/EN 62368-1 compliant; ABS & PC 94V-0 housing

• THE IT PRO'S CHOICE: Designed and built for IT Professionals, this USB galvanic isolator is backed for two years, including free lifetime 24/5 multi-lingual technical assistance

Performance

Warranty	2 Years
Total USB Power Output	5V
Maximum Data Transfer Rate	12Mbps
Type and Rate	USB 1.1 - 1.5 Mbit/s
	USB 2.0 - 12 Mbit/s
ESD Protection	+/-8kV (Contact)
	+/-15kV (Air)
Isolation	6KV

Connector(s)		
	Connector A	1 - USB 2.0 Type-A
	Connector B	1 - USB 2.0 Type-B
	External Ports	1 - Barrel Power Connector (Size M, OD:5.50, ID: 2.10)
Indicators		
	LED Indicators	1 - Linked LED: , Solid Blue: Indicates there's a USB Device connected to the Isolated USB Device Port , Off: No USB Device connected on the Isolated USB , , Aux Power LED: , Solid Green: External power is being supplied , Off: No external power is being supplied
Power		
	Power Source	Bus Powered
	Output Voltage	5V DC
	Plug Type	M
Environmental		
	Operating Temperature	-22 to 167F (-30 to 75C)
	Storage Temperature	-40 to +185F (-40 to +85C)
	Humidity	0 to 95% (non-condensing)
Physical Characteristics		
	Color	Black
	Product Length	2.2 in [5.5 cm]
	Product Width	3.5 in [8.9 cm]
	Product Height	0.9 in [2.4 cm]
	Weight of Product	2.6 oz [72.3 g]
Packaging Information		
	Package Length	2.0 in [5.2 cm]
	Package Width	4.3 in [11.0 cm]
	Package Height	2.5 in [6.3 cm]

	Shipping (Package) Weight	4.6 oz [130.0 g]

What's in the Box

Included in Package	1 - USB Isolator
	1 - 3ft (0.9m) USB-B to USB-A Cable
	1 - Adhesive Strip
	1 - DIN Rail Mounting Kit

Product appearance and specifications are subject to change without notice.