Product sheet: USBISO-AA
Date: May 2013 Rev: 1.0

USB isolator and data line protection.

The USBISO-AA is an isolator and transient protection device for USB 2.0.
It consists of an isolated DC-DC converter for the power, an isolation barrier for the USB signal lines, and a set of transient protection diodes that provide enhanced ESD protection.

It's intended to be used in industrial environments where the host computer needs to be isolated and protected from external surges and electrical interferance.

The isolator is equipped with USB-A type connectors and transient protection diodes for both the host and device side.

Since it's strictly hardware, there is no requirement for software drivers - hence no compatibility issues with specific computers or operating systems.

Full speed isolator

The isolator is a full speed only device, which means that low speed devices can not be used at all, full speed devices works normal, and high speed devices can be used, but the isolator will reduce them to working at full speed only.

Compatibility

USB 1.0 (Low Speed, 1.5 Mbit/sec)	**No**
USB 1.1 (Full Speed, 12 Mbit/sec)	**Yes**
USB 2.0 (High Speed, 480 Mbit/sec)	***Yes**

*reduced to full speed (12 Mbit/sec).

The power supply

Power from the USB host port supplies an isolated DC-DC converter that feeds the external USB device.
It is capable of supplying 200mA, but since the host is delivering the power, the use of USB hubs is not recommended because of their voltage drops and current restrictions.

- **USB 2.0 Full Speed device**
- **1,000 volt DC isolation**
- **IEC 61000-4-2 Level 4 ESD Protection**



Connections

In: USB-A male
Out: USB-A female

Hardware details

- Speed : USB 2.0 full speed
- Isolation voltage : 1,000 volt DC / 1 minute
- Power : Powered from the PCs USB port
- Power out : 200mA max
- Visual indicators (LEDs) : 1 (Power)
- Operating temperature : 0 to 70°C

Mechanical details

- Height: 14mm
- Width: 23mm
- Length: 66mm
- Weight: 20g

Commercial details

- Part no: USBISO-AA
- **IDS Order code: 25480**