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Product sheet: USBISO-DT15 Date: September 2015 Rev: 1.0

USB isolator and data line protection.

The USBISO-DT15 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 provides 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 interference.

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

Since it's strictly hardware, there are no need for drivers, hence no restrictions for which computers or operative systems used.

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.

Low Speed (1.5 Mbit / sec) – can not work. Full Speed (12Mbit / sec) – works normal. High Speed (480Mbit/sec) – works, but reduced to full speed.

The power supply

Power from the USB host port supplies an isolated DC-DC converter that feeds the external USB device.

It's capable of supplying 200mA, but since the host are delivering the power, it's recommended not to use hubs before the isolator, because of their voltage drops and current restrictions.

- USB 2.0 Full Speed device
- 2.500 Vrms isolation (60 sec)
- 300 Vrms Max working voltage
- IEC 61000-4-2 Level 4 ESD Protection



Hardware details

- Speed : USB 2.0 full speed
- In : USB-B female
- Out : USB-A female
- Isolation voltage : 2.500 Vrms / 1 minute
- Isolation resistance : > 10Gohm
- Isolation capacitance : 15pF typ
- 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 :	29mm

- Width : 64mm - Length : 89mm
- Weight : 65 gr
- Weight. 00 g

Commercial details

- Order : USBISO-DT15
- Price(2015) : EUR 78 @1 EUR 70 @10 EUR 56 @100