Overview

The RS232 ISO is an isolating RS232 multi-voltage USB Bridge supporting up to 3Mbaud. It can withstand voltages differences of up to 2.5kV RMS (60s) and has a common mode transient immunity of 35kV/µsec. Therefore it's ideal suited for harsh environments, like power electronics where sensible computer equipment needs to be protected. All inputs (primary and secondary side) are protected against ESD and withstand 15kV discharges on the human body model.

The secondary side RS232 input and supply voltages range from 1.8V to 5.5V. Input and supply voltages need to be matched. The secondary side current consumption is <20mA at 1.8V, reducing to <10mA @ 3.3V. A true-green LED shows presence of supply power. Only RX and TX signals are isolated. All other RS232 signals are not available.

The primary-side USB chipset consist of an FTDI FT231. A micro-usb connector is used to connect the IC. Red and yellow LEDs indicate ongoing receive and transmission actions.

The product is available in a small, rouged 3D printed case, measuring 48mm x 28mm.

Benefits

- A versatile RS232 converter, without the requirement to care of supply voltages

- Avoiding ground loops helps for ensure a reliable communication

- High datarates allow fast communication of up to 3MBaud. Common devices have limit of 56k Baud.

- ESD protected (15kV Human Body Model)

- Stable enclosure allows on the field usage

Overview	
Primary	
Chipset	FT231
USB Connector	Micro USB
Protection	ESD 15kV HBM
RX LED	yellow
TX LED	red
Baud Rate	<3MBaud
Isolation	
Diff. Voltage	2.5kV
CMTI	35kV/µsec
Pri-Sec Clearance	>3.5mm
Secondary	
Suppy Voltage	1.8V-5.5V
Supply current	<20mA @ 1.8V <10mA @ 3.3V
Protection	ESD 15kV HBM
Power good LED	True Green