

### ET-USB TO USB ISOLATION

(P-ET-A-00446)



ET-USB TO USB ISOLATION is a device to protect USB PORT of computer from damaged, especially notebook. It solves the problems of different Signal GND or abnormal current that may leak into USB PORT and make the devices serious damaged.



ET-USB TO USB ISOLATION uses iCoupler Technology to separate signal and GND of USB on the side of IN and OUT.

**Specifications of ET-USB TO USB ISOLATION**

- Support the standard of USB 2.0 (LOW & FULL SPEED) 1.5-12 Mbps
- 2.5KV ISOLATED by using iCoupler Technology No.ADUM4160 and ADUM5000 from ANALOG DEVICES Company
- Has Circuit ESD Protector No.USBLC6-2 for both sides of USB PORT
- Use Power Supply from PORT USB directly, it is unnecessary to inter face with any external Power Supply
- Can supply 100mA Current from Connector USB on the side of ISOLATION
- Has external Connector 5VDC, it is used in case of supplying power for external device that uses current higher than 100mA (OPTION "ET-SWITCHING ADAPTER 5V 2A TYPE B" )
- Use USB PORT Connector TYPE B on the side of IN and Connector TYPE A on the side of OUT
- Has 3 LEDs to display operating status of IN, OUT, EXT PWR
- Not install any Driver, so it is compatible with all operating systems: Windows, Linux, Mac OS X
- Plastic box size of ET-USB TO USB ISOLATION is 7.5 x 2.5 x 5 cm.

• ET-USB TO USB ISOLATION consists of...

1. Board and box ET-USB TO USB ISOLATION
2. USB CABLE A TO B TYPE
3. CD-ROM Program and User's Manual



### ET-USB TO RS232 ISOLATION

(P-ET-A-00447)



ET-USB TO RS232 ISOLATION is the device like ET-USB TO USB ISOLATION but it only is different in the part of converting signal. In this case, it converts signal from USB PORT ISOLATION into RS232 PORT ISOLATION instead. It separates system of USB from RS232.



**Specifications of ET-USB TO RS232 ISOLATION**

- Support the standard of USB 1.1 and USB 2.0; it is converted into RS232 PORT
- Use IC No.FTDI232RL from FTDI Company to convert signal from USB PORT ISOLATION into RS232
- Transmitting and receiving rate is in the range of 300bps to 128 kps
- Has 2.5KV ISOLATION and Circuit ESD Protector as same as ET-USB TO USB ISOLATION
- Has full pins for using RS232: TXD, RXD, DTR, DSR, CTS, RTS, DCD, RI, GND
- Use Power Supply from PORT USB directly, it is unnecessary to interface with external Power Supply
- Use Connector TYPE B with Cable USB A TO B TYPE
- Use Connector RS232 DB 9PIN MALE
- Has 3 LEDs to display operating statuses of RX, TX, and PWR
- Has Driver that supports the operating system of Windows, Linux, Mac OS X
- Plastic box size of ET-USB TO RS232 ISOLATION is 7.5 x 2.5 x 5 cm.

• ET-USB TO RS232 ISOLATION consists of...

1. Board and box ET-USB TO RS232 ISOLATION
2. USB CABLE A TO B TYPE
3. CD-ROM Program and User's Manual



### ET-USB/RS232

(P-ET-A-00200)



ET-USB/RS232 is converter of signal communication from USB PORT (UNIVERSAL SERIAL BUS) on Computer PC into PORT RS232. It is suitable for Notebook Computer and Computer PC that has only PORT USB and need to use PORT RS232 or expand PORT RS232 as COM3, COM4. This method is using PORT USB for expansion COM PORT instead of installing Card in Computer.

- CONVERTER :** USB TO RS232 DB 9 PIN MALE FULL DUPLEX WITH CODE CONTROLLER (RX,TX,DCD,DTR,RTC,CTS,DSR AND R)
- BAUD RATE :** BAUD RATE FROM 300 BPS TO 128 KBPS
- PORT :** USB CONNECTOR TYPE B  
RS232 DB 9 PIN MALE PORT
- OS :** BE ABLE TO RUN WITH USB SYSTEM ON OS WINDOWS 98/ME/2000/NT/XP PLUG AND PLAY TYPE
- LED :** LED DISPLAY TX, RX, POWER
- SIZE :** 7.5 x 2.5 x 5 CM.



Be able to use ET-USB/RS232 with ETT Board that uses Port RS232 download program into CPU and be able to replace RS232 with ET-USB/RS232 to download.

ET-USB/RS232 includes

1. ET-USB/RS232 BOX
2. USB CABLE A TO B TYPE
3. CD-ROM



### ET-USB/RS422/485

(P-ET-A-00201)



ET-USB/RS422/485 is converter of signal communication from USB PORT (UNIVERSAL SERIAL BUS) on Computer PC into PORT RS422 or RS485. It is suitable for Notebook Computer and Computer PC to connect PORT Rs422 or RS485 with industrial machine, Network or connect in long distance (1.2 km).

- CONVERTER :** USB TO RS422 (FULL DUPLEX) AND RS485 (HALF DUPLEX)
- BAUD RATE :** BAUD RATE FROM 300 BPS TO 128 KBPS
- PORT :** USB CONNECTOR TYPE B RS422/485 PLUG TYPE TERMINAL BLOCK WITH SW SELECT MODE RS422/485
- OS :** BE ABLE TO RUN WITH USB PORT ON OS WINDOWS 98/ME/2000/NT/XP PLUG AND PLAY TYPE
- LED :** LED DISPLAY TX, RX, POWER
- DISTANCE :** 4000 FEET OR 1.2 KM.
- SIZE :** 7.5 x 2.5 x 5 CM.



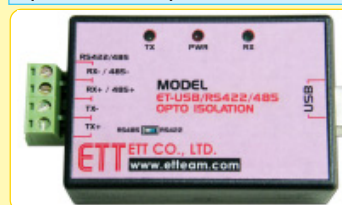
ET-USB/RS422/485 INCLUDES;

1. ET-USB/RS422/485 BOX
2. USB CABLE A TO B TYPE
3. CD-ROM



### ET-USB/RS422/485 ISOLATION

(P-ET-A-00202)



ET-USB/RS422/485 ISOLATION is converter of signal communication from USB PORT (UNIVERSAL SERIAL BUS) on Computer PC into PORT RS422 or RS485. It isolates signal communication of PC and RS422/485 with OPTO Circuit, protects short-circuit or thunderbolt to damage all circuit in system.

- CONVERTER :** USB TO RS422 (FULL DUPLEX) AND RS485 (HALF DUPLEX)
- BAUD RATE :** BAUD RATE FROM 300 BPS TO 115.2 KBPS
- ISOLATION :** ISOLATION DATA INTERFACE 1600 VRMS (1 MINUTE) USE IC MAX1480 AS ISOLATION CIRCUIT
- PORT :** USB CONNECTOR TYPE B  
RS422/485 PLUG TYPE TERMINAL BLOCK WITH SW SELECT MODE RS422/485
- OS :** BE ABLE TO RUN WITH USB PORT ON OS WINDOWS 98/ME/2000/NT/XP PLUG AND PLAY TYPE
- LED :** LED DISPLAY TX, RX, POWER
- DISTANCE :** 4000 FEET OR 1.2 KM.
- SIZE :** 7.5 x 2.5 x 5 CM.



ET-USB/RS422/485 ISOLATION INCLUDES;

1. ET-USB/RS422/485 ISOLATION BOX
2. USB A TO B TYPE
3. CD-ROM

