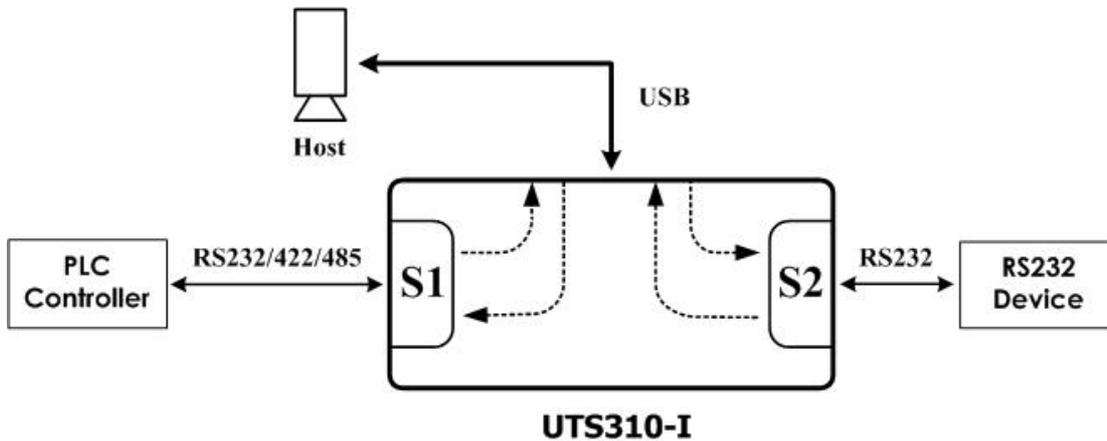


Why you need UTS310-I box

UTS310-I box is **less expensive, safety and flexible** USB to serial port converter. One UTS310-I box can support two serial ports. One serial port can set to RS232, RS422 or RS485 interface easily. The other serial port can support **GROUND isolated RS232** interface in rigid application environment.



There are two DB9 connectors in UTS310-I box. Serial port 1 is **RS232/RS422/RS485 settable**, so you can connect with any host equipment. Serial port 2 is **GROUND isolated RS232**. We will use USB bus power to offer power supply for UTS310-I box. The signal ground pin in serial port 1 is same as signal ground pin of USB bus and PC. The signal pin in serial port 2 is different and isolated with serial port 1 and USB bus. So we can remove the ground loop between the device to connect with serial port 2 and your PC.

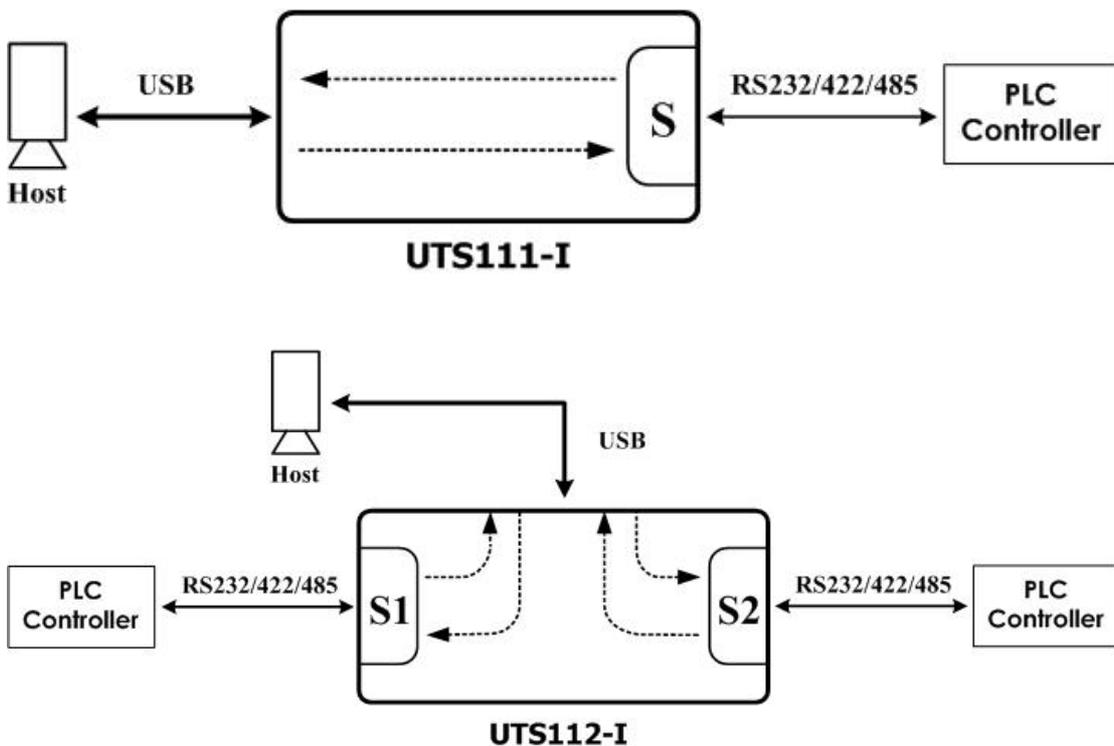
We can use UTS310-I box in **full-duplex RS232** connection and **GROUND isolated full-duplex RS232** application environment. So we will set serial port 1 in RS232 interface type (DIP Switch bit 1 and bit 2 set in OFF location) and serial port 2 in RS232 interface type (DIP Switch bit 3 and 4 in OFF location). Now we can let your PC to control one RS232 device in friendly environment and control another RS232 device in rigid environment safety.

We can use UTS310-I box in **full-duplex RS422** connection and **GROUND isolated full-duplex RS232** application environment. So we will set serial port 1 in RS422 interface type (DIP Switch bit 1 and bit 2 set in ON location) and serial port 2 in RS232 interface type (DIP Switch bit 3 and 4 in OFF location).

We can use UTS310-I box to control half-duplex RS485 network and **GROUND isolated full-duplex RS232** application environment. So we will set serial port 1 in RS485 interface type (DIP Switch bit 1 in OFF location and bit 2 set in ON location) and serial port 2 in RS232 interface type (DIP Switch bit 3 and 4 in OFF location). Now we can let one serial port to handle one RS485 network in friendly environment and the other serial port to handle RS232 connection in rigid environment safety.

As a system integrator we may have one plan to set our environment initially. But we may find

something changed in our environment. Generally we may have one target interface type equipment with lower cost. Upon operating environment changed we may need to buy new equipment to suit and pay more money. If we could have one device with interface settable feature, then we can set different interface to meet our new environment. Of course this flexible device may cost a little more initially. **The purpose for UTS310-I box is major in rigid RS232 application environment.** So we need to have GROUND isolated feature in RS232 interface. But one day we may need to use in RS422/RS485 environment. Then the RS232 only product may not work in RS422/RS485 environment and you need to buy new one. So we let UTS310-I box to support one RS232/RS422/RS485 settable serial port. When you need to use in RS422/RS485 environment, you can use this serial port to support RS422/RS485 connection. You can also use this serial port as a backup for your GROUND isolated RS232 application environment to save the backup cost. In flexible consideration RAYON Technology can offer you other solution UTS111-I box. **UTS111-I** box can support one GROUND isolated RS232/RS422/RS485 settable serial port. So it is very easy to use UTS111-I box in any rigid environment. But UTS111-I box may not have backup capability as UTS301-I box. For cost is not an issue condition RAYON Technology can offer you other solution UTS112-I box. **UTS112-I** box can support two GROUND isolated RS232/RS422/RS485 settable serial ports. It is **flexible** in application environment. It is **safety** in rigid environment. You can have two serial ports to **backup** each other.



In serial port application environment you can send mail to info@rayontech.com.tw or rayon@ms1.hinet.net to talk with over 35 years experience engineer.