



Making Data Acquisition Easy

CAGE/NCAGE Code: 3FNFO

Serial Converter Applications

Serial communication between devices can be challenging in some applications. In this article, I will show some products which can solve some of these challenges.

USB ports are the most commonly used serial communication ports used today. Most devices which require serial communication to a PC have this as an available option.

Problem 1 - Not enough USB ports

A USB hub can be used to convert 1 USB port into multiple individual ports. Using a hub like our USB-2560, you can turn a single USB port into 4.

https://www.icpdas-usa.com/usb_2560.html



Problem 2 -Need RS-232 port

RS-232 used to be the standard PC serial communication method. Many peripheral devices standardized on RS-232. Since USB has taken over as the most common method of serial communication, RS-232 ports are not available on most PC's or laptops.

The I-7560U converts a USB port into an RS-232 port

https://www.icpdas-usa.com/i_7560u.html





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Problem 3 - Need an RS-485 or RS-422 port (also has an RS-232 port)
 Though not as common as RS-232, RS-485 and RS-422 are other forms of serial communication. When you need to communicate using one of these communication standards, you will need a serial converter like our I-7561I

The I-7561U converts a PC's USB port into either an RS-485, RS-232 or RS-422 port.

https://www.icpdas-usa.com/i_7561u.html



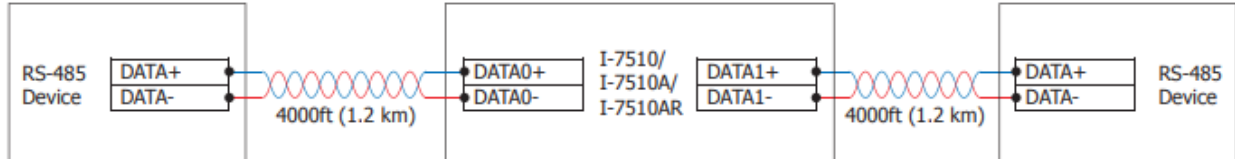
Terminal No.	Pin Assignment
RS-485	01 DATA+
	02 DATA-
RS-422/485	03 TxD+
	04 TxD-
	05 RxD+/DATA2+
	06 RxD-/DATA2-
RS-232	07 TxD
	08 RxD
	09 (B)GND
	10 (B)GND

RS-485

Problem 1 - Need a longer RS-485 bus and/or RS-485 signal strength is too weak
 The I-7510 is an industrial RS-485 repeater which receives RS-485 communication and outputs the RS-485 signal so that it can be communicated up to 4000 ft. additional.

https://www.icpdas-usa.com/i_7510.html

RS-485 to RS-485 Repeater (Only for half duplex application)





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RS-232

Problem 1- Baud Rate Conversion

The TSH-722 will allow a Master device to communicate with Slave devices with different Baud Rate or Data Format.

https://www.icpdas-usa.com/tsh_722.html



If you have any questions concerning any of serial conversion applications, please contact us via email or phone. We are here to help.