
i-7513U

(Ultra Driving 3-Channel RS-485 Active Star Wiring Hub)

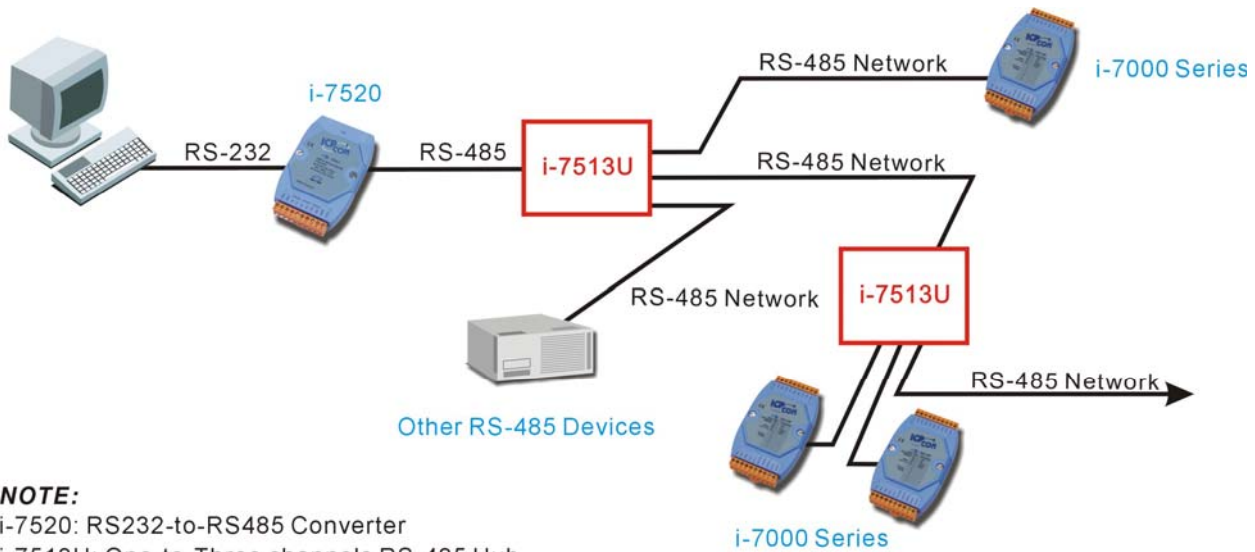
Specifications:

- Protocol: RS-485
- Connector: plug-in screw terminal block.
- Baud rate (bps):1200, 2400, 4800, 9600, 19.2K, 38.4K, 57.6K, 115.2K (Switchable/Self-Tuner).
- Data Format:
9-bit, 10-bit, 11-bit, and 12-bit (Switchable/Self-Tuner).
- LED for indicating RS-485 TxD/RxD activity and Power On.
- Isolation voltage: 3000 VDC
- Power requirements: +10 VDC ~ +30 VDC
- Power consumption: 0.09A@24V; Max

Pin Assignment:



Application:



NOTE:

i-7520: RS232-to-RS485 Converter

i-7513U: One-to-Three channels RS-485 Hub

LED Indicators:

The I-7513 has 2 LED to indicate the power status and network traffic. The TxD/RxD LED(Orange) will flash when the unit is being sent out or received data.

The Power LED(Red) will be ON solid when the Power is On.

Selecting the i-7513U's Data Formats and Baud Rate:

Definition:

- Delay self-tuner: i-7513
The "delay self-tuner" is the first version of self-tuner.
- Pulse-width self-tuner, patent pending: i-7513U
The "pulse-width self-tuner" is the second version of self-tuner

Operation mode of i-7513U:

The i-7513U supports the following modes:

MODE1: Pulse-width self-tuner, 1200 BPS ~ 115200 BPS, 8-stops

MODE2: Pulse-width self-tuner, 1200 BPS ~ 115200 BPS, 4-stops

MODE3: fixed-baud rate, 1200 BPS ~ 115200 BPS, 9/10/11/12 bits.

Selecting the I-7513U's Data Formats and Baud Rate:

Hardware jumper in the position of 1 & 2 --> JP=0

Hardware jumper in the position of 2 & 3 --> JP=1

No hardware jumper in the position of 1 & 2 or 2 & 3 --> JP=1

i-7513U Baud Rate settings (JP1~JP5)					
JP1	JP2	JP3	JP4	JP5	Operation Mode Description
1	1	1	1	1	MODE1 (Factory default)
0	1	1	1	1	MODE2
0	0	1	1	1	MODE3, 115.2K, 9 bits
1	0	1	1	1	MODE3, 115.2K, 10 bits
0/1	0/1	0	1	1	MODE3, 57.6K, 9/10/11/12 bits
0/1	0/1	1	0	1	MODE3, 38.4K, 9/10/11/12 bits
0/1	0/1	0	0	1	MODE3, 19.2K, 9/10/11/12 bits
0/1	0/1	1	1	0	MODE3, 9.6K, 9/10/11/12 bits
0/1	0/1	0	1	0	MODE3, 4.8K, 9/10/11/12 bits
0/1	0/1	1	0	0	MODE3, 2.4K, 9/10/11/12 bits
0/1	0/1	0	0	0	MODE3, 1.2K, 9/10/11/12 bits
JP1 & JP2 defines the total bits of one character as follows:					
JP1	JP2	Bits			
0	0	9 bits			
0	1	10 bits, for example, N81=1 start + 8 data + 1 stop = 10 bits			
1	0	11 bits			
1	1	12 bits			

Note: The data format of 7000 module is N, 8, 1. It is one start bit + 8 data bits + 1 stop bits.

The total bits of one character are 1+8+1=10.

Conclusion:

i-7513U can work well as a universal RS-485 repeater as follows:

1. For i-7000/M-7000 command, MODBUS ASCII, MODBUS RTU → Use MODE1
2. Others → Use MODE3