



I-7510P

Three Way 5 kV Isolated 485 Repeater

Features

- Automatic RS-485 Direction Control
- Transmission Speed of up to 115200 bps
- Operating Temperatures, -25 °C ~ +75 °C
- 3-way 5000 VDC Isolation Protection
- ESD Protection for RS-485 Data Line
- Power Input, +10 ~ +30 VDC
- DIN-Rail Mounting



Introduction

The I-7510P provides 3-way optical isolation between one piece of RS-422/RS-485/Power side equipment and the rest of the system. It can also be used as a repeater to extend the transmission of an existing network. Additionally, an RS-485 system can be expanded beyond the 256 node limitation imposed by the standard. It can also be used to convert a four-wire RS-422 signal into a 2-wire RS-485 signal, and vice versa.

The I-7510P is exactly the same as the I-7510A, except for the isolation side. The isolation side of the I-7510A is located in the input interface circuit, but the isolation side of the I-7510P is located in the input and output interface circuit. In other words the I-7510P is 3-way isolation repeater module.

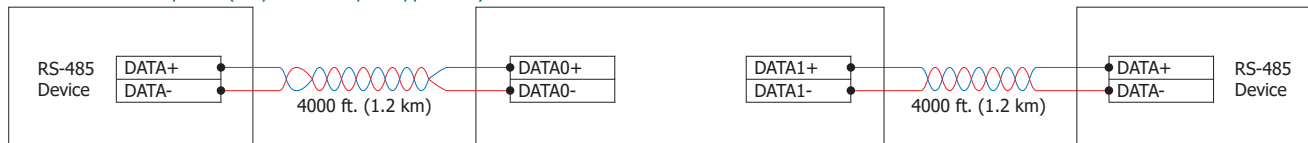
System Specifications

Interface		
Serial Interface	RS-422	-
	RS-485	Data+, Data-
Transmission Distance		Max. 1,200 m at 9.6 kbps; Max. 400 m at 115.2 kbps (Belden 9841 2P twisted-pair cable, if different cables are used, the transmission distance may change)
Self-Tuner Asic Inside		Yes
Speed		300 ~ 115200 bps
ESD Protection		Yes
Isolated Voltage		3-way 5 kV Isolated
Connector		Removable 10-Pin Terminal Block x 2
LED Indicators		
Power/Communication		Yes
Power		
Input Voltage Range		+10 VDC ~ +30 VDC
Power Consumption		2.2 W
Mechanical		
Casing		Plastic
Dimensions (W x H x D)		72 mm x 122 mm x 35 mm
Installation		DIN-Rail Mounting
Environment		
Operating Temperature		-25 °C ~ +75 °C
Storage Temperature		-30 °C ~ +75 °C
Humidity		10 ~ 90% RH, non-condensing

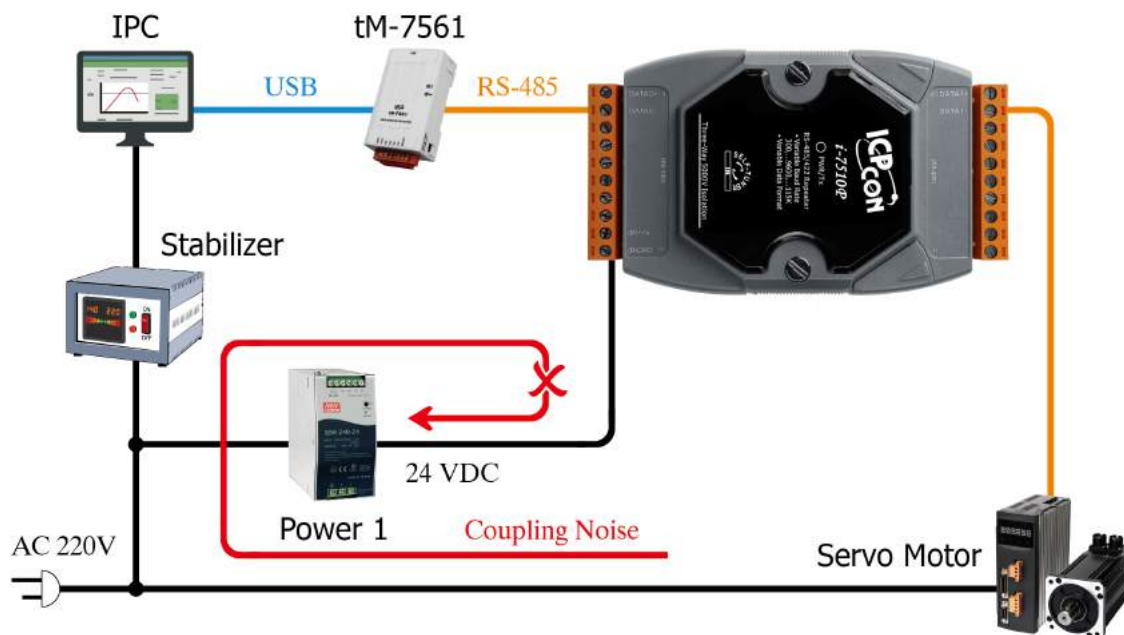
Applications

Applications for RS-422/485

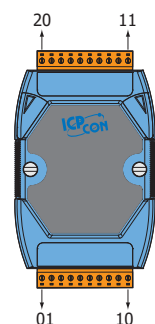
RS-485 to RS-485 Repeater (Only for half duplex application)



Applications for 3-way isolation

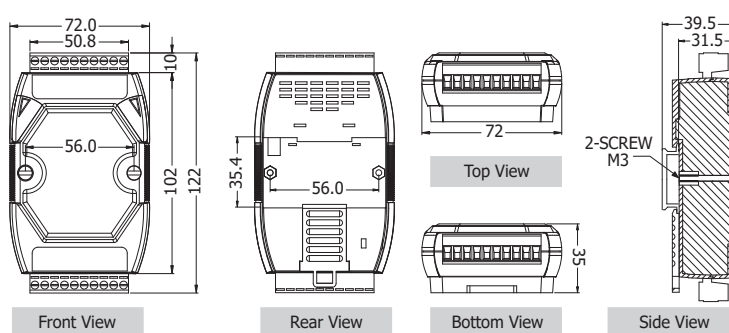


Pin Assignments



Terminal No.	Pin Assignment	Terminal No.	Pin Assignment
01	DATA+	20	DATA1+
02	DATA-	19	DATA1-
03	--	18	--
04	--	17	--
05	--	16	--
06	--	15	--
07	--	14	--
08	--	13	--
09	(R)+Vs	12	--
10	(B)GND	11	--

Dimensions (Units: mm)



Ordering Information

I-7510P CR Three Way 5 kV Isolated RS-485 Repeater (Gray Cover) (RoHS)

Accessories

GPSU06U-6 Power Supply, 110~240VAC or 127~230VDC to 24VDC/0.25A, 6 W, two pins USA plug