

I-7551

Isolated RS-232 to RS-232 Converter



Features ▶▶▶

- 3000 V_{DC} 3-way Isolation Protection
- Transmission Speed of up to 115200 bps
- Operating Temperatures, -25 °C ~ +75 °C
- ESD Protection
- Power Input, +10 ~ +30 V_{DC}
- DIN-Rail Mounting

Introduction

The I-7551 provides a complete full-duplex (including control signal) electrical isolation channel between two RS-232 devices. This isolation is an important consideration if a system uses different power sources, has noisy signals, or must operate at different ground potentials.

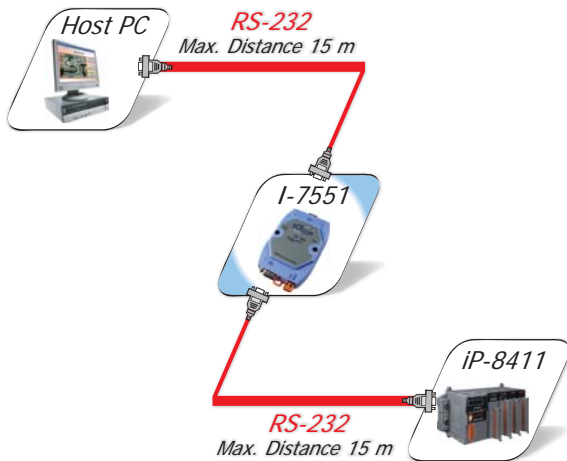
The CTS/RTS pins of the I-7551 module can be reconfigured as DSR/DTR to meet requirements on different applications.

The I-7551 incorporates two DC-to-DC converters, the isolation side of the I-7551 is located in the input and output interface circuit. In other words, the I-7551 is 3-way isolated RS-232 to RS-232 converter.

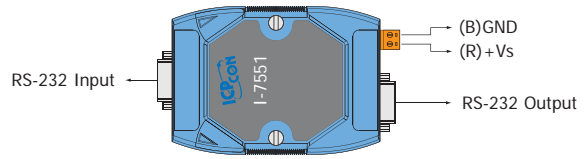
System Specifications

Interface		
Input	TxD, RxD, CTS, RTS, GND (Default) or TxD, RxD, DSR, DTR, GND Jumpers JP1 and JP2 are used to select the RS-232 input source type	
Output	TxD, RxD, CTS, RTS, GND (Default) or TxD, RxD, DSR, DTR, GND	
Transmission Distance	Max. 15 M at 115200 bps	
Speed	300 ~ 115200 bps	
ESD Protection	Yes	
3000 V _{DC} Three Way Isolated Protection	Yes	
Connector	RS-232 Input	9-Pin Female D-Sub
	RS-232 Output	9-Pin Male D-Sub
LED Indicators		
Power/Communication	Yes	
Power		
Input Voltage Range	+10 V _{DC} ~ +30 V _{DC} (Non-isolated)	
Power Consumption	1.2 W	
Mechanical		
Casing	Plastic	
Dimensions (W x H x D)	72 mm x 118 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



Pin Assignments



TxD, RxD, CTS, RTS, GND (Default)

RS-232 Input			RS-232 Output		
Pin Assignment	Terminal No.	Pin Assignment	Pin Assignment	Terminal No.	Pin Assignment
--	01	06 DTR	GND	05	09 --
TxD	02	07 CTS	--	04	08 CTS
RxD	03	08 RTS	TxD	03	07 RTS
DSR	04	09 --	RxD	02	06 --
GND	05		--	01	

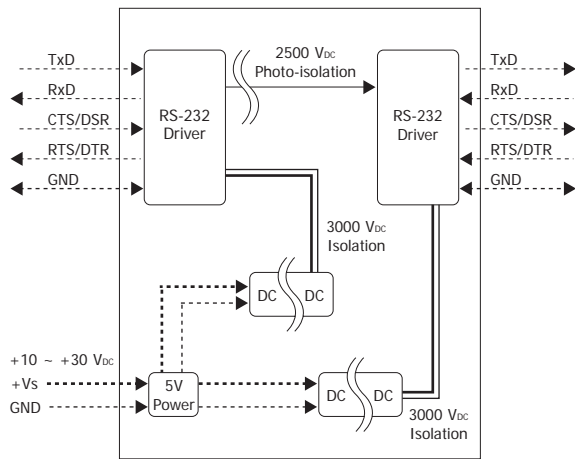
Female DB-9 Connector Male DB-9 Connector

TxD, RxD, DTR, DSR, GND

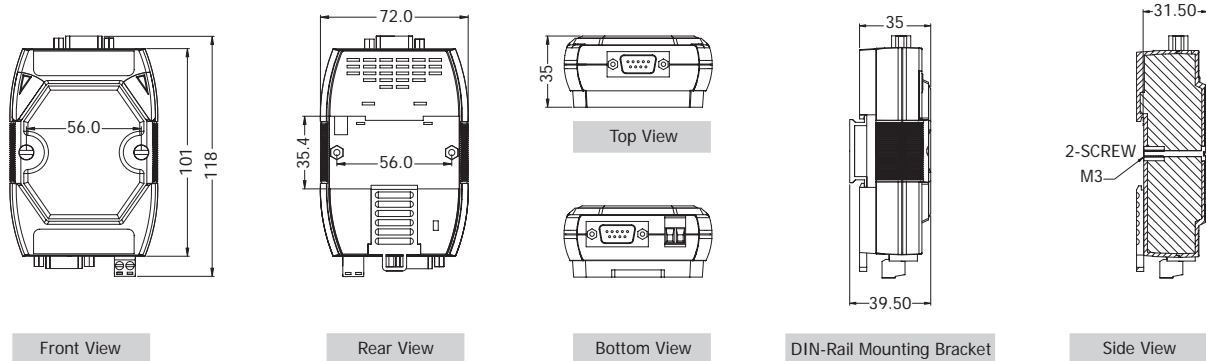
RS-232 Input			RS-232 Output		
Pin Assignment	Terminal No.	Pin Assignment	Pin Assignment	Terminal No.	Pin Assignment
--	01	06 DTR	GND	05	09 --
TxD	02	07 CTS	DTR	04	08 --
RxD	03	08 RTS	TxD	03	07 --
DSR	04	09 --	RxD	02	06 DSR
GND	05		--	01	

Female DB-9 Connector Male DB-9 Connector

Internal I/O Structure



Dimensions (Units: mm)



Ordering Information

I-7551 CR	Isolated RS-232 to RS-232 Converter (RoHS)
I-7551-G CR	Isolated RS-232 to RS-232 Converter (Gray Cover) (RoHS)

Accessories

GPSU06U-6	24 V _{dc} /0.25 A, 6 W Power Supply
DIN-KA52F	24 V _{dc} /1.04 A, 25 W Power Supply with DIN-Rail Mounting