

I-7551

Isolated RS-232 to RS-232 Converter



Features ▶▶▶

- 3000 V_{DC} 3-way Isolation Protection
- Transmission Speed of up 115200 bps
- Operating Temperatures, -25 °C ~ +75 °
- 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.

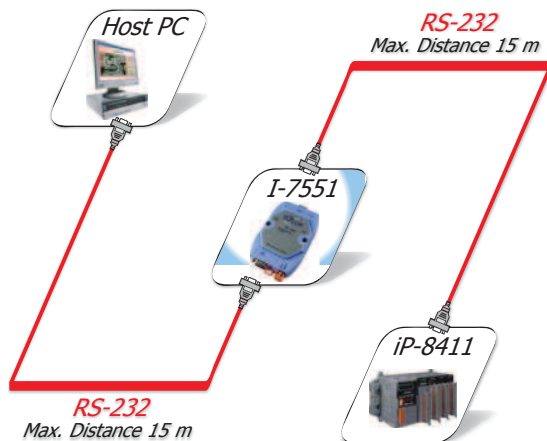
The CTS/RTS pins of the I-7551 module can be reconfigured as DSR/DTR to meet requirements on different applications.

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.

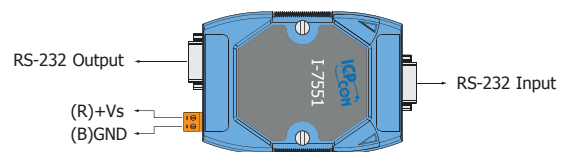
System Specifications

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
Flammability		Fire-Retardant Materials (UL94-V0 Level)
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
GND	01	06	GND	05	09
TxD	02	--	--	04	--
RxD	03	07	TxD	03	08
--	04	08	RxD	02	07
05	09	--	--	01	06

Female DB-9 Connector

Male DB-9 Connector

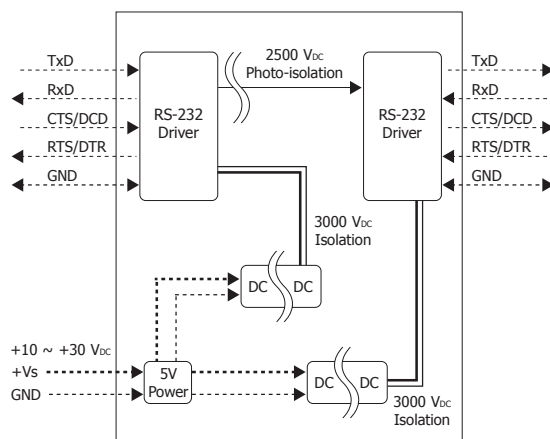
TxD, RxD, DTR, DSR, GND

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

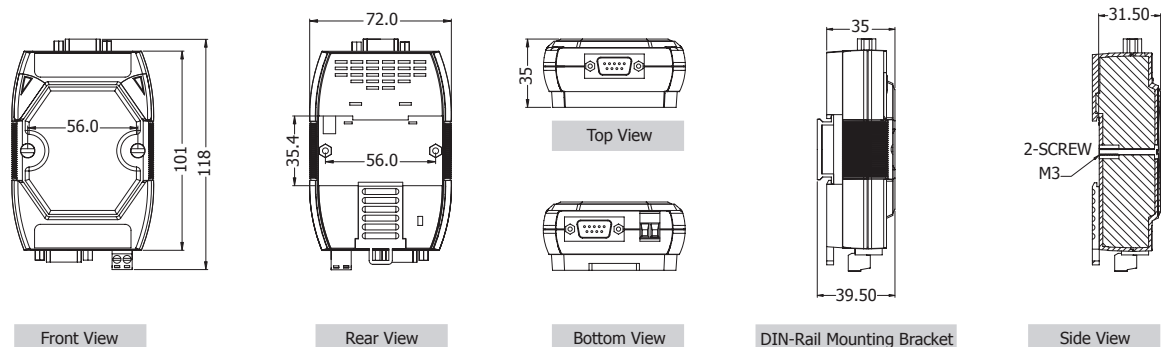
Female DB-9 Connector

Male DB-9 Connector

Internal I/O Structure



Dimensions (Unit: 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 Vdc/0.25 A, 6 W Power Supply
DIN-KA52F	24 Vdc/1.04 A, 25 W Power Supply with DIN-Rail Mounting