



I-7551

Isolated RS-232 to RS-232 Converter

## Features

- 3000 V<sub>dc</sub> 3-way Isolation Protection
- ESD Protection
- Power Input, +10 ~ +30 V<sub>dc</sub>
- Baud Rate, 300 ~ 115200 bps
- Operating Temperatures, -25 °C ~ +75 °C
- DIN-Rail



## Introduction

The I-7551 Photo coupler 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 I-7551 provides the option of reconfiguring which control signal is used. CTS can be selected instead of DSR, and RTS instead of DTR.

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

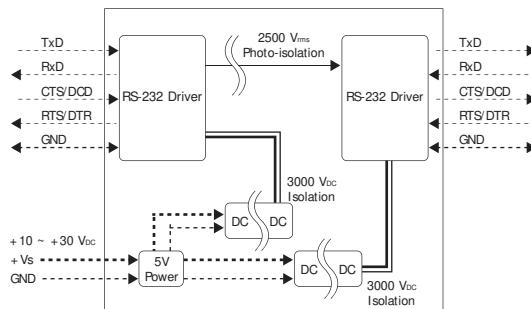
## Applications



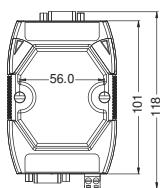
## Specifications

Interface					
Input	TxD, RxD, CTS, RTS, GND 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 or TxD, RxD, DSR, DTR, GND				
Transfer Distance	Max. 15 M at 115200 bps				
Speed	300 ~ 115200 bps				
ESD Protection	Yes				
3000 V <sub>dc</sub> Three Way Isolated Protection	Yes				
Connection	<table border="1"> <tr> <td>RS-232 Input</td><td>9-Pin Female D-Sub</td></tr> <tr> <td>RS-232 Output</td><td>9-Pin Male D-Sub</td></tr> </table>	RS-232 Input	9-Pin Female D-Sub	RS-232 Output	9-Pin Male D-Sub
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 <sub>dc</sub> ~ +30 V <sub>dc</sub> (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				
Environment					
Operating Temperature	-25 °C ~ +75 °C				
Storage Temperature	-30 °C ~ +75 °C				
Humidity	10 ~ 90% RH, non-condensing				

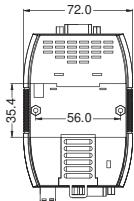
## Internal I/O Structure



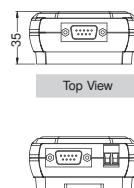
## Dimensions (Unit: mm)



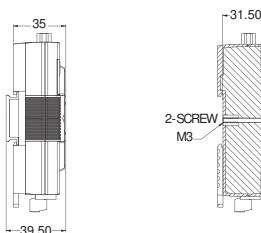
Front View



Back View



Bottom View



Din-Rail Mounting Bracket



Side View

## Pin Assignments



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

RS-232 Output	Pin Assignment	Terminal No.	Pin Assignment
RS-232 Output	GND	05	--
	TxD	04	CTS
	RxD	03	RTS
	--	02	DSR

## 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 Vac/0.25 A, 6 W Power Supply
DIN-KA52F	24 Vac/1.04 A, 25 W Power Supply with Din-Rail Mounting