



I-7551

Isolated RS-232 to RS-232 Converter

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.

Specifications

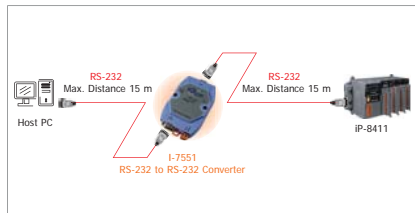
Interface	
Input	TxD, RxD, CTS, RTS, GND or TxD, RxD, DSR, DTR, GND Jumpers JP1 and JP2 are used to select the RS-232 input source type
Output	TxD, RxD, CTS, RTS, GND or TxD, RxD, DSR, DTR, GND
Transfer Distance	Max. 15 M at 115200 bps
Speed	300 – 115200 bps
ESD Protection	Yes
3000 V _{oc} Three Way Isolated Protection	Yes
Connection	RS-232 Input
	RS-232 Output
LED Indicators	
Power/Communication	Yes
Power	
Input Voltage Range	+10 V _{oc} – +30 V _{oc} (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

Features

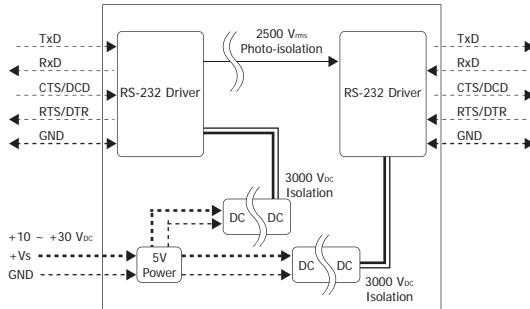
- 3000 V_{oc} 3-way Isolation Protection
- ESD Protection
- Power Input, +10 – +30 V_{oc}
- Baud Rate, 300 – 115200 bps
- Operating Temperatures, -25 °C – +75 °C
- DIN-Rail



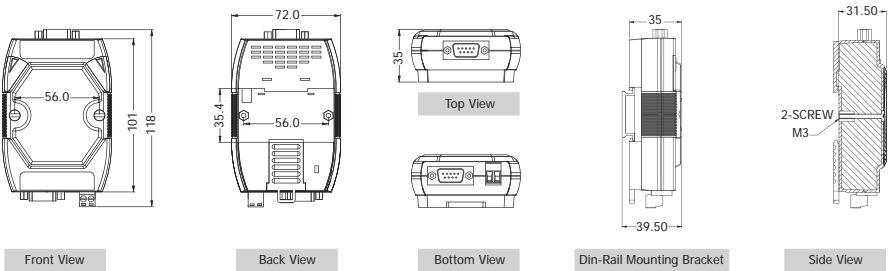
Applications



Internal I/O Structure



Dimensions (Unit: mm)



Pin Assignments



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

RS-232 Input: Female DB-9 Connector

RS-232 Output: Male DB-9 Connector

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