



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.

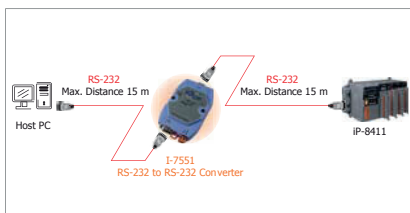
The I-7551 incorporates two DC-to-DC converters, the isolation site of the I-7551 is located in the input and output interface circuit. In other words, the I-7551 is 3-way isolation RS-232 to RS-232 repeater.

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



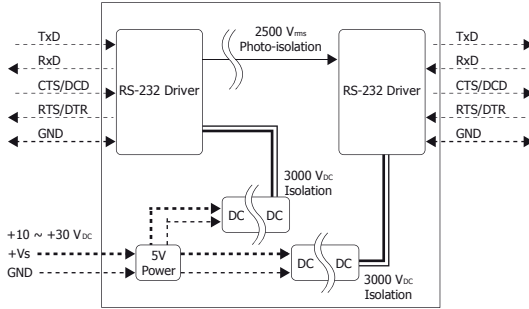
Applications



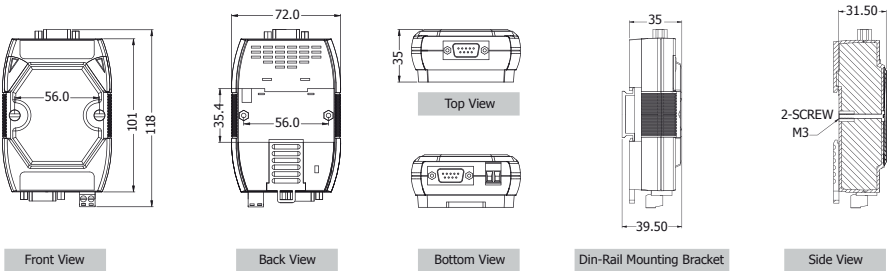
Specifications

| 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 |

Internal I/O Structure



Dimensions (Unit: mm)



Pin Assignments



| Pin Assignment | Terminal No. | 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 | Isolated RS-232 to RS-232 Converter (RoHS) |
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Accessories

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|----------|---|
| 712-7408 | 24 V _{dc} /0.25 A, 15 W Power Supply |
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