

Industrial RS-232 to RS-485 Isolation Module

(WJ101-232-485)

Features:

- >>Compatible with RS-232, RS-485 TIA / EIA standard
- >>Supports baud rate: 300 to 115200 BPS
- >>Adjusts the communication baud rate automatically
- >>Adjusts data transceiver automatically
- >>Transparent transmission without changing the communication protocol
- >>Wide operating range power supply 8-32VDC
- >>3000V isolation between RS-232 and RS-485

Typical applications:

- >>Serial signal remote transmission
- >>For field device communication
- >>intelligent building control, security engineering and other applications
- Industrial automation control system
- >>Industrial field signal isolation and long-term transmission
- >>Equipment operation monitoring and control
- >>Sensor signal conversion and transmission
- >>Industrial field data acquisition and conversion
- >>RS232 and RS485 signal conversion

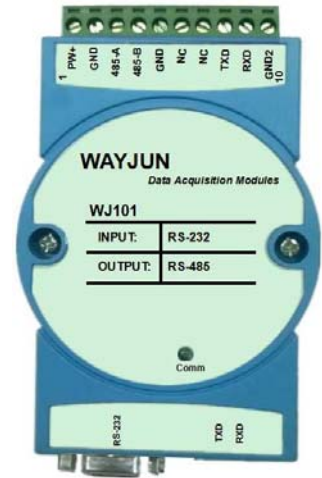


Figure 1 WJ101

Product Overview:

WAYJUN WJ101 is a industrial RS232 to RS485 isolated converter. It is used to convert RS232 signal into RS485 signal, makes data achieve transparent transmission, communication is stable and reliable, suitable for industrial and other high occasions requirements.

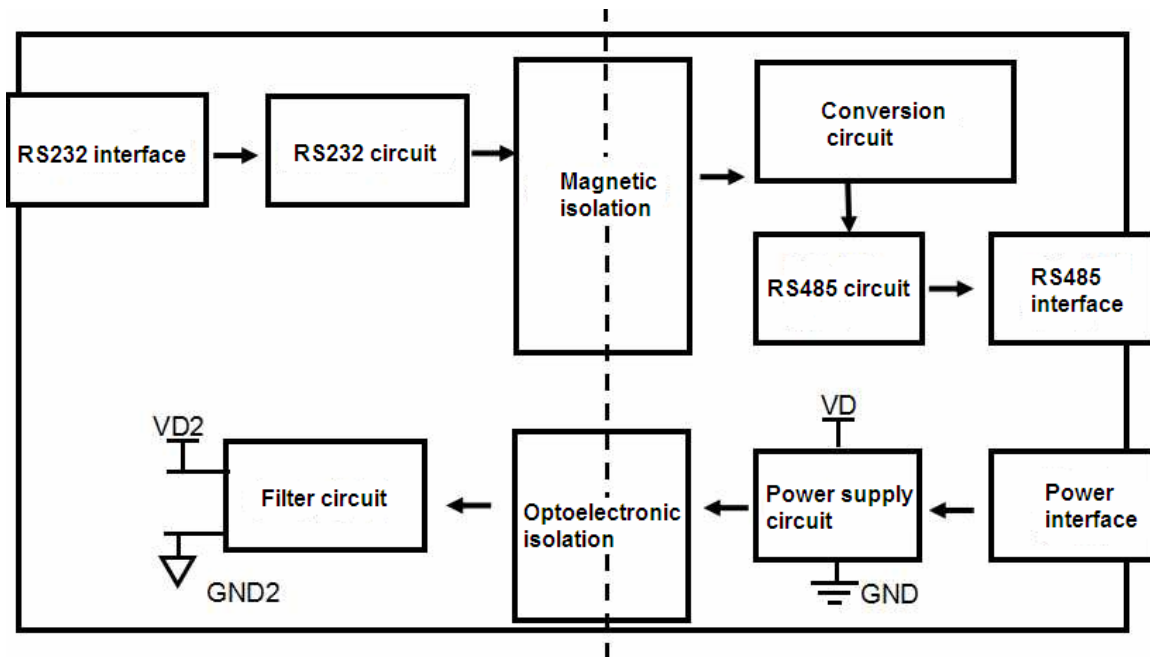
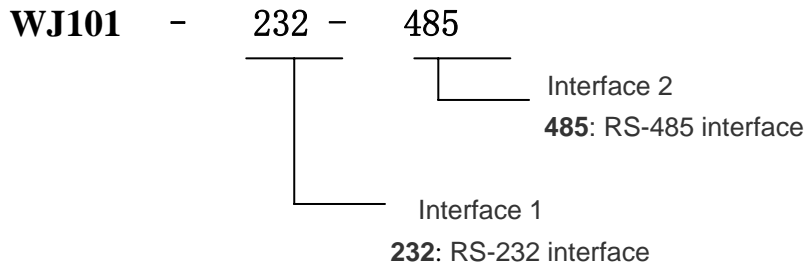


Figure 2 WJ101 Block Diagram

WJ101 products include power conditioning, RS232 interface communication, RS485 communication interface. Wide range power supply:8~32VDC, power supply and RS485 are common ground, and 3000VDC isolation between RS232, power supply has anti-reverse protection. RS485 communication interface adopts high anti-interference design, ± 15KV ESD protection. Products according to industry-standard design, operating

temperature range: - 45 ~ +85 deg.C.

Product Type No.:



WJ101 General parameters:

- (typical @ +25 °C, Vs to 24VDC)
- Transmission distance: RS232 - 15 meters,
RS485 - 1000 m (1200 BPS)
- Communication: RS-232 to RS-485 transparent transmission
- Baud rate: 300,600,1200,2400,4800,9600,19200,38400,57600,115200bps adaptive
- Working mode: Asynchronous half duplex
- Interface: RS232 interface and RS485 interface, RS232 interface can choose DB9 connector or terminal
- Drive capability: Up to 255pcs RS485 devices per module
- Working power: +8 ~ 32VDC wide power supply range, the internal anti-reverse and over-voltage protection circuit
- Power consumption: less than 1W
- Operating temperature: - 45 ~ + 80 °C
- Working humidity: 10 ~ 90% (no condensation)
- Storage temperature: - 45 ~ + 80 °C
- Storage humidity: 10 ~ 95% (no condensation)
- Isolation voltage: between RS232 and RS485 is 3000VDC isolation
- Interface protection: RS-485 interface 15KV ESD protection, and lightning protection and other functions.
- Dimensions: 120 mm x 70 mm x 43 mm

Footprint Function:

| PIN | Name | Function | PIN | Name | Function |
|-----|-------|-------------------------------------|-----|-------|--|
| 1 | PW+ | Power supply+ | 7 | NC | No connecting |
| 2 | GND | Power supply-, signal common ground | 8 | TXD | 232 data sending TXD |
| 3 | 485-A | 485 data interface A | 9 | RXD | 232 data sending RXD |
| 4 | 485-B | 485 data interface B | 10 | GND2 | RS-232 signal common ground |
| 5 | GND | Power supply-, rs485 common ground | 11 | RS232 | RS232interface DB9(9 pole female / hole) |
| 6 | NC | No connecting | | | |

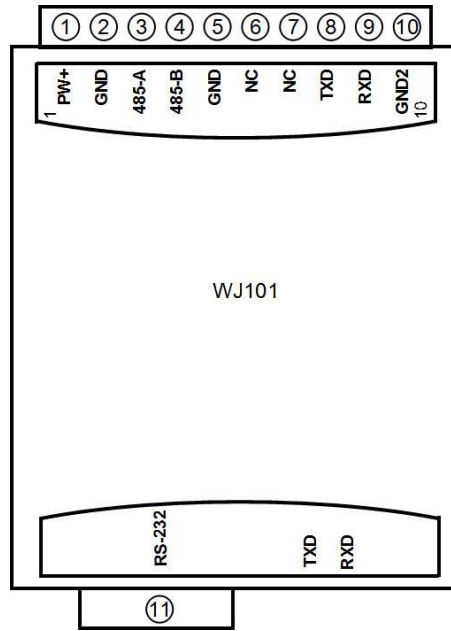


Figure 3 WJ101 Wiring Diagram

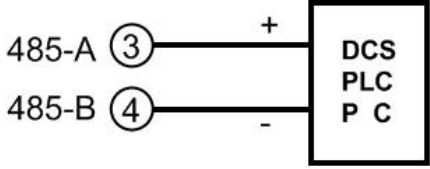
Power supply wiring diagram

| wiring | explanation |
|--------|---|
| | <p>Use PIN1, PIN2 screw terminals to connect the power supply. +8~32VDC Wide power supply range</p> |

RS-232 wiring diagram

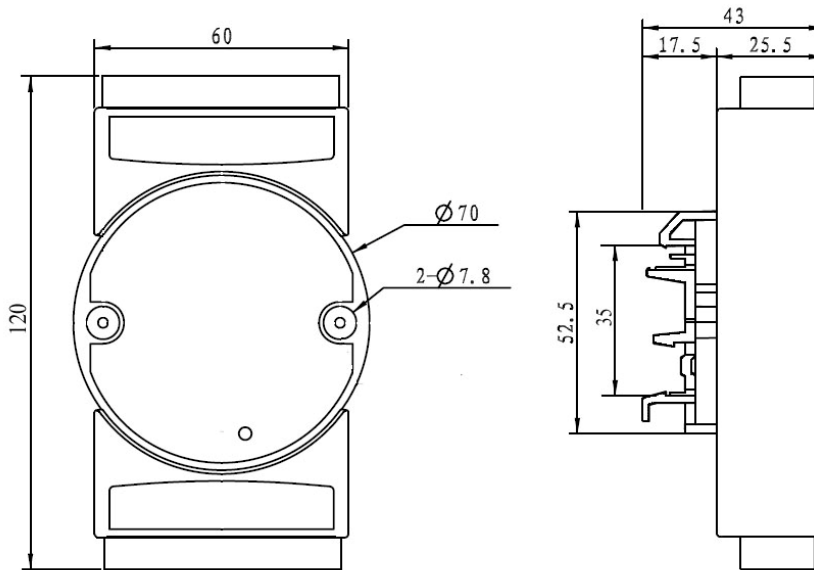
| wiring | explanation |
|--------|--|
| | <p>Connection method 1: The RS-232 interface plug RS-232 socket (9 PIN male pole) of connecting the device.</p> |
| | <p>Connection method 2: If you do not have a RS232 plug, you can also use PIN 8, PIN 9, PIN 10 to connect as the left picture. But note that TXD and RXD have to cross connect.</p> |

RS-485 wiring diagram

| wiring | explanation |
|---|--|
|  | <p>Connection method: Use PIN3, PIN4 screw terminal connection as the left picture.</p> |

Size(unit:mm)

DIN35 Rail Mounted



Warranty

Two years (but violate operating rules and requirements to create damage, clients need pay maintenance costs)

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