



SW485GI

RS-232/485/422 Converter and Repeater

User manual

【Summarize】

SW485GI can use for RS485/422 repeater and RS232 to RS485/422 converter, but just use one function at same time. The product must have 12-36VDC power input, optic- electrical isolation more than 3KV. Have small volume, 3000m transfer distance, high rate, steadily performance and so on. It is abroad used in industry control system. It is a best performance and price interface converter and Repeater.

【Packing list】

Please check the packaging and accessories by your first using.

- SW485GI × 1
- DB9F to DB9M convert line × 1
- User manual × 1

Please inform us or our distributor if your equipment have been damaged or lost any accessories, we will try our best to satisfy you.

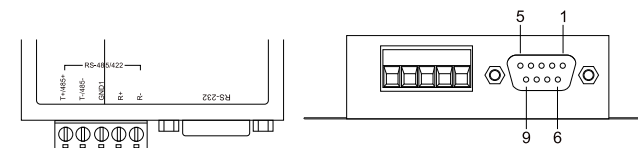
【Feature】

- Support DIN-rail, Terminal block connection
- 12~36VDC Power input(3 bit terminal block)
- Adopt itself adapt interface technique, no use for setup switch
- Adopt ADDC, auto distinguish and data transfer direction.
- Can use for RS485/422 repeater and RS232 to RS485/422 converter, but just use
- one function at same time
- Supply 3000V optic-electrical isolation, 1500W surge protection
- Reach up to 3000m at the rate of 9600bps

【Pinout Configuration:】

RS-232 port adopt DB9F (Female), RS-485/422 port adopt 5 bit terminal block, 12~36VDC power supply Input (3 bit terminal block).

Near side:



RS-232 (DB9F):

2 TXD 3 RXD 5 GND

RS-485/422 side 1 (5 terminal block):

T+/485+ RS-422 send+/485+

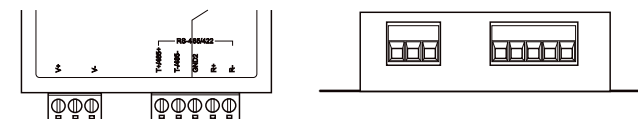
T-/485- RS-422 send-/485-

GND1 Single ground 1

R+ RS-422 receive+

R- RS-422 receive-

Far side:



Power input (12~36VDC, 3 terminal block)

V+ Power input+

V- Power input-

RS-485/422 side 2 (5 terminal block):

T+/485+ RS-422 send+/485+

T-/485- RS-422 send-/485-

GND2 Signal ground 2

R+ RS-422 receive+

R- RS-422 receive-

Note:

1. SW485GI cannot use for converter and repeater in the same time
2. If SW485GI used for RS-232 to RS485/422 converter, RS-485/422 is RS-485/422 side 2.
3. If SW485GI use for converter or repeater, Local device connect RS-485/422 side 1, remote device connect RS-485/422 side 2.

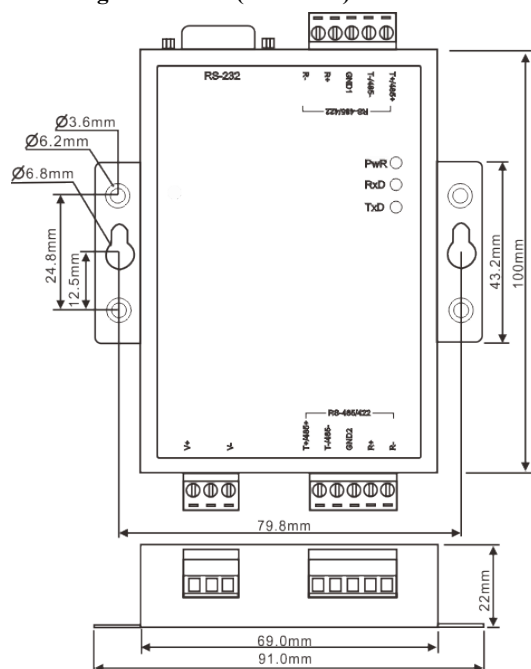
【LED Indicator】

Power	Green, Power supply indication On: power joined; Off: no power connect
RxD	Green, On: Have data receive; Off: no data receive
TxD	Green, On: Have data send; Off: no data send

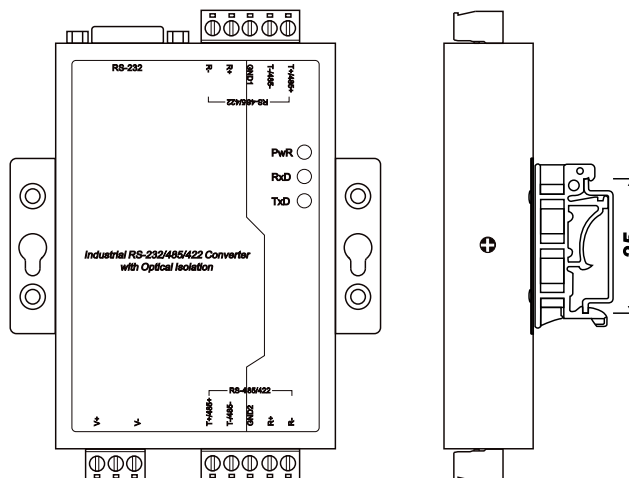
【Installation】

The product provides DIN-rail and wall mounting two types of installation.

Wall mounting installation (Unit: mm)



DIN-Rail Installation (Unit: mm)



【Specification】

Standards: EIA RS-232C, RS-485, RS422 standard

RS-232 signal: TX, RX, GND

RS-422 signal: T+, T-, R+, R-, GND

RS-485 signal: D+, D-, GND

Working mode: Asynchronism, point to point or multi point, 2 wire half-duplex, 4 wire full duplex

Baud rate: 300~115200bps, auto test serial signal rate detect
signal speed automatically, zero delay time

Flow control: Data direction auto-turnaround, no flow control is required

Transfer distance: RS-485/422 side: 3Km (9600bps)

RS-232 side: no less than 15m

Max number of drops: 32 nodes (128 nodes optional)

Optical isolation: 3000V

Port protect: 1500W surge protection, 15KV ESD protection

Connector: RS-232 side DB9 female

RS-485/422 side 5 bit terminal block

Isolation mode, adopt +12V~36VDC input power, provide 3000V isolation

Environment

Operating temperature: -10°C to 75°C

Storage temperature: -40°C to 75°C

Humidity: 5% to 95% (no condensation)

Appearance

Dimensions: 100.0mm×69.0mm×22.0mm

Material: Iron (shell)

Color: White

Weight: 200g

Warranty: 3 years

Approvals: FCC, CE, RoHS approvals

【Applications】

1. RS232 to RS485 mode option:

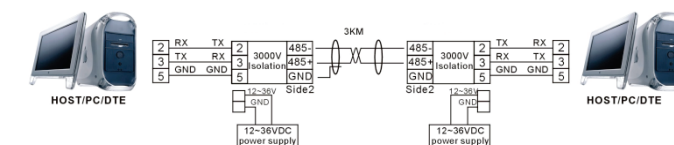


Figure 1: Extending the RS232 data distance in RS485 mode

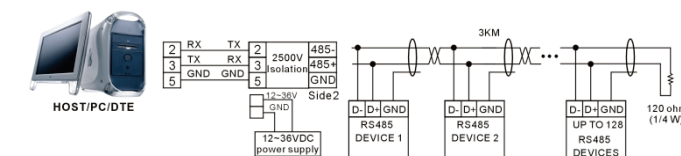


Figure 2: Master/Slave multi-drop configuration in RS485 mode

2. RS232 to RS422 mode option:

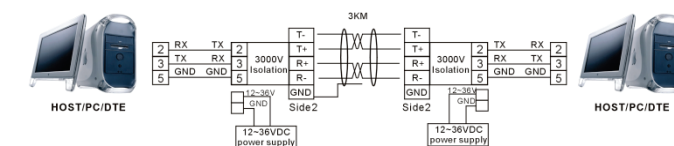


Figure 3: Extending the RS232 data distance in RS422 mode

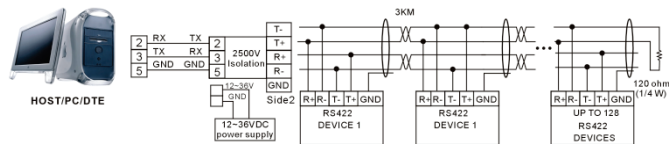


Figure 4: Master/Slave multi-drop configuration in RS422 mode

3. Use for repeater:

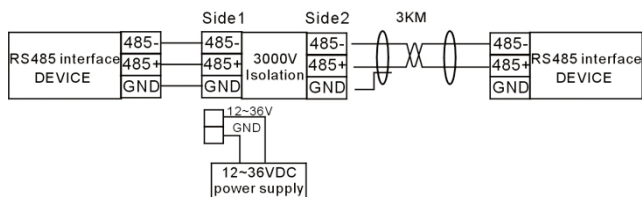


Figure 5: configuration in RS485 repeater mode

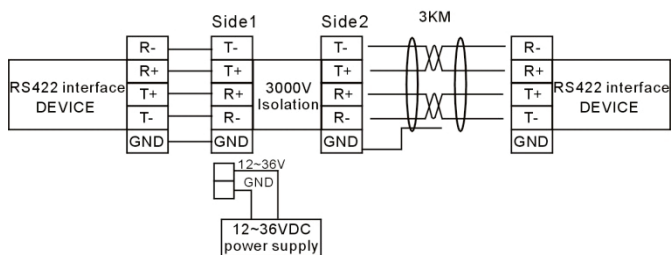


Figure 6: configuration in RS422 repeater mode