



SW485GI

Industrial Isolation

RS-232/485/422 Converter and Repeater

Introduction:

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:

SW485GI is shipped with following items.

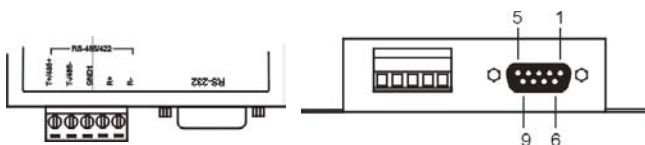
1. SW485GI \times 1
2. DB9F to DB9M convert line \times 1
3. User manual \times 1

Features:

1. Support DIN-rail, Terminal block connection
2. 12~36VDC Power input(3 bit terminal block)
3. Adopt itself adapt interface technique, no use for setup switch
4. Adopt ADDC, auto distinguish and data transfer direction.
5. Can use for RS485/422 repeater and RS232 to RS485/422 converter, but just use one function at same time
6. Supply 3000V optic-electrical isolation, 1500W surge protection
7. 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):

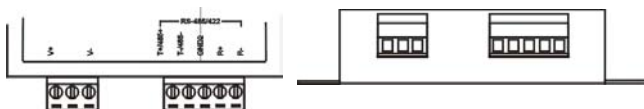
T+/485+ RS-422 send+/485+

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 can not 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 indications:

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

Specifications:

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 5m

Max number of drops: 128 nodes

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 60°C

Storage temperature: -40°C to 85°C

Humidity: 5% to 95%(no condensation)

Appearance

Dimensions: 100.0mm×69.0mm×22.0mm

Material: Iron(shell)

Color: White

Weight: 200g

Warranty: 5 years

Approvals: FCC, CE, RoHS approvals

Applications:

1. RS232 to RS485 mode option:

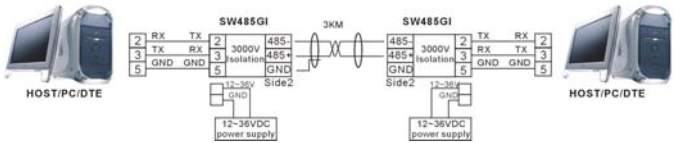


Figure 1: Extending the RS232 data distance in RS485 mode

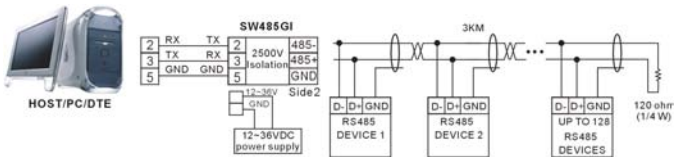


Figure 2: Master/Slave multi-drop configuration in RS485 mode

2. RS232 to RS422 mode option:

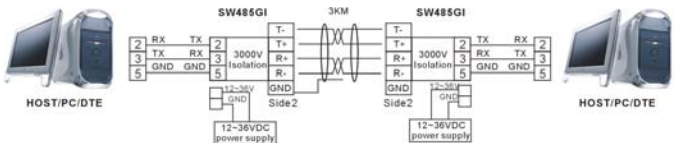


Figure 3: Extending the RS232 data distance in RS422 mode

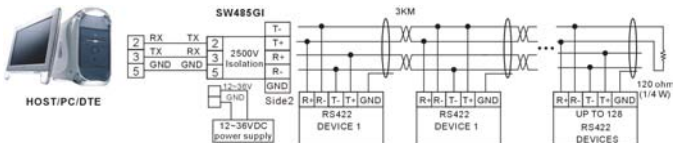


Figure 4: Master/Slave multi-drop configuration in RS422 mode

3. Use for repeater:

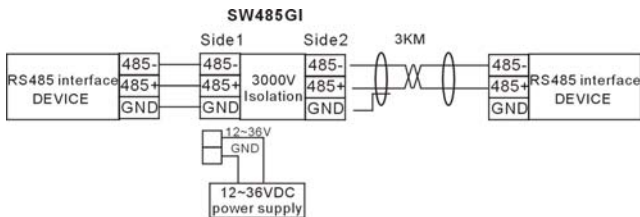


Figure 5: configuration in RS485 repeater mode

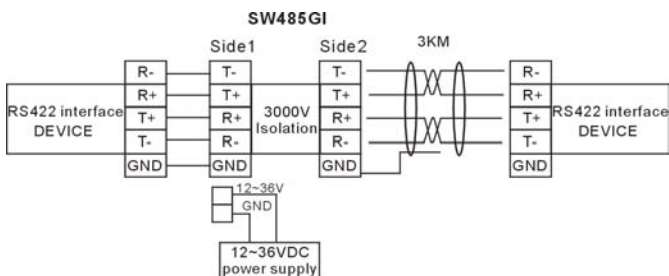
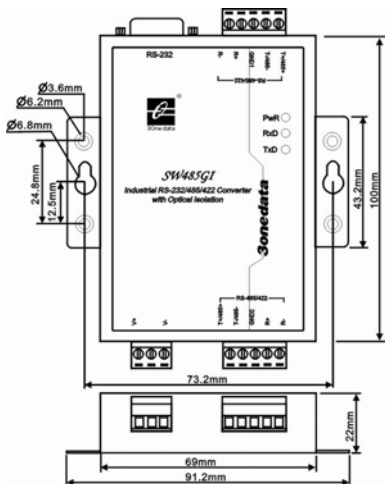


Figure 6: configuration in RS422 repeater mode

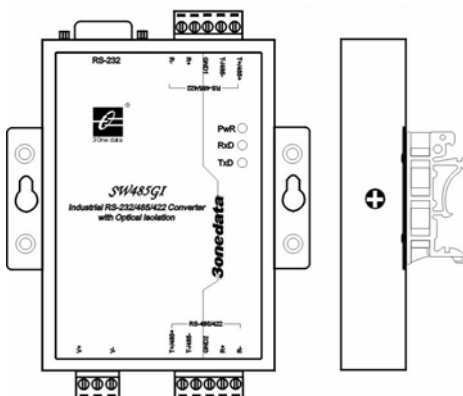
Installation:

SW485GI provides DIN-rail and wall mounting two types of installation.

Wall mounting installation:



DIN-Rail Installation



Certifications:



3onedata

Shenzhen 3onedata Technology Co.,Ltd

Tel: +86-755-26702688 Fax: +86-755-26703485

www.3onedata.com