

SG-3011PCL

Serial to Ethernet Module



SG-3011PCL is an expandable stand-alone device server module connecting legacy serial devices with network through Ethernet.

SG-3011PCL can be remotely connected to POS or various kinds of legacy serial devices in a factory to monitor, control, or collect data.

Medical or security control, manufacturing automation, machine control, process monitoring and controlling devices can be done by this product.

Features

COM Port Redirection

While connected to the network, serial ports in SerialGate can be used as the serial COM ports in PC.

Supports RS-232/422/485 serial interface

Users can select required RS-232/422/485 or TTL serial Interface for their use.

Provides programmable 6 pins of GPIO

For external expansion, users can use GPIO pins to control the external devices.

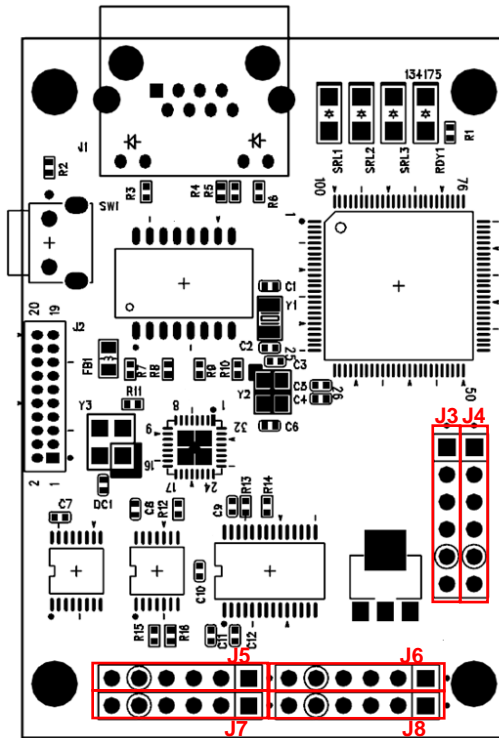
SG-3011PCL

RS-232/422/485 Serial interface to LAN Device Server Module



SG-3011PCL Pin Assign

Serial interface to LAN Device Server Module



J8

J6

J5

J7

J3

J4

RS-232

| | | | |
|---|---------|---|---------|
| 1 | VCC(5V) | 1 | VCC(5V) |
| 2 | RXD1 | 2 | DTR1 |
| 3 | TXD1 | 3 | DSR1 |
| 4 | GND | 4 | GND |
| 5 | RTS1 | 5 | DCD1 |
| 6 | CTS1 | 6 | RI1 |

RS-422/485

| | | | |
|---|--------------|---|--------------|
| 1 | VCC(5V) | 1 | VCC(5V) |
| 2 | TX+ TRXD+ | 2 | TX+ TRXD+ |
| 3 | TX- TRXD- | 3 | TX- TRXD- |
| 4 | GND | 4 | GND |
| 5 | RX+ | 5 | RX+ |
| 6 | RX- | 6 | RX- |

GPIO

| | |
|---|-----------------|
| 1 | GPIO1 (PB5) |
| 2 | GPIO2 (PB6) |
| 3 | GPIO3 (PB7) |
| 4 | GPIO4 (PB8) |
| 5 | GPIO5 (PB9) |
| 6 | GPIO6 (PB14) |

TTL

| | |
|---|---------------|
| 1 | VCC(5V) |
| 2 | RXD3 (TTL) |
| 3 | TXD3 (TTL) |
| 4 | GND |
| 5 | RTS3 (TTL) |
| 6 | CTS3 (TTL) |

SerialGate Specification Sheet

Communication (Ethernet)

| | |
|---------------|--------------------------|
| Ethernet Port | 1 port: 10/100Mbps RJ-45 |
| IP Assignment | Static IP, Dynamic IP |

Communication (Serial)

| | |
|------------------|---|
| Connector | Pitch 2.54mm Pin Header |
| Serial Interface | RS-232/422/485, UART TTL |
| Speed | Max 230.4kbps |
| Signals | RS-232 : TxD, RxD, DTR, DSR, CTS, RTS, DCD, RI RS-422 : TX+, TX-, RX+, RX- RS-485 : TRXD+, TRXD- UART TTL : TxD, RxD, RTS, CTS |

Hardware (Electrical)

| | |
|----------------|---|
| Power Supply | 5 VDC Adapter Power Consumption 1.2 W |
| ESD Protection | ± 15kV ESD (HBM) Protection |
| LED | Ready, Serial Communication Traffic Indicator RJ-45 Connector: Speed (Green), Link/Activity (Yellow) |

Hardware (Physical)

| | |
|-----------------------|---|
| Dimension | 46(W) x 68(L) x 15(H) mm |
| Weight | 20.7g |
| Operating Temperature | 0 ~ 70°C / -40 ~ 85°C (depends on models) |
| Humidity | 5 ~ 95% Non-Condensing |

Reset Button

| Pressed for | Action | Result |
|---------------------|----------------|---|
| Less than 3 seconds | Press and hold | Reset SerialGate |
| More than 3 seconds | | Reverts all settings to the factory default values. |

SerialGate Specification Sheet

Software

| | |
|------------------|----------------------------|
| Protocol | TCP, UDP, ICMP, DHCP, HTTP |
| Utility | PortView |
| Configuration by | Web browser, SGConfig |

Ordering Information

| Model Name | Description |
|----------------------|--|
| SG-1010/232-RJ | 1 x Serial RJ-45 Port (RS232 only) |
| SG-1010/Combo-RJ | 1 x Serial RJ-45 Port (RS422/RS485 selectable) |
| SG-1010/ALL | 1 x Serial DE-9 or T/B Port (RS232/RS422/RS485 selectable) |
| SG-1010W/ALL | 1 x Serial DE-9 or T/B Port (RS232/RS422/RS485 selectable) Ethernet or Wi-Fi selectable |
| SG-1020/232-RJ | 2 x Serial RJ-45 Ports (RS232 only) |
| SG-1020/Combo-RJ | 2 x Serial RJ-45 Ports (RS422/RS485 selectable) |
| SG-1020/ALL | 2 x Serial DE-9 or T/B Ports (RS232/RS422/RS485 independently selectable by each ports) |
| SG-1020W/ALL | 2 x Serial DE-9 or T/B Ports (RS232/RS422/RS485 independently selectable by each ports) Ethernet or Wi-Fi selectable |
| SG-1040/232 Series | 4 x Serial RJ-45 Ports (RS232 only) |
| SG-1040/Combo Series | 4 x Serial RJ-45 Ports (RS422/RS485 independently selectable by each ports) |
| SG-1080/232 Series | 8 x Serial RJ-45 Ports (RS232 only) |
| SG-1080/Combo Series | 8 x Serial RJ-45 Ports (RS422/RS485 independently selectable by each ports) |
| SG-1160/ALL | 16 x Serial RJ-45 Ports (RS232/RS422/RS485 independently selectable by each ports) |
| SG-3011DCL/232 | 1 x Serial DB9 Port (RS232 only) |
| SG-3011PCL | 1 x Serial Pin Header Port (RS232/422/485/TTL selectable) |