



Introduction

The I-8112iW-G provides 2 isolated RS-232 serial ports. It is equipped with a 128-byte hardware FIFO for each port and offers speeds up to 115.2 kbps with support for full-duplex communication.

In the harsh industrial environment, the on board ESD protection devices can divert this potentially damaging charge away from sensitive circuitry and protect the I-8112iW from permanent damage.

The serial communication modules are designed for use with intelligent devices like bar code readers, serial printers, intelligent sensors, instrumentation equipment, computers, and almost any device with an RS-232 or RS-422/485 port.

I/O Specifications

| RS-232 Interface | |
|---------------------------------------|--|
| Number of Ports | 2 |
| Interface | TxD, RxD, RTS, CTS, DSR, DTR, DCD, RI, GND |
| Controller | 16C950 Compatible |
| | Speed: 115200 bps max. |
| | Data Bit: 5, 6, 7, 8 |
| | Stop Bit: 1, 1.5, 2 |
| | Parity: None, Even, Odd, Mark, Space FIFO: Internal 128 bytes for each port |
| Interrupt | Shared Interrupt |
| Bus | Parallel I/O Module |
| Connector | DB-9 (Male) |
| Intra-module Isolated, Field to Logic | 2500 V _{ms} |
| ESD Protection | +/-4 kV (Contact for each channel) |

Software

| |
|--|
| Software |
| Supports interrupt driven software library |
| Supports VxCOM library |

RS-232 Interface

Features

- High-profile Module
- 2500 V_{ms} Isolation
- Serial Port with +/-4 kV ESD Protection
- Internal 128-byte Hardware FIFO for each Port
- Baud Rate of up to 115200 bps
- LED Indicators for Tx/D and Power Status
- RoHS Compliant with no Halogen
- Low power consumption
- Made from fire retardant materials (UL94-V0 Level)



Applications

- Factory Automation
- Building Automation
- Home Automation

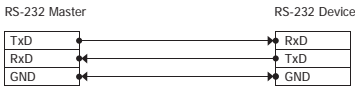
System Specifications

| | |
|------------------------|-----------------------------|
| LED Indicators | |
| Power | 1 LED |
| TxD | 2 LEDs |
| RxD | 2 LEDs |
| Power | |
| Power Consumption | 1.5 W |
| Mechanical | |
| Dimensions (W x L x H) | 31 mm x 86 mm x 114 mm |
| Environment | |
| Operating Temperature | -25 °C ~ +75 °C |
| Storage Temperature | -30 °C ~ +80 °C |
| Humidity | 10 ~ 95% RH, non-condensing |

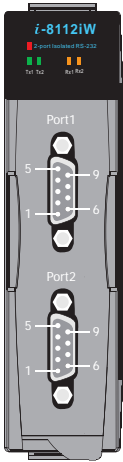
Wiring

| DTE Device (Computer) | | DB-9 | DTE to DCE Connections | | DCE Device (Modem) | | DB-9 |
|-------------------------------|---------------------------|---------------------|------------------------|---|-------------------------------|---------------------------|---------------------|
| Pin# | DB-9 | RS-232 Signal Names | Signal Direction | | Pin# | DB-9 | RS-232 Signal Names |
| #1 | Carrier Detector | DCD | ← | | #1 | Carrier Detector | DCD |
| #2 | Receive Data | RxD | ← | | #2 | Transmit Data | TxD |
| #3 | Transmit Data | TxD | | → | #3 | Receive Data | RxD |
| #4 | Data Terminal Ready | DTR | ← | | #4 | Data Set Ready | DSR |
| #5 | Signal Ground/Common (SG) | GND | ← | | #5 | Signal Ground/Common (SG) | GND |
| #6 | Data Set Ready | DSR | ← | | #6 | Data Terminal Ready | DTR |
| #7 | Request to Send | RTS | ← | | #7 | Clear to Send | CTS |
| #8 | Clear to Send | CTS | ← | | #8 | Request to Send | RTS |
| #9 | Ring Indicator | RI | ← | | #9 | Ring Indicator | RI |
| Soldered to DB-9 Metal Shield | | FGND | ← | | Soldered to DB-9 Metal Shield | | FGND |

3-wire RS-232 Wiring



Pin Assignments



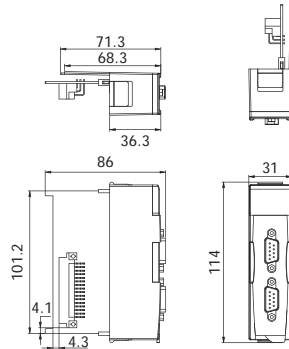
| Pin Assignment | Terminal | No. | Pin Assignment |
|----------------|----------|-----|----------------|
| GND1 | 05 | 09 | RI1 |
| DTR1 | 04 | 08 | CTS1 |
| TxD1 | 03 | 07 | RTS1 |
| RxD1 | 02 | 06 | DSR1 |
| DCD1 | 01 | | |

Port1 9-Pin Male D-Sub Connector

| Pin Assignment | Terminal | No. | Pin Assignment |
|----------------|----------|-----|----------------|
| GND2 | 05 | 09 | RI1 |
| DTR2 | 04 | 08 | CTS2 |
| TxD2 | 03 | 07 | RTS2 |
| RxD2 | 02 | 06 | DSR2 |
| DCD2 | 01 | | |

Port2 9-Pin Male D-Sub Connector

Dimensions (Unit: mm)



Ordering Information

| | |
|---------------|--------------------------------------|
| I-8112IW-G-CR | 2-port Isolated RS-232 Module (RoHS) |
|---------------|--------------------------------------|

Accessories

| | |
|---------|--------------------------------------|
| CA-0915 | 9-Pin Male-Female D-Sub Cable, 1.5 m |
|---------|--------------------------------------|