



Introduction

The I-8114W-G provides 4 non-isolated RS-232 serial ports, while the I-8114iW-G provides 4 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-8114W/I-8114iW 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

Models	I-8114W	I-8114iW
RS-232 Interface		
Number of Ports	4	
Interface	TxD, RxD, RTS, CTS, DSR, DTR, DCD, RI, GND	TxD, RxD, RTS, CTS, 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-37 (Female)	
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 for I-8114iW
- 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 TxD, RxD 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

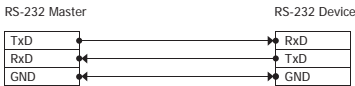
System Specifications

Models	I-8114W	I-8114iW
LED Indicators		
Power	1 LED	
TxD	4 LEDs	
RxD	4 LEDs	
Power		
Power Consumption	1.25 W	1.75 W
Mechanical		
Dimensions (W x L x H)	31 mm x 85 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

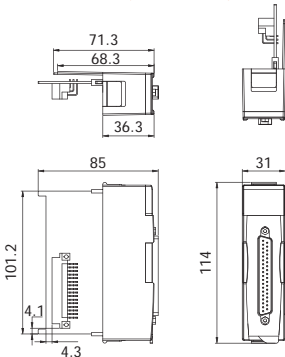
Pin Assignment	Terminal	No.	Pin Assignment
N.C.	01	20	RI3
DCD3	02	21	DTR3
GND	03	22	DSR3
CTS3	04	23	RTS3
RxD3	05	24	TxD3
RI4	06	25	DCD4
DTR4	07	26	GND
DSR4	08	27	CTS4
RTS4	09	28	RxD4
TxD4	10	29	RI2
DCD2	11	30	DTR2
GND	12	31	DSR2
CTS2	13	32	RTS2
RxD2	14	33	TxD2
RI1	15	34	DCD1
DTR1	16	35	GND
DSR1	17	36	CTS1
RTS1	18	37	RxD1
TxD1	19		

37-Pin Female D-Sub Connector

Pin Assignment	Terminal	No.	Pin Assignment
N.C.	01	20	N.C.
N.C.	02	21	N.C.
GND3	03	22	N.C.
CTS3	04	23	RTS3
RxD3	05	24	TxD3
N.C.	06	25	N.C.
N.C.	07	26	GND4
RTS4	09	27	CTS4
TxD4	10	28	RxD4
N.C.	11	29	N.C.
GND2	12	30	N.C.
CTS2	13	31	N.C.
RxD2	14	32	RTS2
N.C.	15	33	TxD2
N.C.	16	34	N.C.
N.C.	17	35	GND1
RTS1	18	36	CTS1
TxD1	19	37	RxD1

37-Pin Female D-Sub Connector

Dimensions (Unit: mm)



Ordering Information

I-8114W-G CR	4-port RS-232 Module (RoHS)
I-8114W-G/D2 CR	4-port RS-232 Module (RoHS) Includes One CA-9-3705 Cable
I-8114IW-G CR	4-port Isolated RS-232 Module (RoHS)
I-8114IW-G/D2 CR	4-port Isolated RS-232 Module (RoHS) Includes One CA-9-3705 Cable

Accessories

CA-4002	37-Pin Male D-Sub Connector with Plastic Cover.
CA-9-3705	DB-37 Male (D-Sub) to 4-port DB-9 Male (D-Sub) Cable 0.5 m Cable for I-8114W-G/I-8114IW-G (90°)