

**I-8114W-G**

4-port RS-232 Module

**I-8114iW-G**

4-port Isolated RS-232 Module



I-8114W

I-8114iW



**Features** ▶▶▶

- High-profile Module
- Serial Port with +/- 4 kV ESD Protection
- Baud Rate of up to 115200 bps
- Low power consumption
- Made from fire-retardant materials (UL94-V0 Level)
- 2500 V<sub>rms</sub> Isolation for I-8114iW
- Internal 128-byte Hardware FIFO for each Port
- LED Indicators for TxD, RxD and Power Status
- RoHS Compliant & no Halogen

**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 onboard 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 port.

**Applications**

- Factory Automation
- Building Automation
- Home Automation

**Software**

- Supports interrupt driven software library
- Supports VxCOM library

**System Specifications**

Models	I-8114W	I-8114iW
<b>LED Indicators</b>		
Power	1 LED	
TxD	4 LEDs	
RxD	4 LEDs	
<b>Power</b>		
Power Consumption	1.25 W	1.75 W
<b>Mechanical</b>		
Dimensions (W x L x H)	32 mm x 85 mm x 115 mm	
<b>Environment</b>		
Operating Temperature	-25 °C ~ +75 °C	
Storage Temperature	-30 °C ~ +80 °C	
Humidity	10 ~ 95% RH, non-condensing	

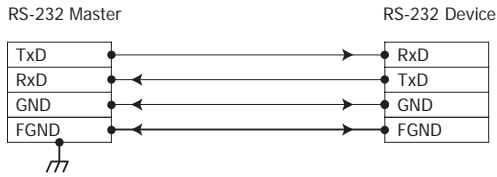
**I/O Specifications**

Models	I-8114W	I-8114iW
<b>RS-232 Interface</b>		
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	
Bus	Parallel I/O Module	
Connector	DB-37 (Female)	
Intra-module Isolated, Field to Logic	-	2500 V <sub>rms</sub>
ESD Protection	+/- 4 kV (Contact for each channel)	

## Wiring

DTE Device (Computer)			DTE to DCE Connections		DCE Device (Modem)		
Pin#	DB9	RS-232 Signal Names	Signal Direction		Pin#	DB9	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 DB9 Metal-Shield			→	←	Soldered to DB9 Metal-Shield		
		FGND					FGND

3-wire RS-232 Wiring



## Pin Assignments

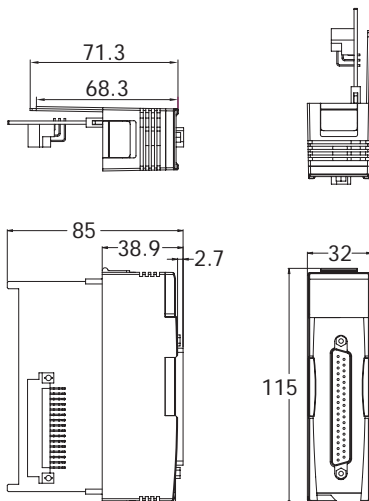
Pin Assignment	Terminal	No.	Pin Assignment
N.C.	01	20	RI3
DCD3	02	21	DTR3
GND	03	22	DSR3
CTS3	04	23	RTS3
RxD3	05	24	TxD3
RI4	06	25	DCD4
DTR4	07	26	GND
DSR4	08	27	CTS4
RTS4	09	28	RxD4
TxD4	10	29	RI2
DCD2	11	30	DTR2
GND	12	31	DSR2
CTS2	13	32	RTS2
RxD2	14	33	TxD2
RI1	15	34	DCD1
DTR1	16	35	GND
DSR1	17	36	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
N.C.	08	27	CTS4
RTS4	09	28	RxD4
TxD4	10	29	N.C.
N.C.	11	30	N.C.
GND2	12	31	N.C.
CTS2	13	32	RTS2
RxD2	14	33	TxD2
N.C.	15	34	N.C.
N.C.	16	35	GND1
N.C.	17	36	CTS1
RTS1	18	37	RxD1
TxD1	19		

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 0.3 m Cable for I-8114W-G/I-8114iW-G (90°)