



I-8114W | I-8114iW

4-port RS-232 Module | 4-port Isolated RS-232 Module

Features

- 4 RS-232 Serial Ports
- Baud Rate of up to 115200 bps
- Internal 128-byte Hardware FIFO for Each Port
- ±4 kV ESD Protection on Each Port
- LED Indicators for TxD, RxD and Power Status
- 2500 VDC Isolation for I-8114iW

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.

System Specifications

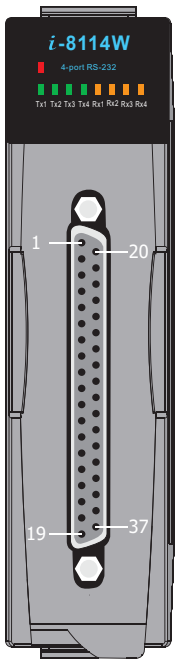
Models		I-8114W	I-8114iW
COM Ports			
Ports		4 x RS-232 TxD, RxD, RTS, CTS, DSR, DTR, DCD, RI, GND	TxD, RxD, RTS, CTS, GND
Protocol	Speed	115200 bps Max.	
	Data Bit	5, 6, 7, 8	
	Stop Bit	1, 1.5, 2	
	Parity	None, Even, Odd, Mark, Space	
FIFO		Internal 128 Bytes for Each Port	
LED Display			
System LED Indicator		1 LED as Power Indicator	
I/O LED Indicator		4 LEDs as TxD Indicators; 4 LEDs as RxD Indicators	
Isolation			
Intra-module Isolation, Field-to-Logic		-	2500 Vrms
EMS Protection			
ESD (IEC 61000-4-2)		±4 kV Contact for Each port	
Power			
Power Consumption		1.25 W	1.75 W
Mechanical			
I/O Connector		DB-37 (Female)	
Dimensions (W x L x H)		30 mm x 114 mm x 85 mm	
Environment			
Operating Temperature		-25 ~ +75 °C	
Storage Temperature		-40 ~ +85 °C	
Humidity		10 ~ 90 % RH, Non-condensing	

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Wire Connections

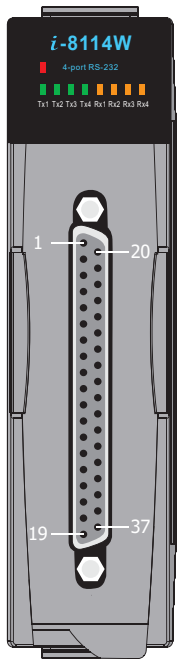
DTE Device (Computer) **DB9**		**DTE to DCE** Connections	DCE Device (Modem) **DB9**	
Pin# DB9 RS-232 Signal Names		Signal Direction	Pin# DB9 RS-232 Signal Names	
#1 Carrier Detector	DCD	←	#1 Carrier Detector	DCD
#2 Receive Data	RxD	←	#2 Transmit Data	TxD
#3 Transmit Data	TxD	→	#3 Receive Data	RxD
#4 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	FGND	↔	Soldered to DB9 Metal-Shield	FGND

Pin Assignments



Pin Assignment	Terminal No.		Pin Assignment
N.C.	1	20	RI3
DCD3	2	21	DTR3
GND3	3	22	DSR3
CTS3	4	23	RTS3
RxD3	5	24	TxD3
RI4	6	25	DCD4
DTR4	7	26	GND4
DSR4	8	27	CTS4
RTS4	9	28	RxD4
TxD4	10	29	RI2
DCD2	11	30	DTR2
GND2	12	31	DSR2
CTS2	13	32	RTS2
RxD2	14	33	TxD2
RI1	15	34	DCD1
DTR1	16	35	GND1
DSR1	17	36	CTS1
RTS1	18	37	RxD1
TxD1	19		

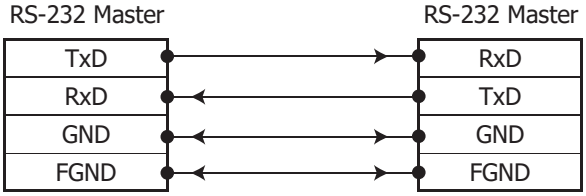
37-pin Female D-sub Connector



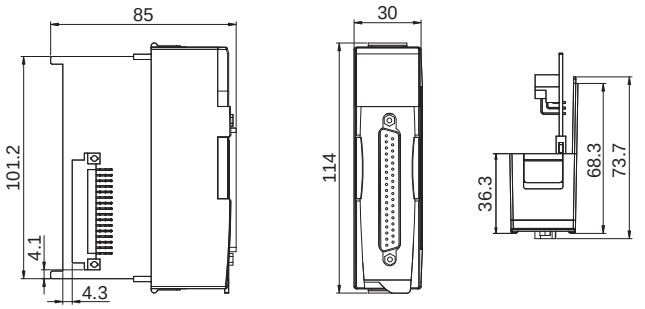
Pin Assignment	Terminal No.		Pin Assignment
N.C.	1	20	N.C.
N.C.	2	21	N.C.
GND3	3	22	N.C.
CTS3	4	23	RTS3
RxD3	5	24	TxD3
N.C.	6	25	N.C.
N.C.	7	26	GND4
N.C.	8	27	CTS4
RTS4	9	28	RxD4
TxD4	10	29	N.C.
N.C.	11	30	N.C.
GND2	12	31	N.C.
CTS2	13	32	RTS2
RxD2	14	33	TxD2
N.C.	15	34	N.C.
N.C.	16	35	GND1
N.C.	17	36	CTS1
RTS1	18	37	RxD1
TxD1	19		

37-pin Female D-sub Connector

3-wire RS-232 Wiring



Dimensions (Units: mm)



Left View | Front View | Top View

Accessories

 **CA-9-3705**	DB37 Male/90° to 4 x DB9 Male Cable [RS-232], 20 cm (RoHS)	 **CA-9-3715D**	DB37 Male/180° to 4 x DB9 Male Cable [RS-232], 1.5 M (RoHS)

Ordering Information

I-8114W-G CR	4-port RS-232 Module (RoHS) Includes CA-4002 (DB37 connector Male)
I-8114W/D2-G CR	4-port RS-232 Module (RoHS) Includes CA-9-3705 Cable
I-8114iW-G CR	4-port Isolated RS-232 Module (RoHS) Includes CA-4002 (DB37 connector Male)
I-8114iW/D2-G CR	4-port Isolated RS-232 Module (RoHS) Includes CA-9-3705 Cable

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