

I-9114i

4-port Isolated RS-232 Module

Features

- 4 Isolated 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

Introduction

The I-9114i provides 4 isolated RS-232 serial ports. Each port is equipped with a 128-byte hardware FIFO 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-9114i 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

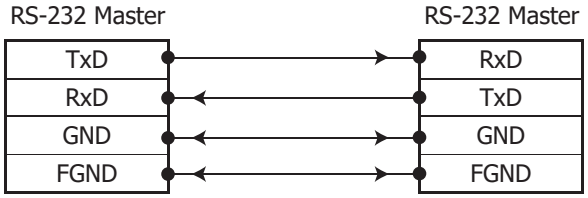
RS-232 Interface	
Ports	4 x RS-232 (TxD, RxD, RTS, CTS, DSR, DTR, DCD, RI, GND)
UART	16C850 Compatible
Protocol	Speed: 115200 bps Max.
	Data Bit: 5, 6, 7, 8
	Stop Bit: 1, 1.5, 2
	Parity: None, Even, Odd, Mark, Space
FIFO	Internal 128 Bytes for Each Port
Self-Tuner Asic inside	Yes
Software	
Supported Libraries	Interrupt driven software library and VxCOM library
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 VDC
EMS Protection	
ESD (IEC 61000-4-2)	±4 kV Contact for Each port
Power	
Power Consumption	1.75 W Max.
Mechanical	
I/O Connector	DB-37 (Female)
Dimensions (W x L x H)	31 mm x 134 mm x 134 mm
Environment	
Operating Temperature	-25 ~ +75 °C
Storage Temperature	-40 ~ +85 °C
Humidity	10 ~ 90% RH, Non-condensing

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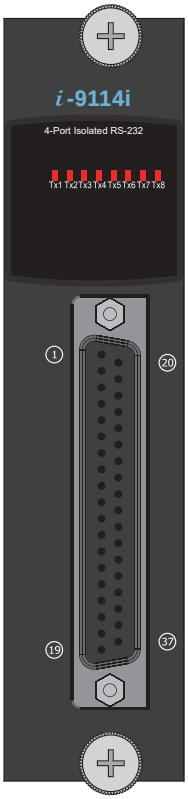
Wire Connections

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

3-wire RS-232 Wiring



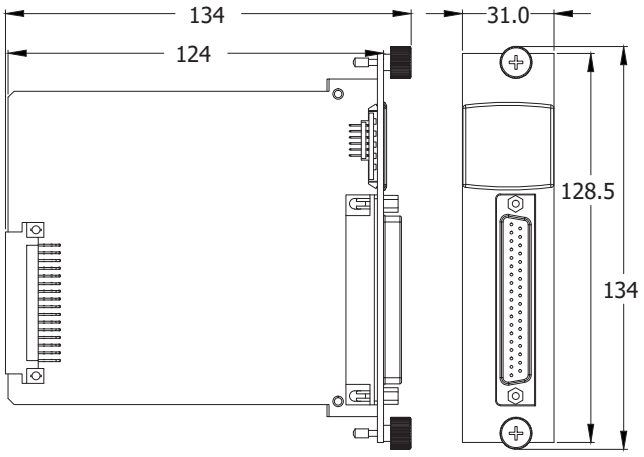
Pin Assignments



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

37-pin Female D-sub Connector

Dimensions (Units: mm)



Left View | Front 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-9114i CR	4-port Isolated RS-232 Module (RoHS)

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