I-9114i
4-port Isolated RS-232 Module

Features

- Includes 4 Isolated RS-232 Ports
- Baud Rate of up to 115200 bps
- Internal 128-byte Hardware FIFO for Each Port
- RoHS Compliant & Halogen Free
- ±4 kV ESD Protection on Each Port
- LED Indicators for TxD, RxD and Power Status
- 3000 VDC Isolation
- Low Power Consumption

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.

Applications

- Factory, Building and Home Automation

Software

- Supports interrupt driven software library
- Supports VxCOM library

System Specifications

Model	I-9114i
LED Indicators	
System LED Indictor	1 LED as Power Indicator
I/O LED Indicator	4 LEDs as TxD Indicators; 4 LEDs as RxD Indicators
Power	
Power Consumption	1.75 W
Mechanical	
I/O Connector	DB-37 (Female)
Dimensions (L × W × H)	134 mm × 31 mm × 133 mm
Environment	
OperatingTemperature	-25 ~ +75°C
Storage Temperature	-40 ~ +85°C
Humidity	10 ~ 90% RH, Non-condensing

I/O Specifications

Model	I-9114i
RS-232 Interface	
Ports	4
Interface	TxD, RxD, RTS, CTS, DSR, DTR, DCD, RI, GND
Controller	16C850 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
Self-Tuner Asic inside	Yes
Isolation	
Intra-module Isolation, Field-to-Logic	3000 VDC
EMS Protection	
ESD (IEC 61000-4-2)	±4 kV Contact for Each port

■ Wire Connections

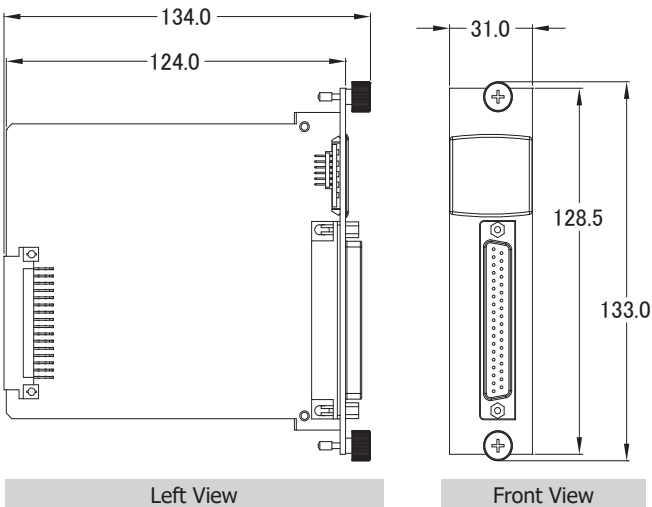| DTE Device (Computer)	**DB9**	**DTE to DCE** Connections	DCE Device (Modem)	**DB9**
Pin# DB9 RS-232 Signal Names		Signal Direction	Pin# DB9 RS-232 Signal Names	
#1 Carrier Detector	DCD	←	#1 Carrier Detector	DCD
#2 Receive Data	RxD	←	#2 Transmit Data	TxD
#3 Transmit Data	TxD	→	#3 Receive Data	RxD
#4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

RS-232 Master

TxD	→ RxD
RxD	← TxD
GND	↔ GND
FGND	↔ FGND

RS-232 Master

■ Dimensions (Units: mm)

134.0
124.0
Left View

31.0
128.5
133.0
Front View

■ Pin Assignments

i-9114i
4-Port Isolated RS-232
Tx1 Tx2 Tx3 Tx4 Tx5 Tx6 Tx7 Tx8

① ⑳
⑲ ㊲
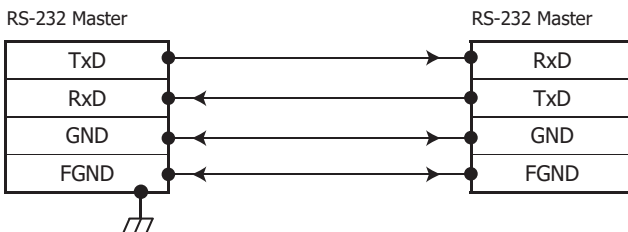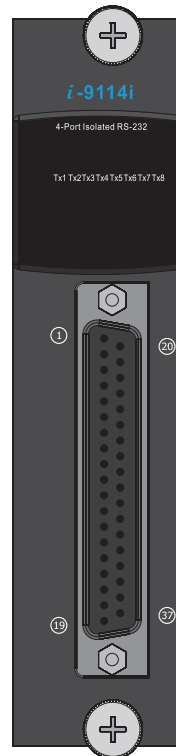
Pin Assignment	Terminal No.		Pin Assignment
N.C.	01		
DCD3	02	20	RI3
GND3	03	21	DTR3
CTS3	04	22	DSR3
RxD3	05	23	RTS3
RI4	06	24	TxD3
DTR4	07	25	DCD4
DSR4	08	26	GND4
RTS4	09	27	CTS4
TxD4	10	28	RxD4
DCD2	11	29	RI2
GND2	12	30	DTR2
CTS2	13	31	DSR2
RxD2	14	32	RTS2
RI1	15	33	TxD2
DTR1	16	34	DCD1
DSR1	17	35	GND1
RTS1	18	36	CTS1
TxD1	19	37	RxD1
		37-pin Male D-sub Connector	

■ Ordering Information

I-9114i CR	4-port Isolated RS-232 Module (RoHS)

■ 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. 0.5M Cable for I-8114W/I-8114iW/I-9114i (90º)