ICP DAS

Features

- Serial Port with +/-4 kV ESD Protection
- Baud Rate of up to 115200 bps
- Internal 16-byte Hardware FIFO for each Port
- LED Indicators for TxD, Error and Power Status

I-8114   I-8114-G
4-port RS-232 Module

CE FC RoHS

Introduction

The I-8114 provides 4 non-isolated RS-232 serial ports. It is equipped with a 16-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-8114 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.
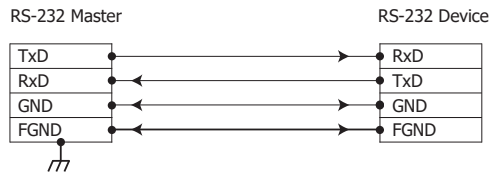
Specifications

LED Indicators/Display	
Power	1 LED
TxD	4 LEDs
Error	4 LEDs
EMS Protection	
ESD (IEC 61000-4-2)	±4 kV Contact for each Terminal
Power	
Power Consumption	0.9 W
Mechanical	
Dimensions (W × L × H)	31 mm × 114 mm × 67 mm
Environment	
Operating Temperature	-25 ~ +75 °C
Storage Temperature	-40 ~ +85 °C
Humidity	5 ~ 95% RH, Non-condensing

COM Ports	
Ports	4 x RS-232
Baud Rate	115200 bps Max.
Parity	None, Even, Odd, Mark, Space
Data Bit	5, 6, 7, 8
Stop Bit	1, 1.5, 2
FIFO Size	Internal 16 bytes 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 — RS-232 Device

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

■ Dimensions (Units: mm)

67.0
31.0
101.2
114.0
110.0
57.0
54.0
22.0
4.0
4.6

Left View   Front View   Top View

■ Pin Assignments

i-8114
Tx1 Tx2 Tx3 Tx4 Er1 Er2 Er3 Er4

Port 1
Port 2
Port 3
Port 4
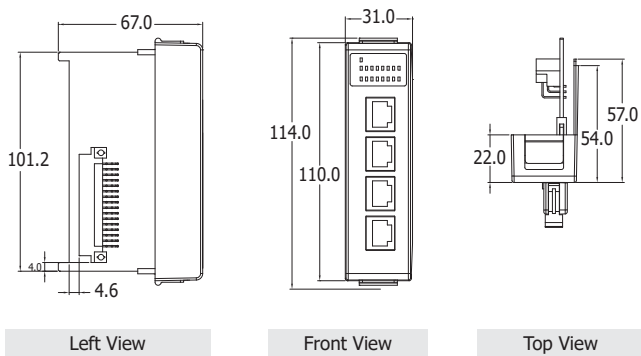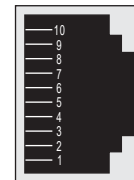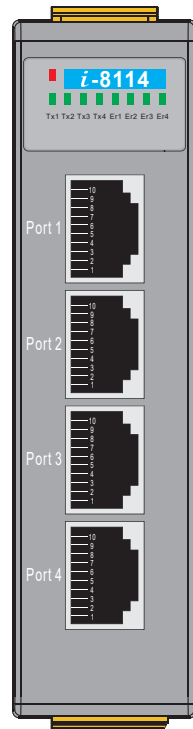
10-pin RJ-45

Pin		Signal	Mode
01	DCD	Data Carrier Detect	Input
02	DSR	Data Set Ready	Input
03	RTS	Request To Send	Output
04	GND	Ground	
05	TD	Transmit Data	Output
06	RD	Receive Data	Input
07	GND	Ground	
08	CTS	Clear To Send	Input
09	DTR	Data Term Ready	Output
10	RI	Ring Indicator	Input

■ Ordering Information

I-8114 CR	4-port Non-isolated RS-232 Module (Blue Cover) (RoHS) Includes CA-RJ0903 Cable (9-pin Male D-sub to 10-pin RJ-45 Cable, 30 cm)	
I-8114-G CR	4-port Non-isolated RS-232 Module (Gray Cover) (RoHS) Includes CA-RJ0903 Cable (9-pin Male D-sub to 10-pin RJ-45 Cable, 30 cm)	CA-RJ0903

■ Accessories

	CA-RJ1003	10-pin & RJ-45 Cable, 30 cm (RoHS)		CA-RJ1010	10-pin & RJ-45 Cable, 1 M (RoHS)