

I-9144i

4-port Isolated RS-422/485 Module

Features

- 4 Isolated RS-422/485 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-9144i provides 4 isolated RS-422/485 serial ports. Each port is equipped with a 128-byte hardware FIFO and offers speeds up to 115.2 kbps with support for RS-422 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-9144i from permanent damage.

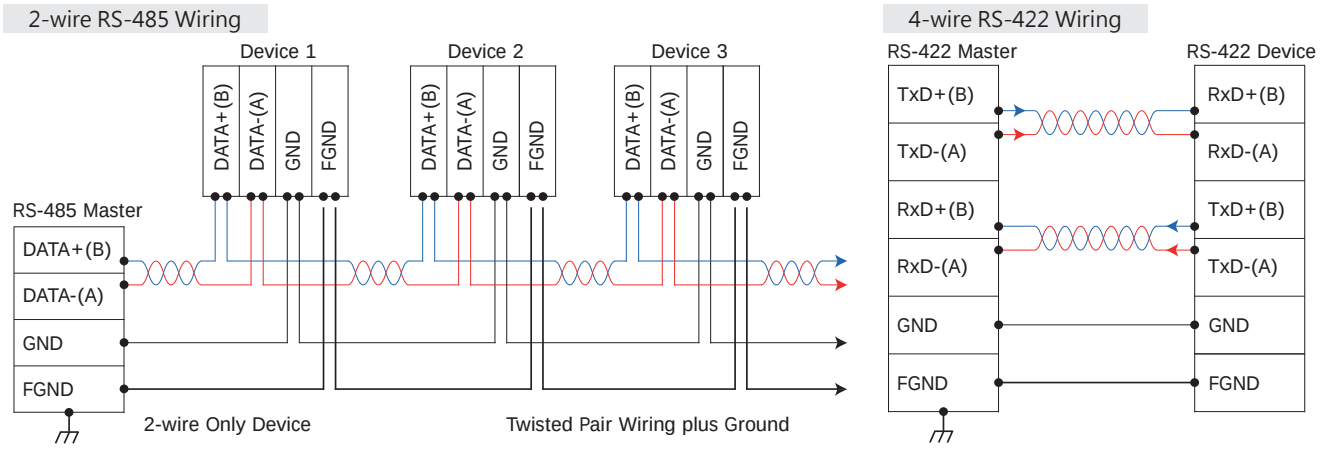
The serial communication modules are designed for use with intelligent devices like bar code readers, serial printers, intelligent sensors, instrumentation equipment, computers, and almost any device with an RS-422/485 port.

System Specifications

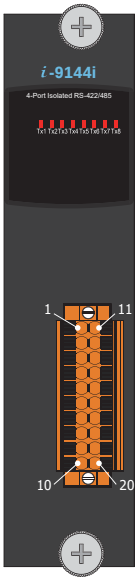
RS-422/RS-485 Interface	
Ports	4, Isolated RS-422/485 (The RS-422 and RS-485 can not be used simultaneously) RS-422: TxD+, TxD-, RxD+, RxD-, GND; RS-485: D+, D-, GND
Cabling	Belden 9841 (2P twisted-pair cable)/Belden 9842 (4P twisted-pair cable)
Transfer Distance	Max. 1,200 m at 9.6 kbps; Max. 400 m at 115.2 kbps
Controller	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
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	3 W (With 2 Resistors,1/4 Watt, 120 Ω 5%)
Mechanical	
I/O Connector	Removable 20-Pin Terminal Block
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

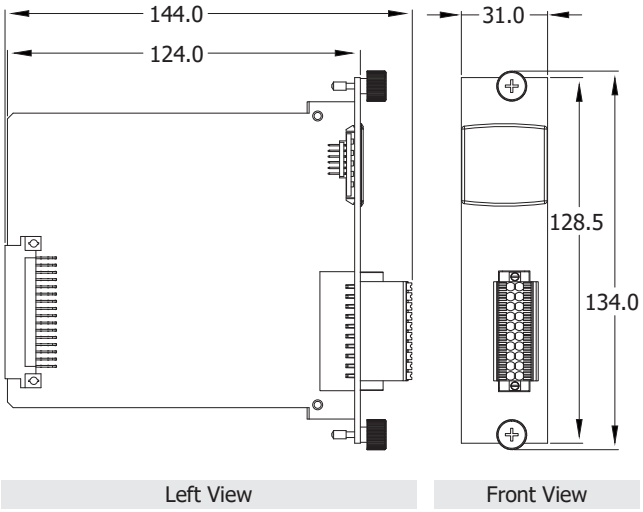


Pin Assignments



Pin Assignment	Terminal No.		Pin Assignment
D1+/TxD1+	01	11	D3+/TxD3+
D1-/TxD1-	02	12	D3-/TxD3-
RxD1+	03	13	RxD3+
RxD1-	04	14	RxD3-
GND1	05	15	GND3
D2+/TxD2+	06	16	D4+/TxD4+
D2-/TxD2-	07	17	D4-/TxD4-
RxD2+	08	18	RxD4+
RxD2-	09	19	RxD4-
GND2	10	20	GND4

Dimensions (Units: mm)



Ordering Information

I-9144i CR	4-port Isolated RS-422/485 Module (RoHS)

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