



I-8144

I-8144-G

4-port RS-422/485 Module

Features

- Serial Port with +/-4 kV ESD Protection
- Baud Rate of up to 115200 bps
- Built-in Self-Tuner or Auto-Direction Control
- Internal 16-byte Hardware FIFO for each Port
- LED Indicators for TxD, RxD and Power Status



Introduction

The I-8144 provides 4 non-isolated RS-422/485 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 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-8142/I-8144 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.

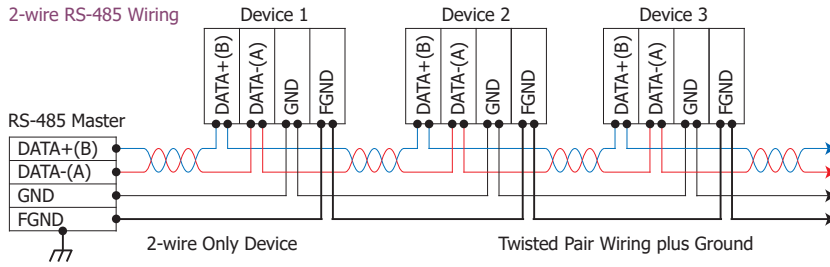
Specifications

LED Indicators/Display	
Power	1 LED
TxD	4 LEDs
Error	4 LEDs
Isolation	
Intra-module Isolation, Field-to-Logic	-
EMS Protection	
ESD (IEC 61000-4-2)	±4 kV Contact for each Terminal
Power	
Power Consumption	1.9 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

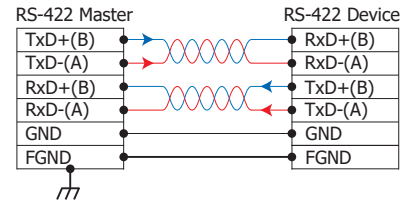
COM Ports	
Ports	4 x RS-422/485
Baud Rate	115200 bps Max.
Parity	None, Even, Odd, Mark, Space
Data Bit	5, 6, 7, 8
Stop Bit	1, 1.5, 2
FIFO Size	Internal 16 bytes for each port

Wire Connections

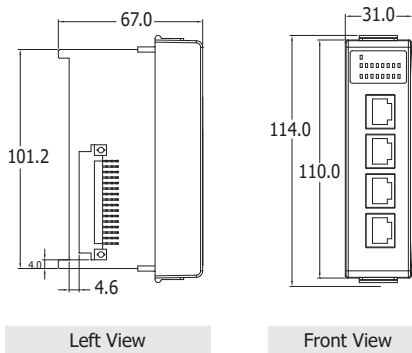
2-wire RS-485 Wiring



4-wire RS-422 Wiring

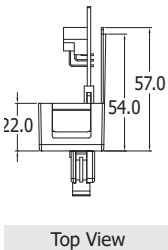


Dimensions (Units: mm)



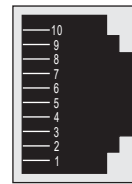
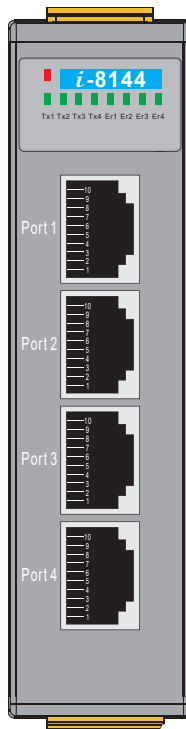
Left View

Front View



Top View


Pin Assignments





10-pin RJ-45

Pin	Signal	Mode	
01	GND	Ground	
02	TxD+/D+	Transmit Data Positive Data+	Output
03	TxD-/D-	Transmit Data Negative Data-	Output
04	RxD+	Receive Data Positive	Input
05	RxD-	Receive Data Negative	Input
06	RTS+	Request To Send Positive	Output
07	RTS-	Request To Send Negative	Output
08	CTS+	Clear To Send Positive	Input
09	CTS-	Clear To Send Negative	Input
10	GND	Ground	

Ordering Information

I-8144 CR	4-port Non-isolated RS-422/485 Module (RoHS) Includes CA-RJ1003 Cable (10-pin RJ-45 to 10-wire Cable, 30 cm)	 <p>CA-RJ1003</p>
I-8144-G CR	4-port Non-isolated RS-422/485 Module (Blue Cover) (RoHS) Includes CA-RJ1003 Cable (10-pin RJ-45 to 10-wire Cable, 30 cm)	

Accessories

 <p>CA-RJ0903</p>	9-pin Male D-sub & RJ-45 cable, 30 cm (RoHS)	 <p>CA-RJ1010</p>	10-pin & RJ-45 Cable, 1 M (RoHS)
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