



**I-8142iW** | **I-8144iW**  
 2-port Isolated RS-422/485 Module | 4-port Isolated RS-422/485 Module

### Features

- 2/4 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-8142iW-G provides 2 isolated RS-422/485 serial ports, while the I-8144iW-G provides 4 isolated RS422/485 serial ports. It is equipped with a 128-byte hardware FIFO for each port and offers speeds up to 115.2kbps with support for RS-422 full-duplex communication.

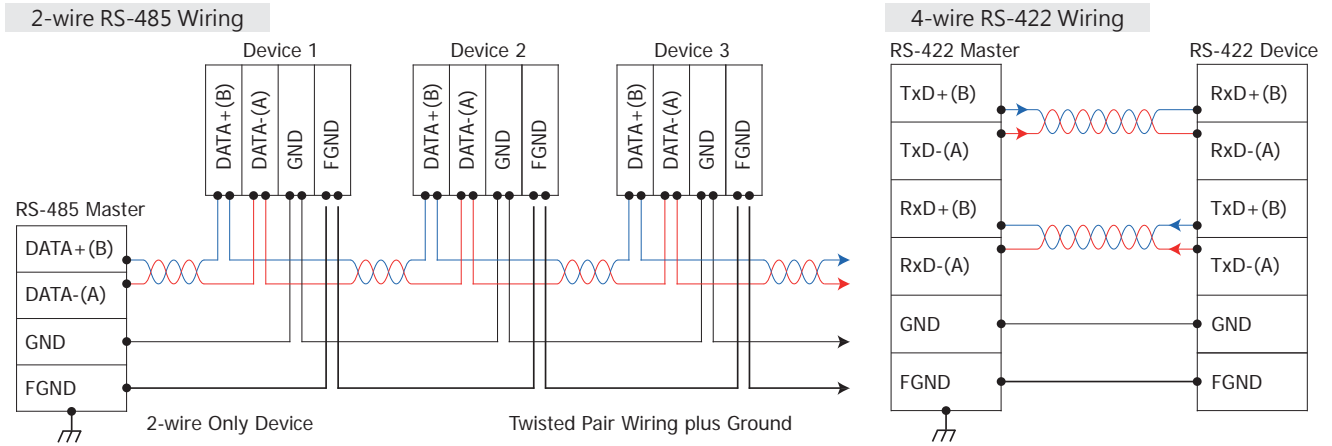
In the harsh industrial environment, the onboard ESD protection devices can divert this potentially damaging charge away from sensitive circuitry and protect the I-8142iW/I-8144iW from permanent damage.

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.

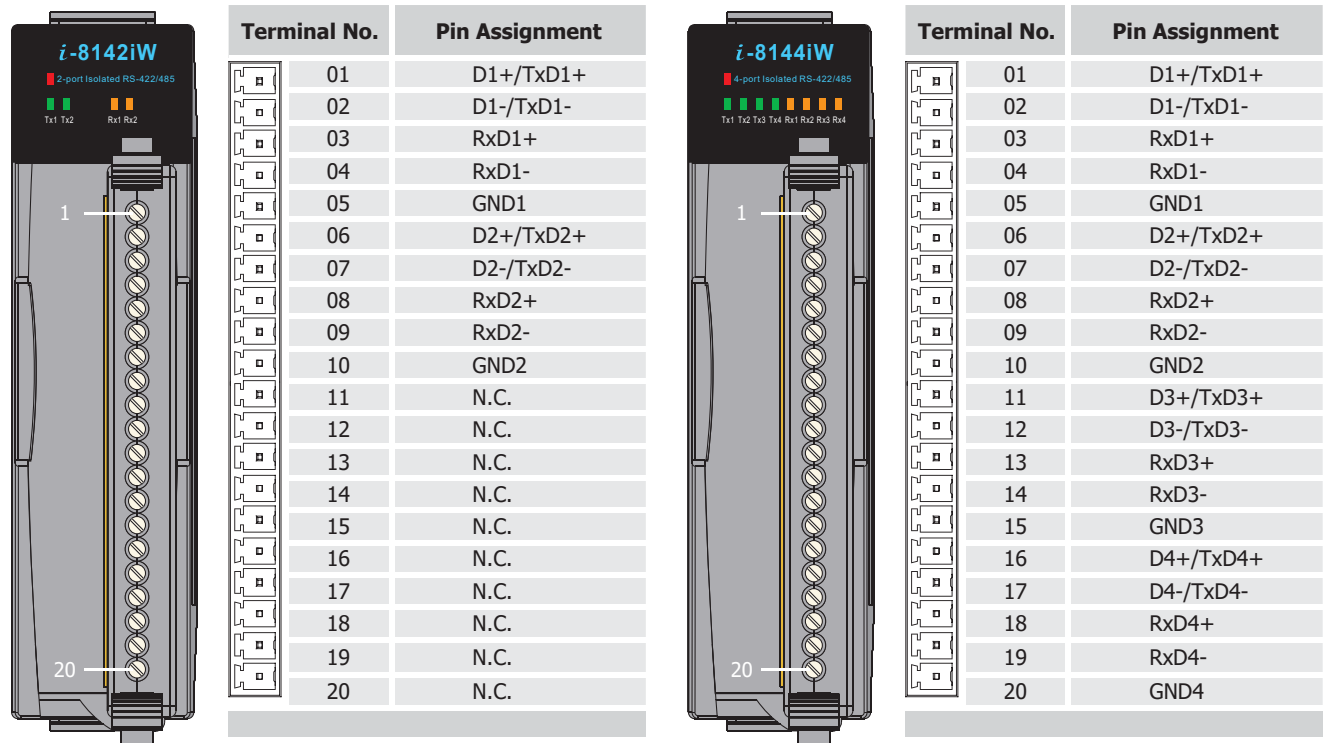
### System Specifications

Model	I-8142iW	I-8144iW
<b>COM Port</b>		
Ports	2 x RS-422/RS-485	4 x RS-422/RS-485
Interface	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	
Protocol	Speed: 115200 bps Max.	
	Data Bit: 5, 6, 7, 8	
	Stop Bit: 1, 1.5, 2	
FIFO	Internal 128 Bytes for Each Port	
<b>LED Display</b>		
System LED Indicator	1 LED as Power Indicator	
I/O LED Indicator	4 LEDs as TxD Indicators; 4 LEDs as RxD Indicators	
<b>Isolation</b>		
Intra-module Isolation, Field-to-Logic	2500 VDC	
<b>EMS Protection</b>		
ESD (IEC 61000-4-2)	±4 kV Contact for Each port	
<b>Power</b>		
Consumption	1.5 W (without Resistor), 2 W (With 2 Resistors, 1/4 W, 120 Ω 5 %)	1.75 W (without Resistor), 3 W (With 4 Resistors, 1/4 W, 120 Ω 5 %)
<b>Mechanical</b>		
Dimensions (W x L x H)	30 mm x 115 mm x 102 mm	
<b>Environment</b>		
Operating Temperature	-25 ~ +75 °C	
Storage Temperature	-40 ~ +85 °C	
Humidity	10 ~ 90 % RH, Non-condensing	

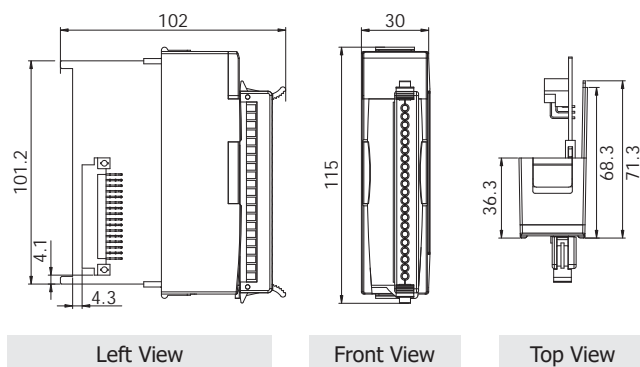
## Wire Connections



## Pin Assignments



## Dimensions (Units: mm)



## Ordering Information

<b>I-8142iW-G CR</b>	2-port Isolated RS-422/485 Module (RoHS)
<b>I-8144iW-G CR</b>	4-port Isolated RS-422/485 Module (RoHS)