ISC-1212-I

>> *Industrial RS-422/485 Repeater with Isolation*

- RS-422/485 interface repeater with 3000VDC isolation
- RS-485 support auto flow control
- Serial type support auto detect and switch
- Support auto switch baud rate
- Reach distance up to 4000 feet (1200m)
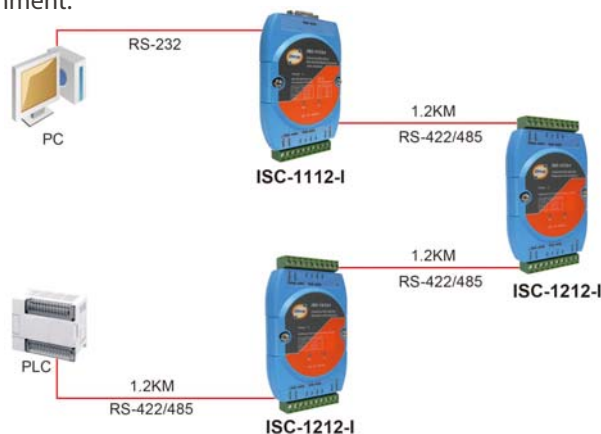- Support multiple baud rate and multiple data format

> Features

- Automatic internal RS-422/485 bus supervision
- No external flow control signals required for RS-485
- Minimum 3000VDC isolation protection
- Supported baud rate up to 115.2Kbps
- Reach distance up to 4000 feet (1200m)

- Reserved space for termination resistors (R8,R9)
- Power and data flow indicator for troubleshooting
- Power requirement : +9 ~ 30VDC
- ABS with captive mounting hardware design
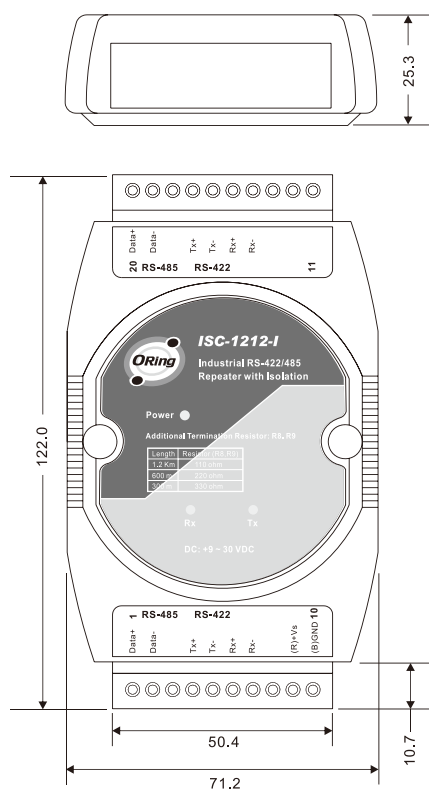- Mounts easily on DIN-Rail or panel

> Introduction

The ISC-1212-I RS-422/485 repeater boosts the RS-422/485 signals to extend the reach distance up to 4000 ft (1200m) and increase the maximum number of connected nodes up to 128. With a special circuitry, ISC-1212-I is able to automatically detect the data flow and switch the direction of the data lines accordingly. "Auto baud rate detector" enables ISC-1212-I to automatically configure RS-422/485 signals to any baud rate without external switch setting. Build in Opto-isolations on ISC-1212-I provides 3000VDC of isolation to protect the host computer from ground loops and destructive voltage spikes on the RS-422/485 data lines. ISC-1212-I also offers internal surge-protection on the data lines. Internal high-speed transient suppressors on each data line protect the module from dangerous voltages levels or spikes. Therefore, the ISC-1212-I is a reliable RS-422/485 repeater and can satisfy most demand of operating environment.

Connections of Media Converter

Company Overview

Key Technologies

New Products

Product Selection Guide

Industrial Ethernet Switch

Industrial Media Converter

Industrial Device Server

Industrial Wireless Solution

Industrial Serial Card

USB Server

Accessories

> Dimension

(Unit=mm)

> Pin Assignment

Inputs RS-422/485 Terminal Block Pin Assignment

Interface	RS-485		Reserved	RS-422				Reserved		
Pin No.	1	2	3	4	5	6	7	8	9	10
Info	Data+	Data-	N.C.	TX+	X-	RX+	RX-	N.C.	V+	GND

Outputs RS-422/485 Terminal Block Pin Assignment

Interface	RS-485		Reserved	RS-422				Reserved	Power Input	
Pin No.	20	19	18	17	16	15	14	13	12	11
Info	Data+	Data-	N.C.	TX+	TX-	RX+	RX-	N.C.		

> Specifications

ORing Media Converter Model	ISC-1212-I
Physical Ports	
RS-422/485 Connector	10-pin terminal block
RS-422/485 Signals	RS-422 : TxD+, TxD-, RxD+, RxD- RS-485 : Data+, Data-, GND
Baud Rate	300 ~ 115.2 Kbps

Data bit	5, 6, 7, 8
Stop bit	1, 1.5, 2
Parity	None, Even, Odd, Space, Mark
Flow Control	XON/XOFF(software) Auto Hardware Direction Control for RS-485
LED Indicators	
Power Indicator	Green : Power LED x 1
TxD Indicator	Green LED x 1
RxD Indicator	Red LED x 1
Power	
Input Power	+9 ~ 30 VDC power inputs in 10-pin terminal block
Power Consumption (Typ.)	0.7 Watts
Physical Characteristic	
Enclosure	ABS
Dimension (W x D x H)	71.2(W) x 25.3(D) x 100.6(H) mm (2.8x1x3.96 inch.)
Weight (g)	130g
Environmental	
Storage Temperature	-25 to 85°C (-13 to 185°F)
Operating Temperature	-10 to 70°C (14 to 158°F)
Operating Humidity	5% to 95% Non-condensing
Regulatory approvals	
EMI	FCC Part 15, CISPR (EN55022) class A
EMS	EN61000-4-2 (ESD), EN61000-4-3 (RS), EN61000-4-4 (EFT), EN61000-4-5 (Surge), EN61000-4-6 (CS), EN61000-4-8, EN61000-4-11
Shock	IEC60068-2-27
Free Fall	IEC60068-2-32
Vibration	IEC60068-2-6
Warranty	2 years

> Ordering Information

ISC- A B C D E - F

Code Definition	Serial Port Number	Serial Port Type	Converter Prot Number	Converter Type	Other Converter Type	Additional function
Option	- **1 :** 1 ports	- **1 :** RS-232 only - **2 :** RS-422/485 - **3 :** RS-232/422/485	- **1 :** 1 ports	- **0 :** other type - **1 :** RS-232 only - **2 :** RS-422/485 - **3 :** RS-232/422/485	- **F :** 100FX Fiber - **U :** USB	- **I :** Isolation

Available Model	Model Name	Description	Operating Temperature
	ISC-1212-I	Industrial RS-422/485 repeater with Isolation	-10 to 70°C