ISC-1212-I

ISC-1212-I

Industrial RS-422/485 repeater with 3KV isolation

Features

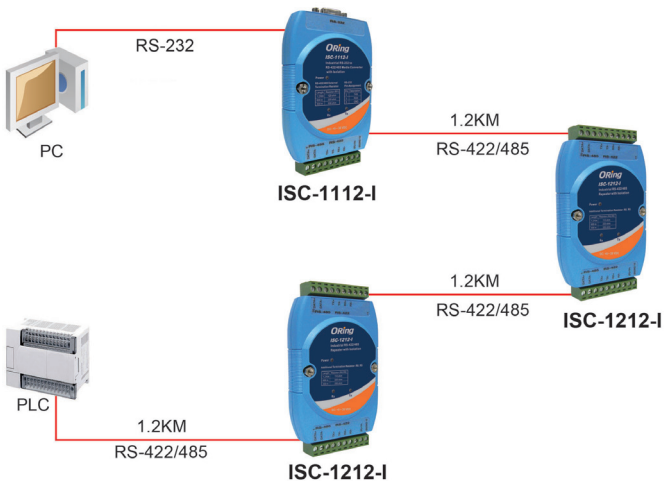
- Automatic internal RS-422/485 bus supervision
- No external flow control signals required for RS-485
- Serial type support auto detect and switch
- Supported baud rate up to 115.2Kbps
- Reach distance up to 4000 feet (1200m)
- Support multiple baud rate and multiple data format
- Reserved space for termination resistors (R8,R9)
- Power and data flow indicator for troubleshooting
- Power requirement : +9 ~ 30VDC
- DIN-Rail and wall mounting enabled



Isolation
-10~70°C Temperature
RoHS Lead Free

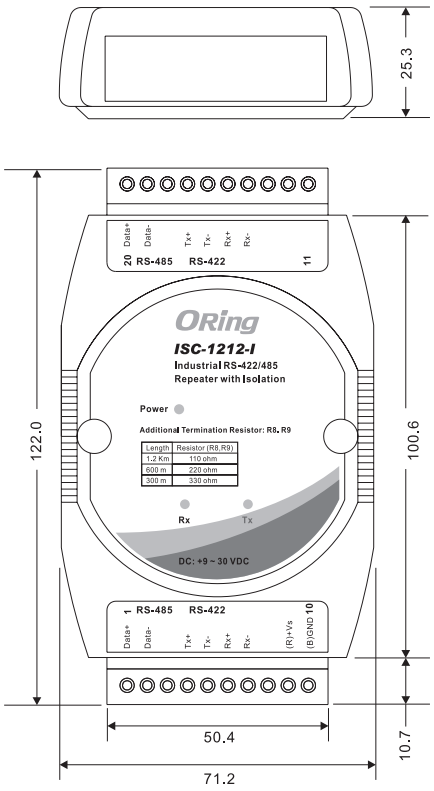
Introduction

The ISC-1212-I is a RS-422/485 repeater which boosts the RS-422/485 signals to extend the reach distance up to 4000 ft (1200m) and increase the maximum number of connection up to 128 nodes. 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 destructive voltage spikes on the RS-422/485 data lines. ISC-1212-I also offers internal surge-protection on the data lines. The 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 RS-422/485 Repeater

Dimensions



(Unit=mm)

Pin Assignment

Inputs RS-422/485 Terminal Block Pin Assignment										
Interface	RS-485		Reserved	RS-422				Reserved	Power Input	
Pin No.	1	2	3	4	5	6	7	8	9	10
Info	Data+	Data-	N.C.	TX+	TX-	RX+	RX-	N.C.	V+	GND

Outputs RS-422/485 Terminal Block Pin Assignment										
Interface	RS-485		Reserved	RS-422				Reserved		
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 : TX+, TX-, RX+, RX- RS-485 : Data+, Data-
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 on 10-pin terminal block
Power Consumption (Typ.)	0.7 Watts
Physical Characteristics	
Enclosure	IP-30
Dimensions (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 :** 1port	- **1 :** RS-232 - **2 :** RS-422/485 - **3 :** RS-232/422/485	- **1 :** 1port	- **0 :** other type - **1 :** RS-232 - **2 :** RS-422/485 - **3 :** RS-232/422/485	- **F :** 100Base-FX Fiber - **U :** USB	- **I :** Isolation

	Model Name	Description
Available Model	ISC-1212-I	Industrial RS-422/485 repeater with 3KV isolation

Packing List

- ISC-1212-I
- DIN-Rail Kit
- Wall-Mount Kit
- Quick Installation Guide

Optional Accessories (Can be purchased separately)

- DR-45 series, 45W DIN-Rail power supply
- DR-75-12, 12V/75W DIN-Rail power supply
- DR-75-24, 24V/75W DIN-Rail power supply