

Ci-SS200

General Serial Signal Converter

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Summary

This product is an industrial RS-485 bus isolator, provide RS-485 serial port, support Modbus/MPI/PPI and other buses, communication rate 0~2Mbps Adaptive, 2-channel bus interface data forwarding, electrical signal isolation and cable system to provide a star link. This product features with industrial grade design, IP40 protection grade, wavy aluminum strengthening shell, 35mmDIN rail installation, DC (18~36V) wide power input (9~18VDC power model customizable), with relay alarm output, power supply redundancy and isolation protection etc.. -40~75 working temperature range, can meet the requirements of a variety of industrial sites.

Characteristic

- Support 2 RS-485 bus, baudrate:0~2Mbps optional
- 2 Ports isolation function, support star link and extend the General Serial Fieldbus transmission distance
- Support electrical isolation, constant voltage 1000V and provide 4000V lightning protection function
- Support Modbus/MPI/PPI etc many Fieldbus to Signal Converter
- Provide 3 LED status indicators
- DC (18~36V) dual redundant power input (can be customized with 9~18VDC), With DC1500V voltage isolation and reverse connect protection
- IP40 protection, Metal case (wave grain aluminum reinforce case option), 35mmDIN-Rail Installation
- Operating Temperature: -40°C to 75°C suitable to various Industrial work situation

Specification

Bus data interface

- DB9F interface
- Support for Modbus/MPI/PPI etc many Fieldbus based on RS-485 protocol
- RS-485 support A, B half-duplex mode , baudrate:0~2Mbps
- constant voltage 1000V
- Resistor: without terminal resistor, connect external when necessary.

Power

- DC (18~36V) dual redundant power input (can be

More Reliable Connection, More Intellegent Life

customized with 9~18VDC), industrial standard voltage DC24V, consumption is less than 1.5W, With DC1500V voltage isolation and reverse connect protection, adopt 5 cores 5.08mm industrial terminal port (please use industrial standard power, otherwise it will occur unit error or damage).

Protection

- Relay: Fieldbus ports error Relay alarm output
- Contact rating: 1A @24V DC, Industrial Terminal port

Mechanical

- Dimensions (H×D×W): 136mm×104.8mm×52.8mm
- Weight:800g
- Casing: IP40 protection, wave grain aluminum reinforce case option
- Installation: Wall mounting or DIN rail mounting

Environmental

- Operating Temperature:-40 °C ~75 °C (-40 °C ~85 °C optional)
- Storage Temperature: -40°C~85°C
- Ambient Relative Humidity: 5%~95%(non-condensing)

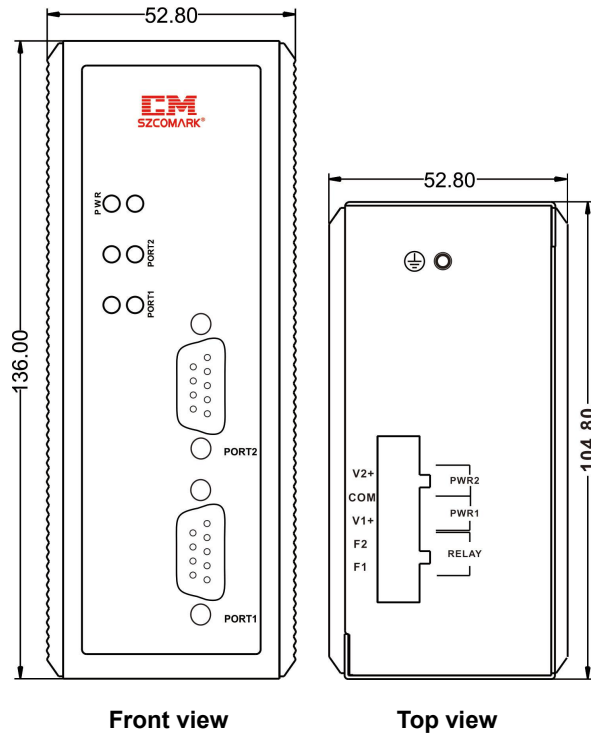
Warranty

- Warranty Period: 5 years

Certifications

- IEC61000-4-2(ESD): Power ±8KV Contact, ±15KV Air; Relay ±8KV Contact, ±15KV Air; Data Cable ±15KV Air
- IEC61000-4-4(EFT):Power ±4KV, Data Cable ±4KV
- IEC61000-4-5(Surge):Power ±2KV CM/ ±1KV DM, Relay±2KV CM/ ±1KV DM
- IEC60068-2-27(Shock)
- IEC60068-2-32(Free Fall)
- IEC61000-6-2(General Industrial Standard)
- EN50121-4 (rail transit)

Overall Dimension



LED Indicators

LED	state	Description
PWR	off	Non-connect or error
	light	Power is ok
PORT 1-2	off	Fieldbus is closed
	shine	Copper port is normal, can received data
	light	Copper Port is not working properly.

Terminal Resistor

Resistor is to eliminate the effect of the signal reflected in communication cable, can be connected in the two terminal nodes of the cable as needed. Signal converter is to make cable bus segment, each segment on both ends of the cable can be an external resistor as needed. Please refer to the bus standard resistor connection mode, such as using splitter.

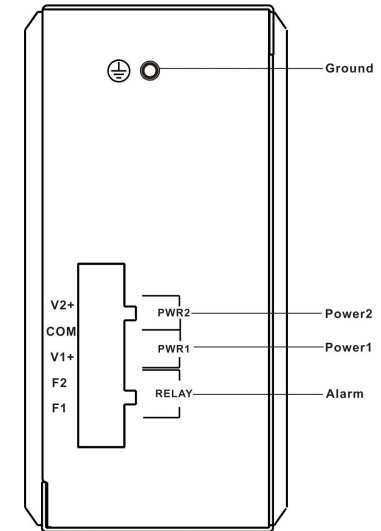
Connection

1. Bus cable connection method:

Appearance	Pin	Definition
	1	Shield or protect Ground
	2	-
	3	Data cable A
	4	-
	5	Data reference potential (ground)
	6	-
	7	-
	8	Data cable B
	9	-

2. Power and Relay alarm output connection:

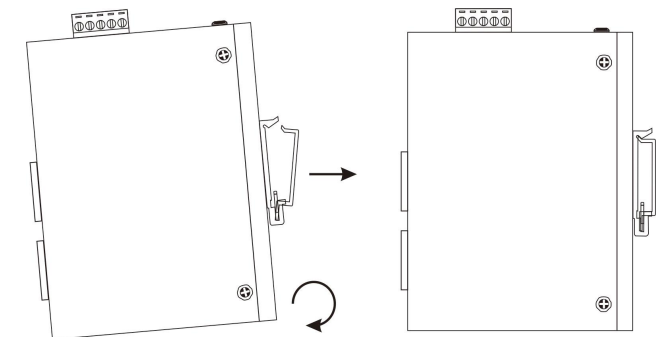
- this device supports dual redundant input, V1 +, V2 + respectively connect the anode of power supply (DC18 ~36V), COM with cathode (double power sharing). (can be customized with 9~18VDC)
- Relay alarm output connection: F1, F2 in normal open. When the alarm is closed, make F1, F2 both contacted in series with external alarm circuit (e.g., buzzer, etc.).(When there is no electricity on device, the relay is closed.) As shown in the figure below.



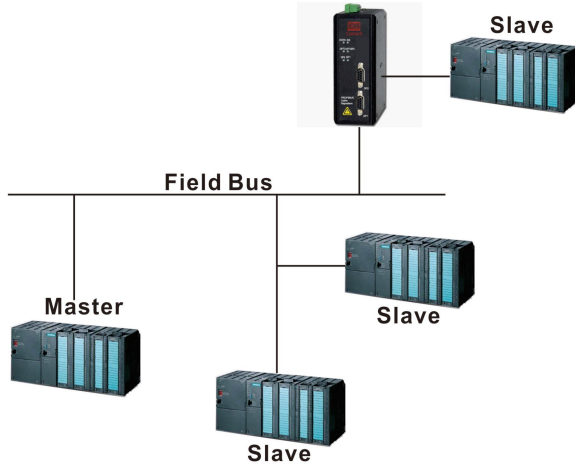
DIN-Rail Installation

In order to use in industrial environments expediently, Ci-SS200 adopt 35mm DIN-Rail installation, the installation steps as follows:

- Step 1: Examine the DIN-Rail attachment
- Step 2: Examine DIN Rail whether be firm and the position is suitability or not.
- Step 3: insert the bottom of the DIN-RAIL into the slot, then insert the top of the DIN-RAIL into the slot.
- Step 4: after insert the DIN-RAIL into the slot, check the device is installed into the slot firmly.



Typical Application



ground connection is via the landing screw on the sideboard, please use the professional landing line, which is less than 2.5 mm², and landing resistor is less than 50ohms.

Order Information

Part No.	Description
Ci-SS200	1 channel standard RS-485 port, baud rate 0~2Mbps optional, 18v~36VDC (9~18vdc Optional).

Troubleshooting

Fault Symptoms	What to Do
PWR off	Check and ensure the power supply meets the requirement, and terminal wiring is correct or not.
PORT 1~2 off	Serial data communication is abnormal, check the connector.

Package Checklist

Please check accessories completely when open the box.

Packing list is as follows:

- Serial data signal converter (with industrial terminal block for power equipment)
- Product specification
- Product warranty card

Cautions

- Please use DC24V Industrial standard power(if customized with 9~18VDC, please use DC 12V Industrial standard power). Please use 0.75mm² above quality copper line.
- When relay alarm output, the voltage and current can exceed the rated one(1A@24VDC), otherwise, it will damage the unit.
- This device is precision communication instruction, please insure its ground connection well, the device