

Model OT-PLC302C-RS2 Power Line Ethernet Extender

Description

OT-PLC302C-RS2 Power line Ethernet Extender is a high-speed Ethernet signal transmission device. It can transmit power + Ethernet + RS232 serial data signals via 2-wire power line up to 600m.



This device contains the Transmitter unit and the Receiver unit. There is the built-in noise reduction isolation transformer and isolation frequency crosstalk function. It transmits multiple signals over one 2-wire cable, used for various middle and short distance Ethernet signal transmission.

Application



IP Video Surveillance



Network Smart Home



Elevator IP Surveillance

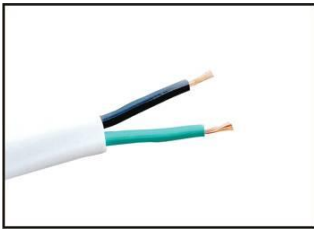


Intelligent Network Industry

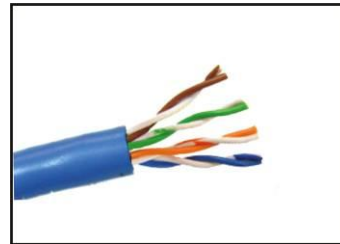
Features

- ◆ Max transmission distance can reach 600m (RVS 2×1mm²)
- ◆ Support power over one cable technology (110 / 220VAC)
- ◆ Support RS232 serial data transmission
- ◆ Built-in ESD protection circuit, effectively prevent electrostatic damage
- ◆ Support one power cable to simultaneously transmit multiple signals, built-in isolation filter circuit

Cable Tips

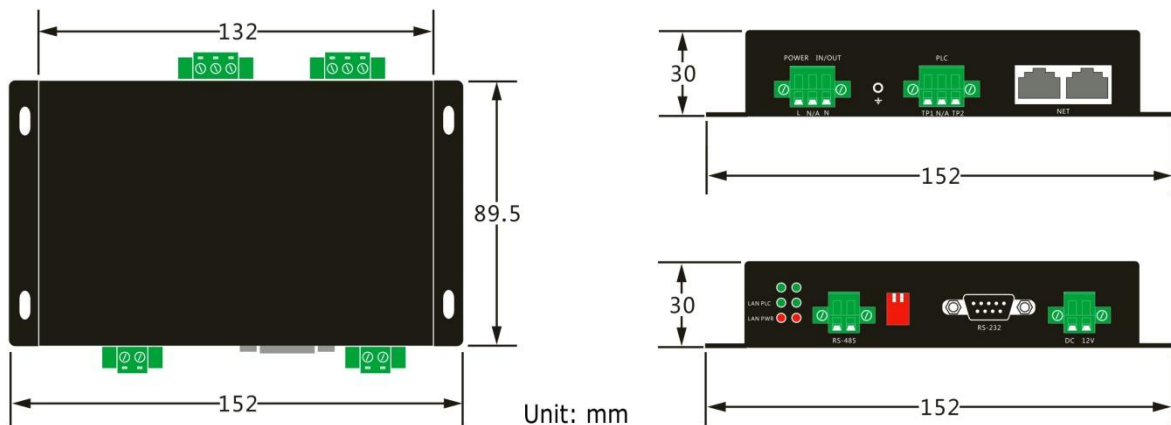


Power Line: RVV/RVS/RVVP/RVB 2×0.5mm² above



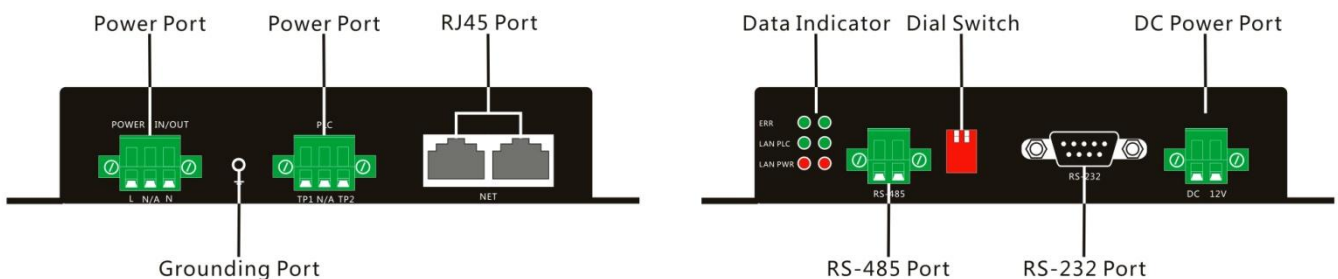
Twisted Pair Cable: Cat5 cable or above

Dimension



Note: Dimension error value ±0.5 mm

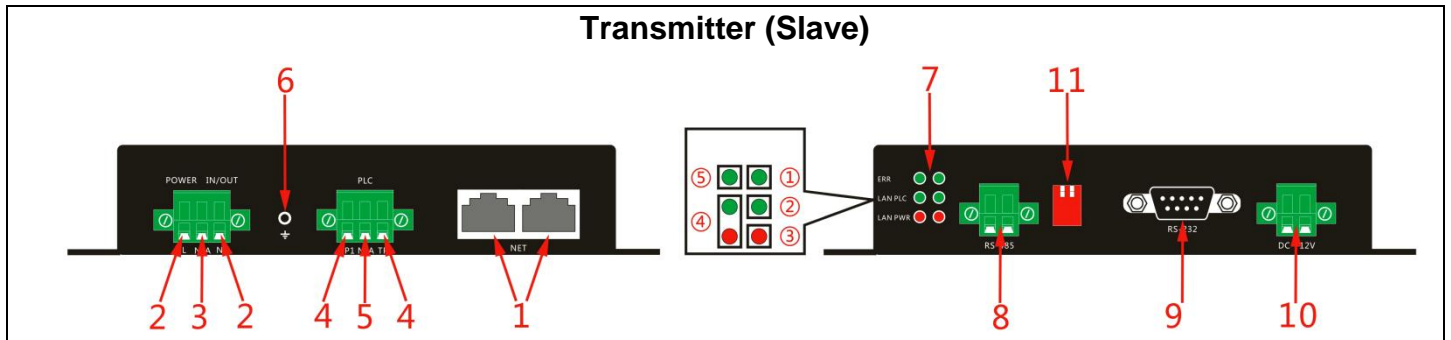
Terminals



Technical Parameter

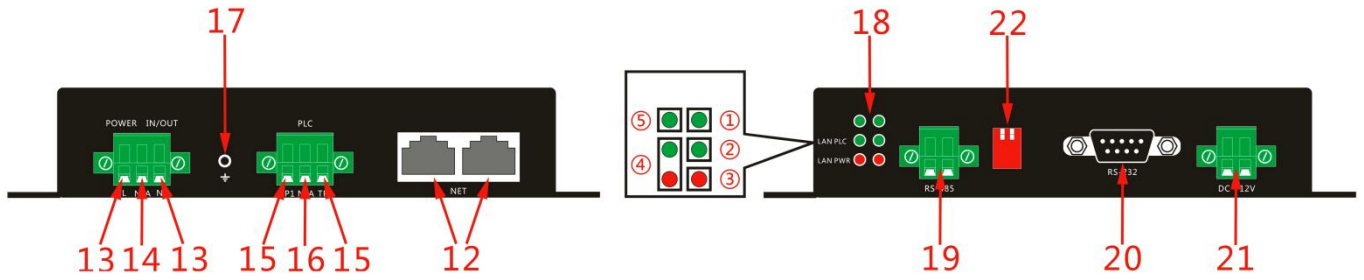
Category		Description	
Power	Available Voltage Range	100~240VAC	
	Power Consumption	≤5W / PC	
	Power Output Transmitter Unit	100~240VAC	
	220V Output Current	< 10A	
	12V Output Current	< 1A	
Transmission / Rate	Standard Compliance	IEEE1901, IEEE802.3	
	RS232 Port Rate	Dial the switch to adjust, support 38400, 56000, 57600, 115200	
	Up Down Agreement	CSMA/CA	
	Network Rate	Transmission Speed	88Mbps
Physical Characteristic	Dimensions (L x W x H)	89.5mmx152mmx30mm	
	Material	Aluminum	
	Net Weight	450g / PC	
Operating Environment	Working Temperature	-20°C~60°C	
	Working Humidity	<95% (Non-condensation)	

Installation Instruction



Step	Installation Instruction	Step	Installation Instruction
1	Network equipment is connected to RJ45 port of transmitter unit (1)	9	Connect front-end serial data to RS232 terminal (9)
2	220V power output/input L and N terminal (2)	10	12VDC power output (10)
3	Grounding terminal of power cable (3)	11	Dial switch of rate setup (11)
4	Connect terminal transmission 220V power line L and N terminal (4)	①	ERR link disconnect, the indicator is always on
5	Grounding terminal of power line (5)	②	PLC connection is ok, it is always on or flash
6	Grounding terminal of case (6)	③	PWR power indicator, it is always on
7	Signal indicator (7)	④	After connecting network device, when data exchanges, it starts to flash
8	Reserved RS485 terminal (8)	⑤	No function, idle indicator

Receiver (Master)



Step	Installation Instruction	Step	Installation Instruction
12	Network equipment is connected to RJ45 port of receiver unit (12)	20	Connect local serial data to RS232 terminal (20)
13	220V power input L and N terminal (13)	21	12VDC power output (21)
14	Grounding terminal of power line (14)	22	Dial switch of rate setup (22)
15	Connect front-end transmission 220V power line L and N terminal (15)	①	ERR link disconnect, the indicator is always on
16	Grounding terminal of power line (16)	②	PLC connection is ok, it is always on or flash
17	Grounding terminal of case (17)	③	PWR power indicator, it is always on
18	Signal indicator (18)	④	After connecting network device, when data exchanges, it starts to flash
19	Reserved RS485 terminal (19)	⑤	No function, idle indicator

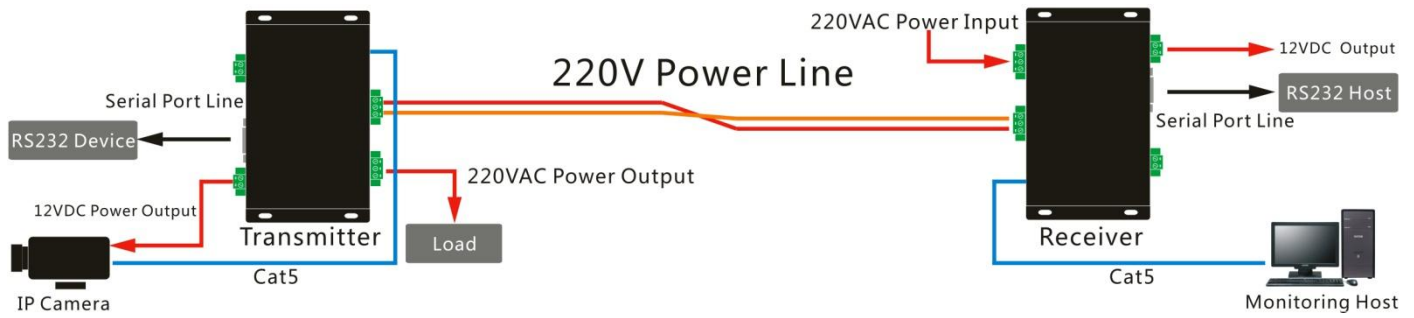
Tips:

1. When receiver connect 100~240VAC power, transmitter don't need external power supply, transmitter provide 12VDC power output.
2. The device supports RS232 serial data transmission.
3. When the load current is within 10A, the overload will automatically fuse the power circuit to realize circuit break protection.

Adjust Baud Rate Dial Switch as below:

Diagram	Setup		
	SW1	SW2	Baud Rat
	ON	ON	115200
	ON	OFF	57600
	OFF	ON	56000
	OFF	OFF	38400

Installation Diagram



Serial Cable Note:

Generally speaking, please use RS232 serial straight-through cable when connecting the equipment to the computer; please use RS232 serial crossover cable when connecting the equipment to the equipment. So the user should select the different connection methods of RS232 serial cable according to the actual connection situation between the two devices.

Use Tips

When you use OT-PLC302C-RS2, please follow the below tips as a reference, in order to reduce the fault in the process of using and the inspection work.

1. Each transmission unit contains one transmitter unit and one receiver unit, when installation, please install receiver unit at the side of the power supply cabinet, and install transmitter unit at the side of loading equipment.
2. Please make sure power line is disconnected before installation. The metal conductor of the access port should not be exposed, to avoid short circuit to burn the equipment.
3. Signal transmission cable must be the copper cable. Other material cables will cause the decrease of signal transmission quality and distance.
4. Long distance cable connection must be formal connection methods, such as welding or using connectors.
5. When the power line system has the protective grounding, please use the special grounding cable to connect the grounding terminal of the power line system with the grounding terminal of the device.
6. The load current of the front-end equipment should be controlled within 10A, 12VDC output current is 1A. It cannot work under the saturated current for a long time.
7. There is no waterproof design for this product, please make sure it use in dry environment.
8. If device fails, do not disassemble or repair it by yourself. Please contact us timely.

Attentions: Specifications are subject to change without notice. Thank you for choosing us. For more details, please visit our website: www.ourten.com



Shaoxing Ourten Electronics Co., Ltd.

#1 Liando U Valley, No. 1999 Wuxing West Road, Shangyu, Zhejiang, China

Tel: +86-21-5888 9980 (+86-575-8213 7256); Fax: +86-575-8212 7256

Email: sales@ourten.com

www.ourten.com

Thank you for choosing Ourten!