

## VC-320MiniPoE Ethernet Extender

### Description

**Mini POE Ethernet Extender VC-320MiniPoE** is a high-speed Ethernet transmission device.

It can transmit Power and Ethernet signals together over any pair of 2-wire such as Cat5, coaxial cable and power line, etc.

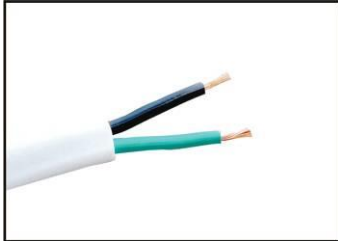


It contains one Master unit and one Slave. The Master can directly supply power for the Slave unit and PoE device. It can be installed in a small space with its compact size. It can transmit IP & PoE over 2-wire such as Cat5, coaxial cable and power line which greatly simplify the project cabling, applied to transmit middle & short distances of PoE device signals.

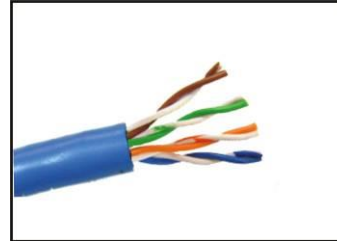
### Features

- ◆ Max Transmission distance reach 600m (RVS 2 × 1mm<sup>2</sup>)
- ◆ Max physical bandwidth reach 500Mbps
- ◆ Support power over cable technology (12VDC or 48~56VDC)
- ◆ Support PoE output (48~56VDC power input)
- ◆ Built-in ESD protection circuit, in case of static damage

## Cable Tips



Power line: RVV / RVS / RVVP / RVB 2x1mm<sup>2</sup> above

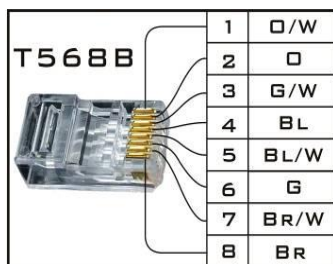


UTP Cable: Cat5 (2 pair) or above



Coaxial cable: RG59 or above

## Accessories Spec

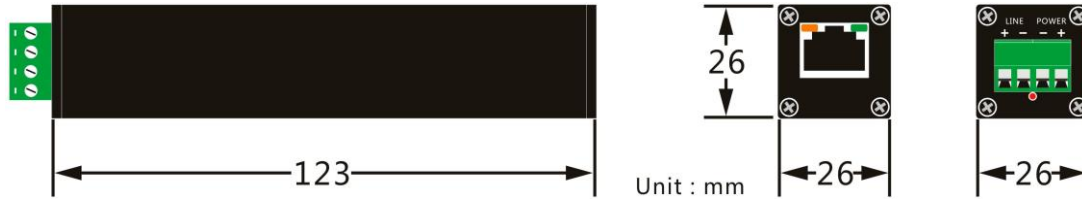


RJ45 port by EIA / TIA568B



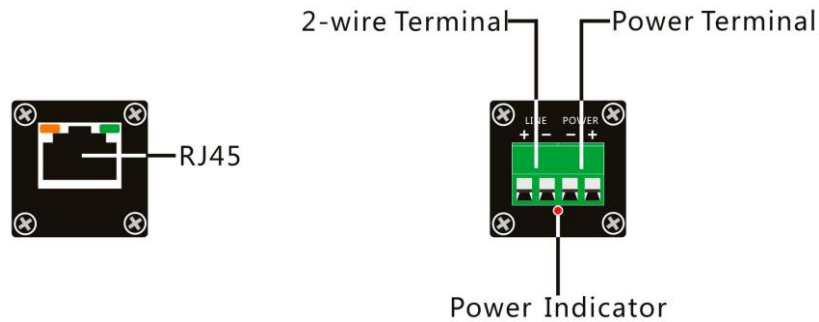
Power Adapter by 48 or 56 VDC  
5mm female power port (Optional)

## Dimension



Note: Dimension error value  $\pm 0.5$  mm

## Terminals

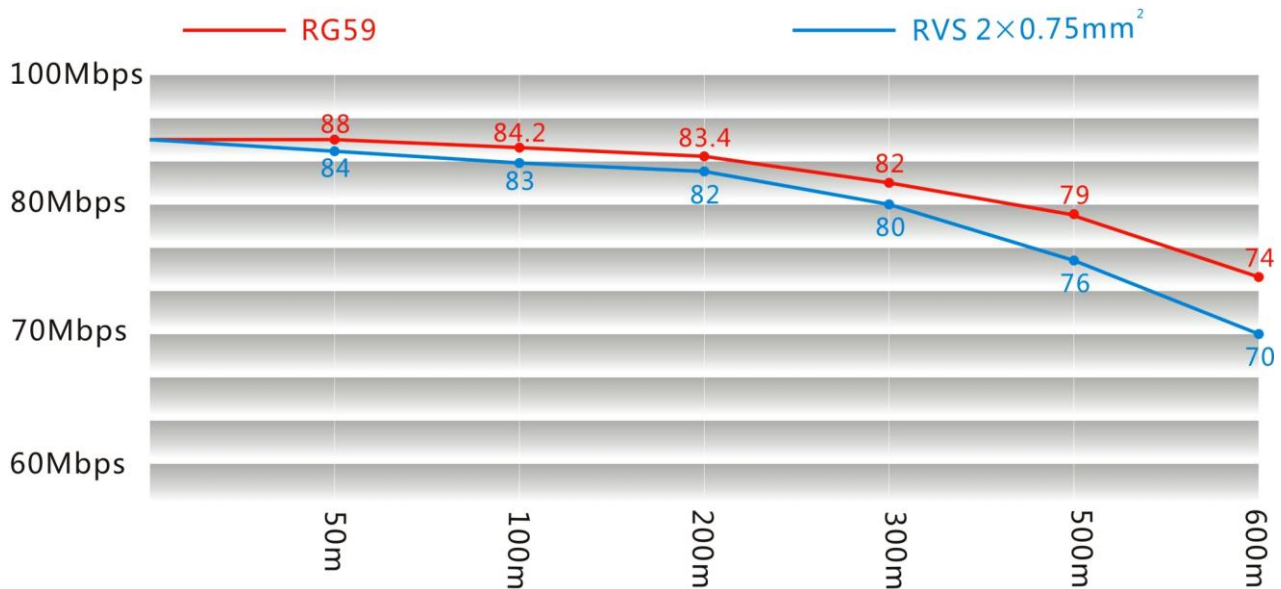


## Technical Parameter

Category		Description
Power	Available Voltage Range	12VDC or 48~56VDC
	Power Consumption	$\leq 3W$ / PC
	PoE Power Output	Standard 48VDC; IEEE802.3af
Transmission / Rate	Standard Compliance	IEEE1901, IEEE802.3
	Up down Agreement	CSMA/CA
	Rate	500Mbps Physical Bandwidth 88Mbps Transmission Speed
Physical Characteristic	Dimensions (L x W x H)	123mmx26mmx26mm
	Material	Aluminum
	Net Weight	105g / PC
Operating Environment	Working Temperature	-20°C ~ 60°C
	Working Humidity	< 95% (Non-condensation)

## Rate and Power Loss

VC-320MiniPoE supports enhanced high speed network data transmission. The data differs from the cables types. Moreover, the longer distance of cable, the lower the transmission rate accordingly. The following testing details are for your reference:



**Figure (1)**

The above data is one-way network parameters. Testing is made under the condition of the cable not fully expanded. There may be differences compared with practical application of the data. Rate is only used as reference in project application.

Power loss and attenuation differs from the cable types. When transmit PoE signal, the power will have some certain degree loss due to the different specification of cable. The following PoE power distance chart is just for your reference.

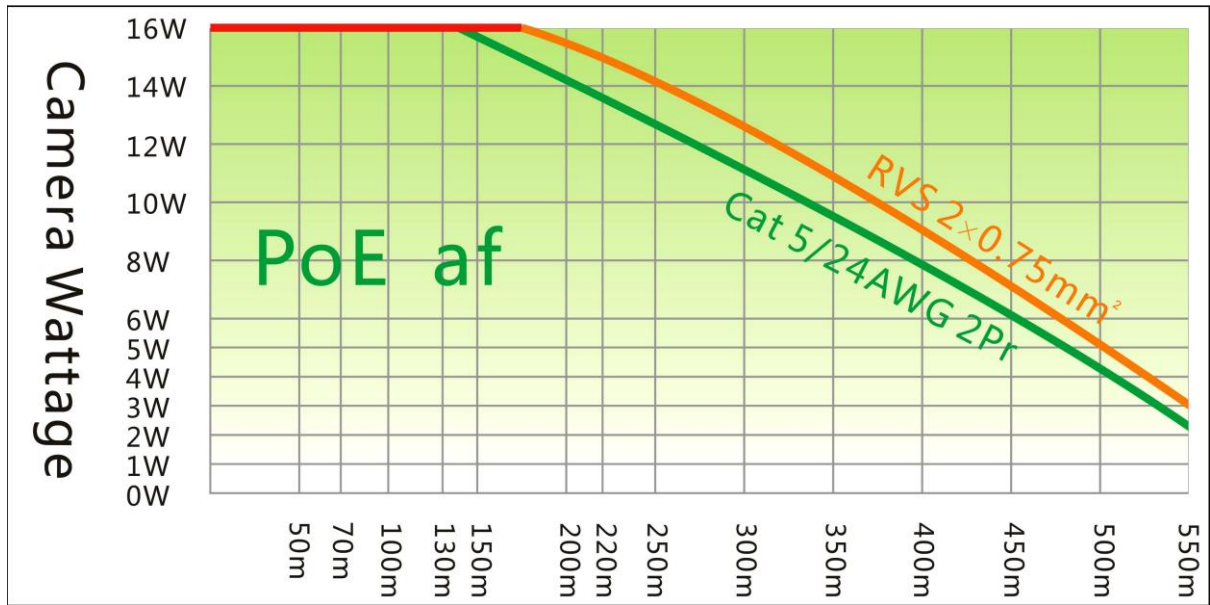
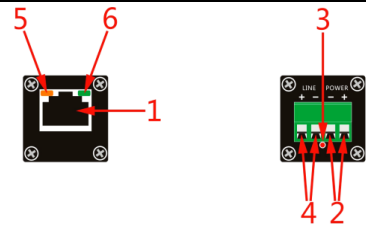
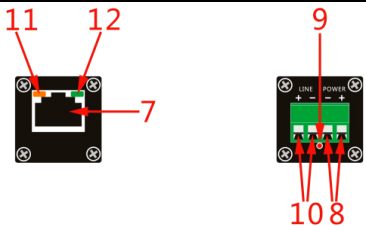


Figure (2)

**Tips:** In the above figure, the left vertical coordinate is Camera Wattage, the below horizontal coordinate is PoE transmission distance, please simultaneously contrast the horizontal and vertical coordinate to get accurate corresponding power output.

## Installation Instructions

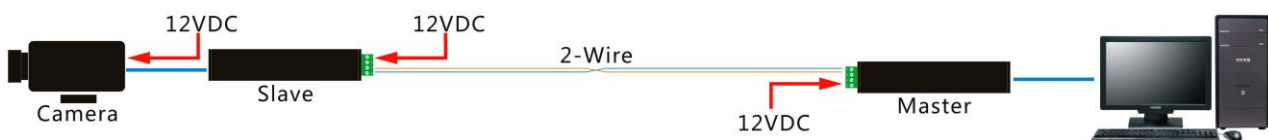
Master		Slave	
			
Step	Installation Instruction	Step	Installation Instruction
1	Network equipment is connected to RJ45 port of Master unit (1)	7	Network equipment is connected to RJ45 port of Slave unit (7)
2	Positive and negative terminals of the low voltage power (2)	8	Positive and negative terminals of the low voltage power (8)
3	Power indicator is always on (3)	9	Power indicator is always on (9)
4	Positive and negative connection terminal of 2-wire cable (4)	10	Positive and negative connection terminal of 2-wire cable (10)
5	Network data indicator quickly blinks when data is normal (5)	11	Network data indicator quickly blinks when data is normal (11)
6	Line indicator is on (In one line, the indicator is always on when powered firstly, indicator is always flash when powered later) (6)	12	Line indicator is on (In one line, the indicator is always on when powered firstly, indicator is always flash when powered later) (12)

## Power Supply Tips

1. Provide 48~56VDC for the Master unit, slave unit and PoE powered device no need extra power supply



2. Provide 12VDC for front-end IP device, Master and Slave units need extra power supply separately



**Tips:** This device can't support PoE modules power supply, including PoE switch, PoE recorder, etc. It only supports 48-56VDC power input.

## Use Tips

When you use VC-320MiniPoE, please follow the below tips as a reference, in order to reduce the fault in the process of using and the inspection work.

1. Every unit device consists of master and slave. Please notice the positive and negative terminal of signal cable when transmit PoE power.
2. Please pay attention to the polarity of the power when the power signal cable is connected to the terminals. Metal wire should be hidden lest happen short circuit to burn out equipments.
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 connections must be by standard connection method, such as welding or using connectors.
5. The coaxial cable, twisted pair cable, telephone line, power line can be sued to transmit the network data signal. Please notice that it may cause the decrease of signal transmission quality if connect kinds of cables at random.
6. Please choose matching power adaptor (**12VDC/1A or 48~56VDC/0.8~1.2A**).
7. There is no waterproof design for this product, please make sure that it is used 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. For more details, please visit our website: [www.rubyttech.de](http://www.rubyttech.de)**