



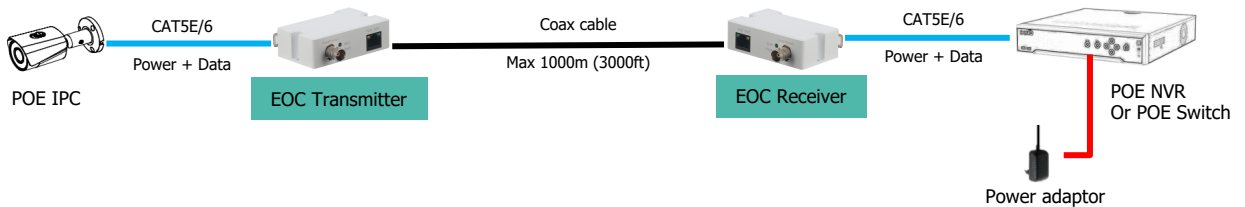
LINOVISION

POE IP Over Coax Converter



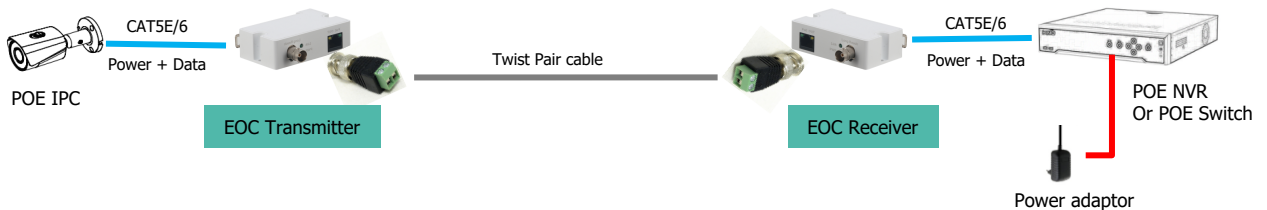
Introduction

EOC (Ethernet Over Coax, also known as IP over Coax) Converter is used to transmit Video & Audio & Data over existing coaxial cables or twist pair cables. Features with POE & IP data transmission and passive design, LINOVISION EOC converter is designed to upgrade traditional analogue video surveillance system to IP surveillance system without replacing coaxial cables. It is working with POE IP cameras, POE Wi-Fi AP, VoIP phones, etc.



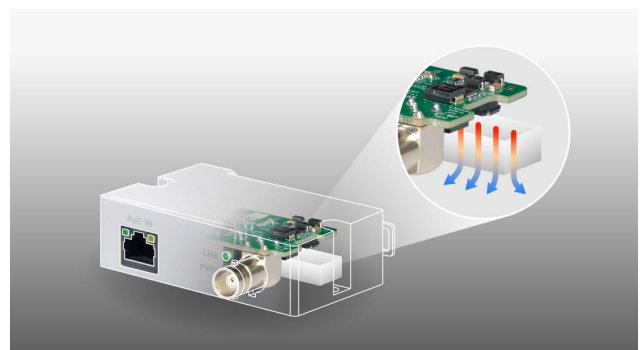
2022 Upgraded Version

The 2022 version EOC converter supports POE IP data transmission over twist pair cable, such as Cat5E/Cat 6 cable, power line, RS485 cable, etc. BNC to Twist pair connectors are required in this connection. This function is widely used in elevator application.



Unique Features compared with other products in the market

- POE + IP Data transmission over Coaxial cable, perfect for IP CCTV system.
- Industrial design, with built-in heat sink, ensure super reliability and hassle-free transmission.
- Up to 100Mbps in 300m (1000ft) RG59 cable transmission, max 1000m (3000ft) distance in 10Mbps.



Functions

- IP Video & Audio & Data & POE Power transmission over coaxial cable
- Passive design, no power adapter is required.
- Max 1000 meters (3000ft) transmission
- Up to 100Mbps bandwidth over 1,000 feet regular coax cable transmission, working with CCA/CCU RG59/RG6 cable
- Plug-and-play, configuration free.
- Small size (3.1"x2.0"x0.9"), light weight, fit into regular camera back box.
- Compatible to IEEE802.3af / IEEE802.3at POE protocol, max 21W POE load capacity in 100m (330ft), or 11W POE load capacity in 300m (1000ft)
- Optional water-proof box for outdoor use
- Working with POE IP Cameras, POE Wi-Fi AP, VoIP phone, etc.
- 1* RJ45 port: 10/100Mbps, MDI/MDIX self-adaption; 1*BNC RG59 coaxial

Package Includes



1* EoC Transmitter



1* EoC Receiver



2* Screw Bag



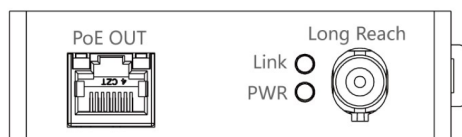
2* BNC to Twist Pair Connector

Dimension

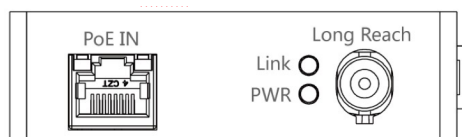
Transmitter and receiver are alike:
79mm×52mm×23mm (Each)
(3.1" x 2.0" x 0.9")



Panel View



EOC Transmitter



EOC Receiver

SN	Interface	Note
1	PoE OUT	To connect POE device (IPC, VoIP, AP, etc)
2	PoE IN	To connect POE injector, POE switch, or POE NVR
3	Link	BNC port Link indicator light
4	PWR	Power indicator light
5	Long Reach	Coaxial cable port



- **EOC transmitter has to be connected to POE device (IPC/VoIP), and EOC receiver is connected to POE injectors. The reverse connection will not work.**
- It is used for **point-to-point coax cable direct connection** only, no BNC repeater/T-connect/splitter in the middle.

Data Sheet

Technical Specification	
Model	EOC-Transmitter/Receiver
Function Port	1*10/100 Mbps Base-TX 1*BNC
Power Consumption	<2W
Transmission Bandwidth	RG59 coaxial cable: 400m/100Mbps, 1000m/10Mbps
PoE Protocol	IEEE802.3af, IEEE802.3at
Network Standard	IEEE802.3(x), IEEE802.3u,
Lightning Protection	Common Mode 4KV Differential Mode 2KV
Operating Temperature	-30°C to 65°C (-22 °F to 149 °F)
Operating Humidity	5%~95%
Weight (each)	61g (0.134lbs)
Dimension (W×D×H)	79mm×52mm×23mm (3.1" x 2.0" x 0.9")

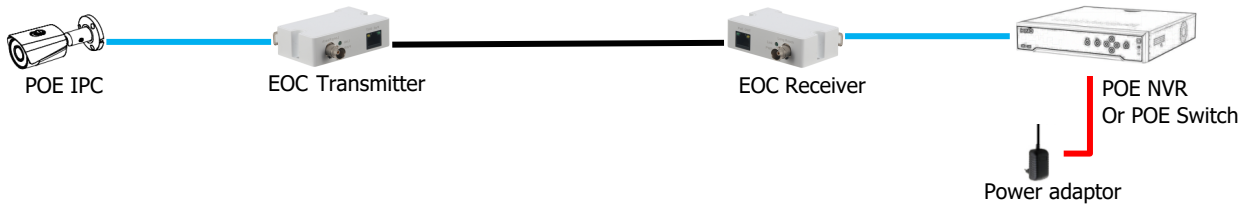
Transmission Performance

Transmission Distance		Performance
100m (330ft)	Bandwidth	100 Mbps
	Load Capacity	21W
300m (1,000ft)	Bandwidth	100 Mbps
	Load Capacity	11W
1,000m (3,280ft)	Bandwidth	10 Mbps
	Load Capacity	4W

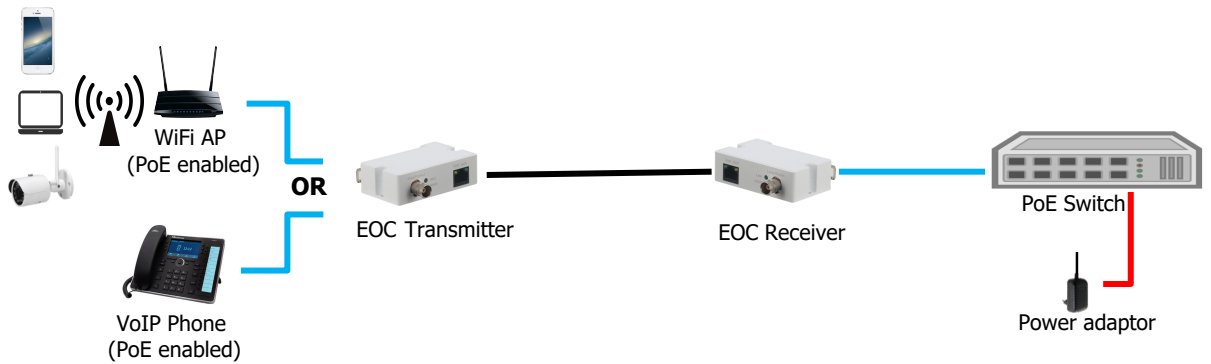
- This chart is based on regular RG59 coaxial cable and powered by standard DC48V POE injectors.
- This EOC converter can transmit up to 100Mbps network data and load max 11W POE device in 300 meters (or 1,000ft).
- The network bandwidth will be automatically lowered to 10Mbps over 1,000ft and the max transmission distance is 3,280ft. This bandwidth is still sufficient for single 4K IP camera.
- **The performance will be better when using RG6 cable or DC53V POE injectors.**

Applications

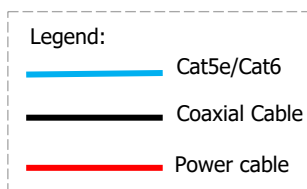
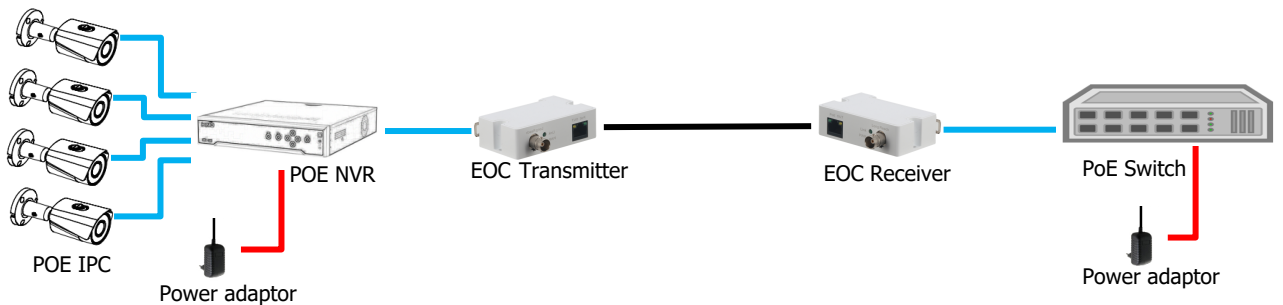
1. Upgrade traditional analogue system to IP surveillance system while using existing coaxial cable(RG59 cable)



2. Remote network & power transmission for POE compatible devices over coaxial cable

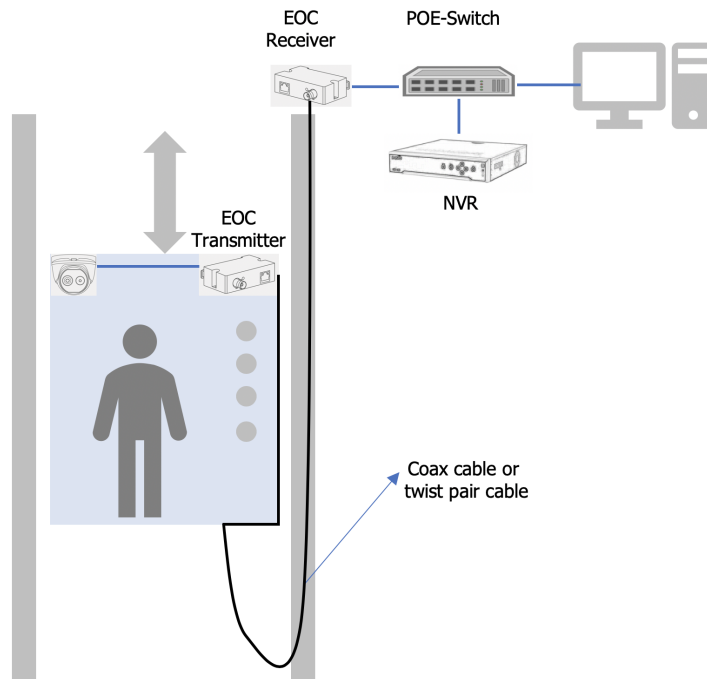


3. Remote NVR connection over long distance coaxial cable (100Mbps bandwidth in 300 meters or 1000ft transmission)

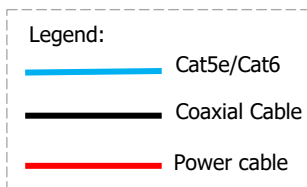
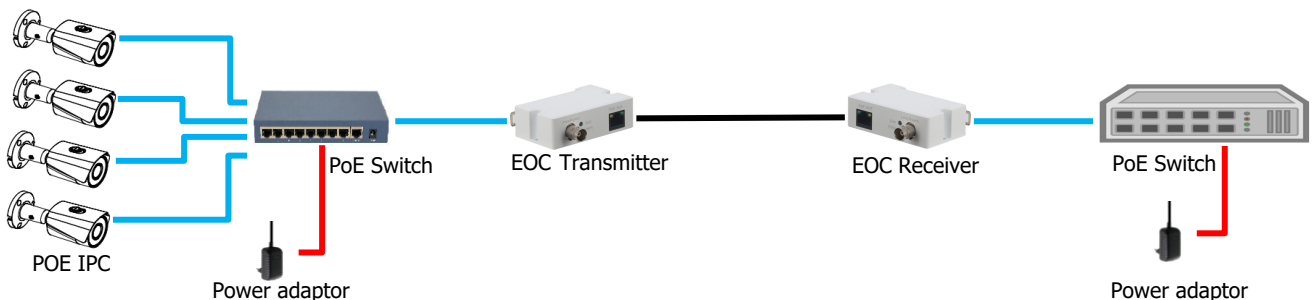


Applications

4. For many elevators there are no ethernet cables and no camera powers in the elevator cart, LINOVISION EOC converters is perfect for this application. It can transmit POE power and IP data over coaxial or twist pair cable. One passive EOC-transmitter will be put inside the elevator cart to feed camera or signal board, and one EOC-receiver will be in the control room, powered by POE switch/POE injector/POE NVR. For multiple elevators application, one EOC-Switch04 or EOC-Switch24 will be put in the control room, working together with max 8 elevators.



5. Remote network connection over long distance coaxial cable (100Mbps in 300 meters or 1000ft transmission)



Q1 : Can multiple devices be connected via single coaxial cable?

A : Yes, one pair of EOC converter can be used to transmit multiple device over single coaxial cable with NVR/POE switch/WI-FI AP. The connection will be multiple device -> NVR/POE switch/WI-FI AP -> EOC Transmitter -> Coaxial cable ->EOC Receiver -> POE NVR/POE Switch/POE Injector with internet.

Please note that the EOC receiver has to be connected to an POE NVR or POE Switch to be powered.

Q2 : Can I use the IP camera with 4k quality, record in a NVR without losing the quality?

A : Yes. The transmission bandwidth can be max 100Mbps in 1000ft, or 10Mbps in 3000ft. The required bandwidth for one 4K IP camera is about 8Mbps (H.264 encoding) or 4Mbps (H.265 encoding). So it is definitely no problem to transmit 4K IP camera video over coax without losing quality.

Q3 : Will this work for extending connectivity between a router and an Ethernet switch? Or extending WIFI?

A : Yes. But you need a POE injector in EOC receiver side to provide power to EOC receiver and EOC transmitter. It is recommended to use 56V 30W POE injector. And the transmission bandwidth maybe dropped to 10Mbps depends on the cable quality. And limit the power consumption below 10W. Please also make sure there is no additional BNC connector or splitter in the middle of RJ5 cable.

Q4: What's the maximum load capacity of this EOC Converter?

A : The maximum load capacity is 21W in 300ft transmission which is sufficient to power a regular IP PTZ camera. The load capacity can be at least 11W in 1000ft transmission which is sufficient to power most of IP cameras or VoIP phones

Q5: What kind of POE device it can be working with?

A : It can work with POE IP cameras, POE Wi-Fi AP, VoIP phones, etc

Q6 : What POE standards does this support?

A : It supports IEEE802.3af and IEEE802.3at standard. It is working with most of the IP cameras and mini PTZs in the market, we also have customers use this to power POE WIFI AP and it is working well.

Q7: Why my POE device is offline when working with our EOC (IP Over Coax) Converter?

A: Several main reasons are as follow:

1. EOC transmitter has to be connected to POE device (IPC/VoIP), and EOC receiver is connected to POE supply device (POE NVR, POE Switch or POE Injector). The reverse connection will not work.
2. It is used for point-to-point coax cable direct connection only, no BNC repeater/T-connect/splitter in the middle.
3. It may be caused by insufficient load capacity. The maximum load capacity is 21W in 300ft transmission which is sufficient to power a regular IP PTZ camera. The load capacity can be at least 11W in 1000ft transmission which is sufficient to power most of IP cameras or VoIP phones.
4. No power supply will also make it fail to work. Please be informed that EOC receiver has to be connected to an POE NVR, POE Switch or POE Injector to be powered.

Q8: Can this EOC converter working with non-POE device?

A : Yes, this EOC converter can work with non-POE device like PC/NVR, etc.

Q9: Can I use this device to get tv video reception, from modem to tv?

A : No, I am afraid this will not be working.


Q10: How can I mount them?

A : : It supports DIN Rail installation, or you can put it inside a regular camera's junction box, since it is very small in dimension, that is 3.1" x 2.0" x 0.9"

Q11: Will this work with AT&T digital internet?

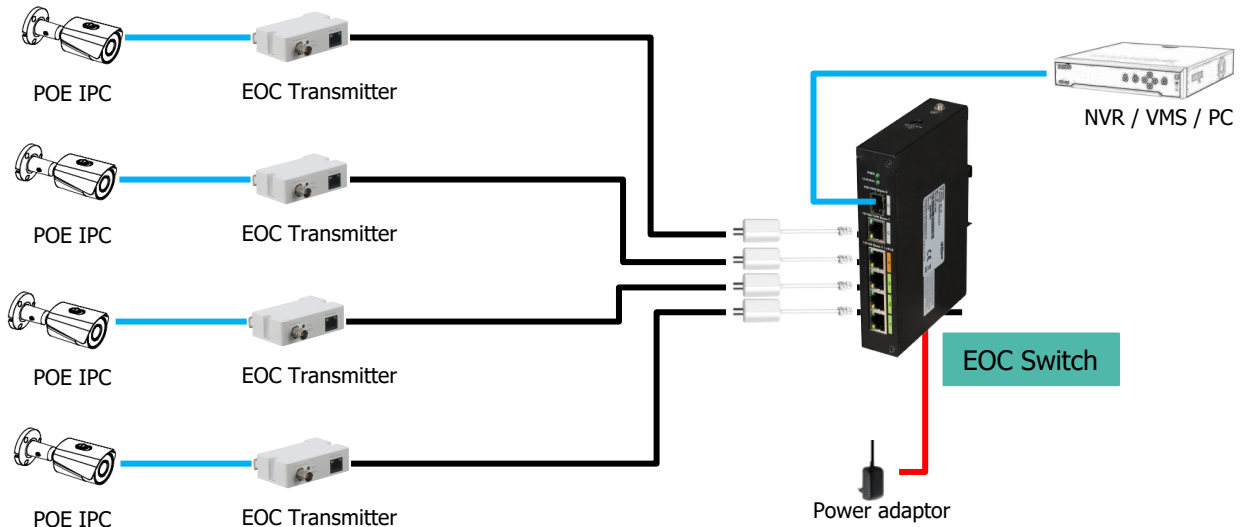
A : This IP over Coax converter is not designed to be working with this kind of 4G LTE router.

Related Products – 4ch Industrial POE & EOC Hybrid Switch

EOC-Switch04	Outstanding Features	Application
	<ul style="list-style-type: none"> • Layer-2 industrial POE switch, Supports IEEE802.3af, IEEE802.3at, Hi-PoE standard • 4ch POE IP over Coax ports plus 1 GE uplink and 1 SFP fiber port • Conform IEEE802.3, IEEE802.3u, IEEE802.3ab/z and IEEE802.3X standards • Max 800m (2,500ft) POE data transmission • Working together with EOC transmitter and ePOE IP Cameras 	<ul style="list-style-type: none"> • Upgrade existing analogue system to IP surveillance system while using coax cables • Long distance POE Data transmission • Can also be used as regular POE switch to work with standard POE device (IP camera, VoIP phone, etc.)

Application

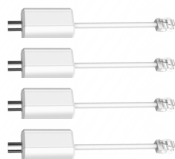
- Work with 4 EOC Transmitters to upgrade multiple analog system to IP system



Package Includes



1* EOC-Switch04



4* EOC-Adapter




1* Power Adapter



Scan for more information...

Related Product – 24ch Industrial POE & EOC Hybrid Switch

EOC-Switch24	Outstanding Features	Application
	<ul style="list-style-type: none"> • 24 ports Industrial POE switch with 2 ports GE unlinks • First 8 ports support both POE and EOC IP Over Coax transmission, max 3000ft data and POE transmission distance. • Layer-two web management, POE port management, VLAN, STP/RSTP, QOS, etc. • Each port max 30W POE power, total budget 360W • Working perfectly with Dahua ePOE IP cameras 	<ul style="list-style-type: none"> • Upgrade existing analogue system to IP surveillance system while using coax cables • Long distance POE Data transmission • Can also be used as regular POE switch to work with standard POE device (IP camera, VoIP phone, etc.)

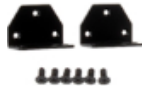
Application

- Same as EOC Switch 04 but can work with **8 EOC Transmitters** (Port 1-8) to upgrade multiple analog system to IP system.

Package Includes



1* EOC-Switch04



1* Screw Bag



1* Power Adapter



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PoE Supplier– PoE Injector 30W



PoE Injector 30W



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Optional water-proof box



DS-1280ZJ-S



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- Optional waterproof junction box for outdoor use.