DIN-Rail Industrial 10/100Base-TX (PoE+) Ethernet over Coax Extenders with PoC



Model: LNK-DEC110 Series

Overview

The LNK-DEC110 Series DIN-Rail Ethernet over Coaxial Converter is a new designed Ethernet Extender Device. This Device is designed to extend Ethernet Network signal and Power over existing coaxial cable, and able to live transmit multi-channel Power + Network date signal, the Max distance is up to 1200M(Power: 300M). 2pc BNC design supports to connect 2 channel branch lines at same time. The total power of electricity is 100W, each BNC max is 50W. Network max baud-rate is up to 100Mbps. It has excellent lightning protection and Anti-interference. Inbuilt Industry level intelligent auto-monitoring module (this function is optional), this function can make the device intelligent detect circuit individually, all time automatically detect network communication link exceptional situation. If any link is abnormal, it make the device recover to link the communication automatically, ensure the network communication link data transmission stably. Really realize never loss network connection, never crash industry network transmission.

Guarantee the security of surveillance zone. These series products are widely used in CCTV surveillance and remote network extension.

Features

- Transmit 10/100 Mbps Full Duplex Ethernet up to 1200m (without PoE) or 300m (with PoE)
- Transmission Media: Coaxial Cable(Best), 586B, CAT5e/6
- Input Voltage: DC18V~48V (POE: DC48V).
- Support Power over Coax & Power over Ethernet at same time.
- 2pc BNC design, support to connect Max. 7 channels branch line
- Operation: Use the existing network, easy to install, Plug & Play. Convenient and efficient.
- Code Standard: abide by IEEE802.3 10/100 base-TX Ethernet standard protocol
- Advanced 128-bit AES encrypted transmission and PoE+ power technology
- Excellent Protection: Built-in transient protection; industrial temperature range. Excellent lightning protection and strongly Anti-interference, surge protection.

Application

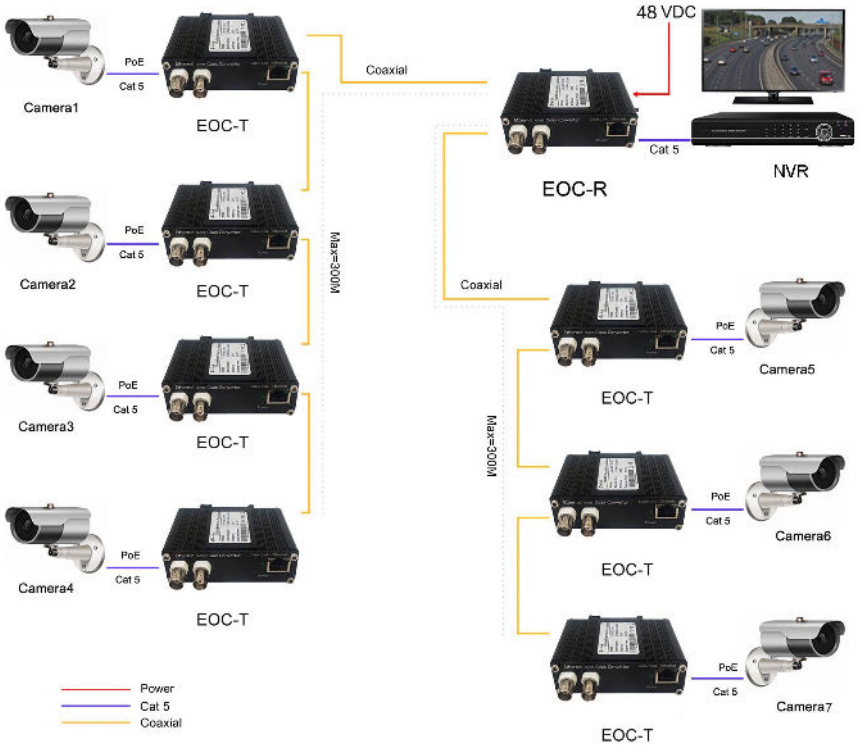
I. Provide PoE Power Supply for front-end PoE device (Transmission Distance: 300m)



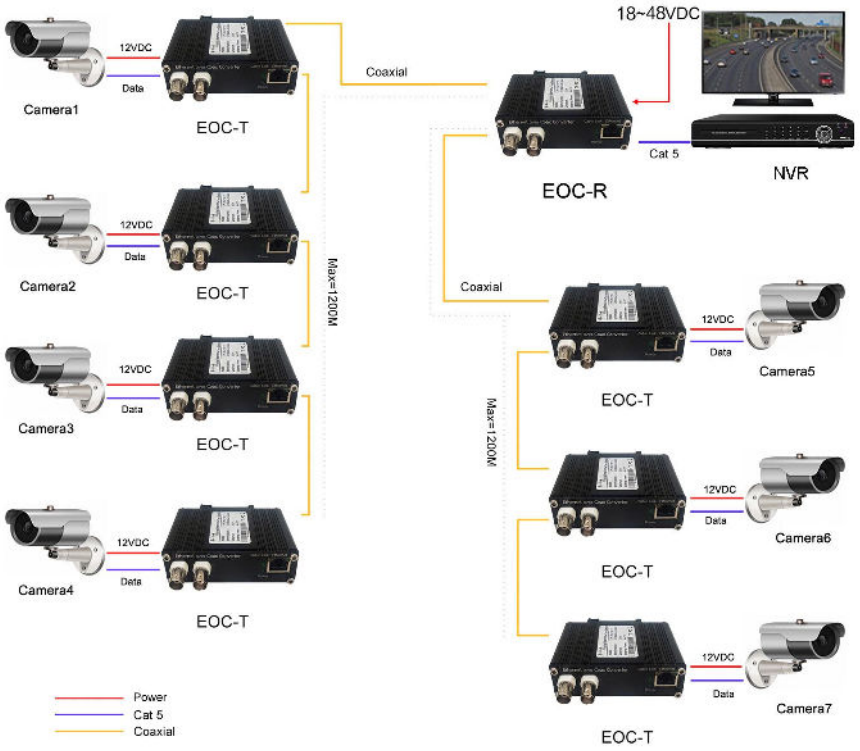
II. Without PoE (Transmission Distance: 1200m)



III. Daisy-chain Connection with PoE



IV. Daisy-chain Connection without PoE

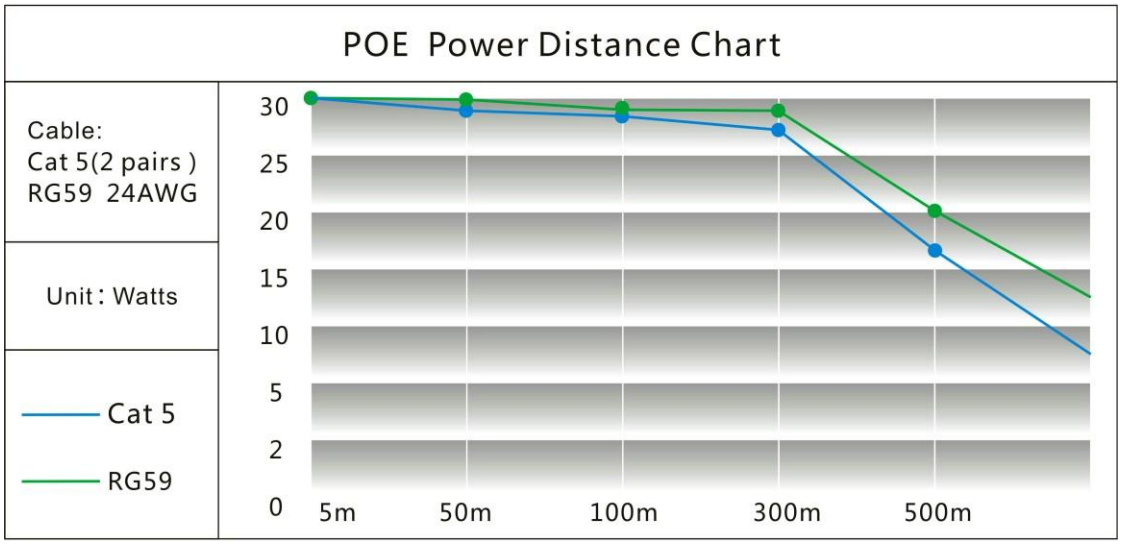


Technical Indexes

Ethernet	
Standards	IEEE802.3 10Base-T
	IEEE802.3u 100Base-TX
	IEEE802.3af Power Over Ethernet
	IEEE802.3at Power Over Ethernet
Cabling	10Base-T: Cat 3,4,5, or above
	100Base-TX: Cat5 or above
Maximum Distance	Cat5UTP up to 100m
Connector	1 x RJ45
Coaxial	
Cabling	Coaxial Cable (75 ohm)
Connector	1 BNC (female)
Distance	Up to 1200m (no PoE), 300m (with PoE)
Data Rate	
Downlink (TX to RX)	90Mbps (Max.)
Uplink (RX to TX)	90Mbps (Max.)
Technology	**Power Line Communication (PLC)**
Protection	
Reverse Polarity	Present
Electrical and Mechanical	
Input Power	DC18V~48V (PoE: DC48V)
Power Consumption	8W Max. (PoC not in use)
	60W Max. (Poc in use)
LED Indicators	
Power (Power)	RED (Power On: keep lighting; Power Off: lighting off)
Coax (Cable Link)	GREEN (Flicker: signal transmission)
Ethernet	SPD, LINK/ACT, PoE(Transmitter)
PoE	
Standard	IEEE802.3af/at
Mode	B Mode
Port	RJ45
Max. Power Per Port	25.5W max.at RX(Powered Device)
	30W Max.at TX(Power Souring Equipment)
Mode	Positive(VCC+): RJ45 Pin 4,5
	Negative(VCC-):RJ45 Pin 7,8
Dimensions (W x D x H)	95 × 67 × 30 mm
Weight	0.5kg
Casing	Aluminum case

Environmental	
Operation Temperature	-10˚C to 60˚C (14˚F to 140˚F)
Storage Temperature	-40˚C to 85˚C (-40˚F to 185˚F)
Relative Humidity	5% to 90% non-condensing
MTBF	> 100,000 hrs
Regulatory Approvals	ISO9001 FCC Part 15 Class A EN55022 Class A Surge Protection RJ45: 1KV BNC: 2KV Power: 500V

Power Loss Diagram



Cable \ Distance	5 m	50 m	100 m	300 m	500 m
Cat 5(2 pairs)	30 W	29.5W	28 W	27W	16.8 W
RG59	30W	30 W	29.5 W	29W	20 W

Network & Power can be transmitted over coaxial cable. The total PoE power output is 30W(at) and it can be attenuated when transmitting through cable. Distance is longer, attenuation is more.
Power loss and attenuation differs from the cable types. The above PoE power distance chart is just for your reference.

Dimensions



Ordering Information

Model	Description
LNK-DEC110-T/R	DIN-Rail EoC Converter, 1200m transmission distance, including Transmitter and Receiver, not including power supply adapter
LNK-DEC110P-T/R	DIN-Rail EoC Converter with PoE+, 300m transmission distance, including Transmitter and Receiver, not including power supply adapter