



## Product Description

The KBC **eCopper™** line of products offer a cost-effective way to connect the latest IP cameras using existing coax or copper (UTP) wiring to a remote monitoring station. In addition to saving costs and time from cabling infrastructure upgrades to CAT5/5e/6, **eCopper™** powers both its transmitter and remote cameras, eliminating the need for any additional power source at the camera site. **eCopper™** also extends the IP camera cable run distance from 100 to 300 meters, making it ideal for upgrading analog to IP cameras and other systems in large corporate buildings, retail, casinos, banks, prisons, stadiums and other applications.



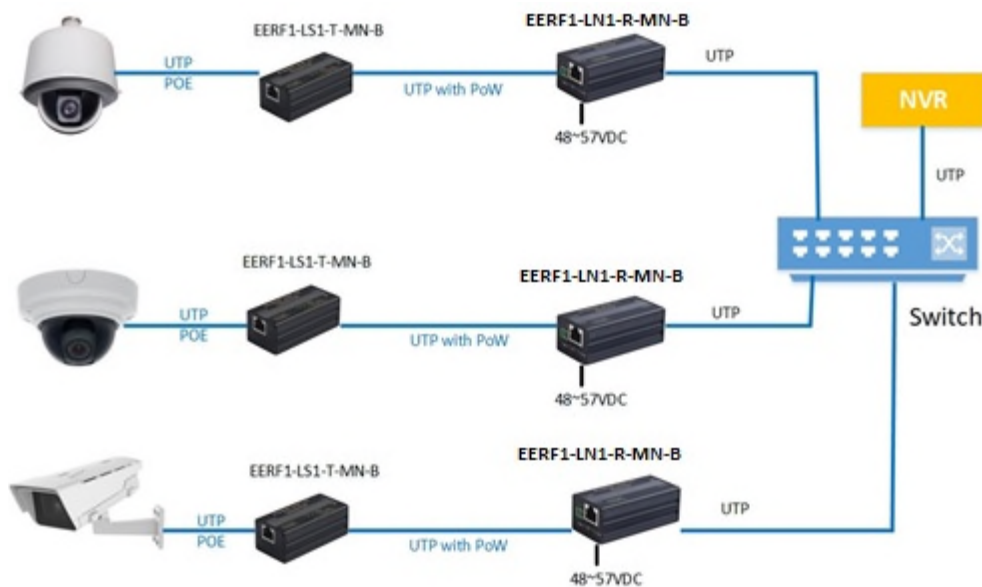
The KBC EERF1-LN1-R-MX-B series is an Ethernet over UTP (EoU) switch with 1 UTP port supplying Power over Wire (PoW) and 1\*10/100M Ethernet port. This switch provides connectivity to one PoW/PoE (EERF1-LS1-T-MN-B) transmitter. Power is supplied to the transmitter through the UTP cable. Varying data rates are supported depending on cable distance and quality. Plug-and-play design ensures ease of installation with no electrical adjustment needed. LED indicators are provided to show the operational status of the unit clearly.

This unit is available in compact wall mount via metal clip

## Product Features

- 1 UTP port with or without PoW
- 1 \*10/100M ethernet port
- Connect one transmitter EERF1-LS1-T-MN-B.
- UTP data rate >40Mbps (300m)
- Based on cable quality, cable pairs used (1, 2 or 4 pairs) and voltage applied to cable (48-57VDC) from headend. PoE and PoE+ are supported by PoW up to 400m.
- Over current and short circuit protection
- Unique PoW transmission protection design so that no power is output when transmitter end is not connected.

## Typical System Configuration



## Specifications

### Standards

IEEE Standard	IEEE 802.3 10BASE-T IEEE 802.3u 100BASE-TX
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### LAN Port

No of Ports	1*100Base-T
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### UTP Port

No of Ports	1
Cable	UTP
Data Rate(2&4 Pairs)	>40Mbps (300m)
Load Power (2 Pairs) @54VDC <sup>(1)</sup>	PoE+: 200m ; PoE: 400m
Load Power (4 pairs) @54VDC <sup>(1)</sup>	PoE+: 400m ; PoE: 800m

### PoW Management

Individual channel status LEDs	
Individual channel PoW on/off	

### Power<sup>(2)</sup>

Power Input	48-57VDC
Power Consumption	≤1w

### Environmental

Operating Temperature	-20° ~ +70° C
Storage Temperature	-40° ~ +85° C
Operating Humidity	0 to 95% non-condensing
Mean Time Between Failure (MTBF)	> 100,000 Hours

### Mechanical

Dimensions (L x W x H)	76mm x 37mm x 29mm
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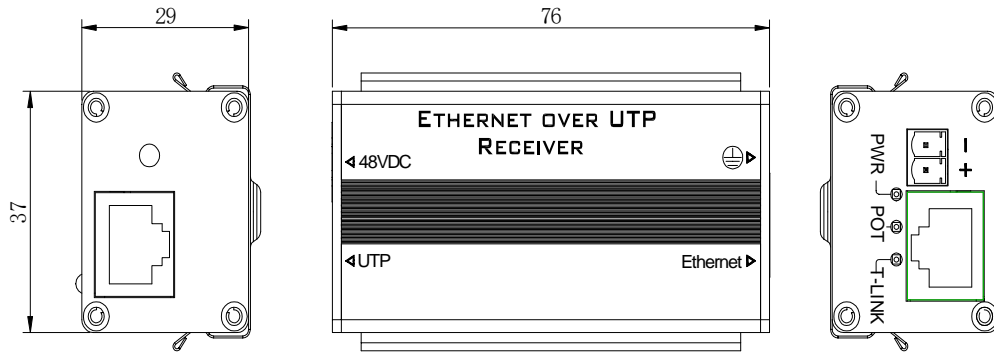
### Connectors

Ethernet	RJ45
UTP	RJ45
Power	IEC

### Protection

Surge	UTP: 6kV
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## Dimension



## Part Number

**EERF1-LN1-R-MN-B**

1. It is assumed that the transmitter installed together with PD devices, that means the distance between the transmitter and PD device is very short (less than 5m). Per the IEEE802.3 af/at standard, the maximum power of PD for 802.3af and IEEE802.3at are 12.95w and 25.5w respectively.
2. Power supply sold separately. Please select the power plug from US Standard, Euro 2 Circular, UK 3 Pin square or Australian when placing order

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