

Quick Start Guide EERF1-LN1-R-MN-B

EoU Receiver - 1 UTP Connector and 1 RJ45

Introduction

The KBC EERF1-LN1-R-MN-B series is an Ethernet over UTP (EoU) receiver with 1 UTP port supplying Power over Wire (PoW) and 1*10/100M Ethernet port. This receiver provides connectivity for 1* 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.

This unit is available in compact wall-mount via metal clip.

Features

- 1 UTP port with PoW
- 1 *10/100M Ethernet port
- Connect one transmitter or 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.

Downloads

Full specifications, features and additional information can be found on the KBC website: www.kbcnetworks.com.

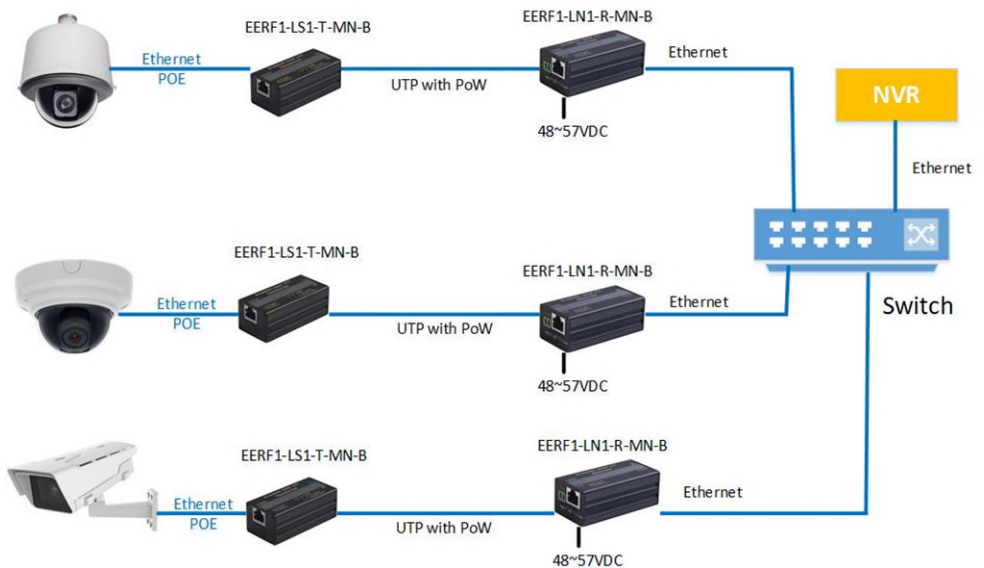
General

Check the product upon receipt for any visible damage which may have been caused during shipping.

Physical Deployment

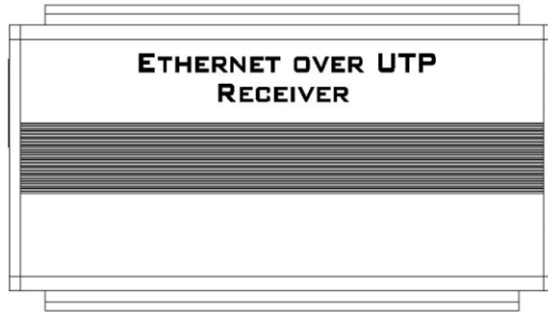
This equipment must be installed and operated in accordance with instructions found in this document. Failure to comply with these instructions will invalidate the warranty.

Application

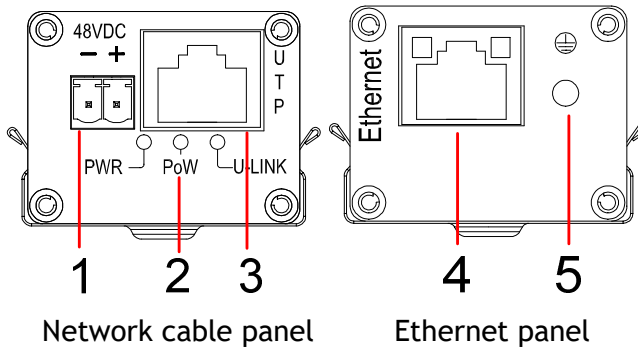


Panel views

Top view



Panel view



- 1 - Power input; 2 - LED indicator; 3 - Network cable connector;
4 - Ethernet RJ45 port; 5 - Grounding terminal.

LED	Color	Status	Description
PWR	Orange	On	Power supply is normal.
POW	Green	On	PoW power supply is normal.
U-LINK	Green	On	EoU connection is normal.
Ethernet Link/Act	Orange	On/Blink	On: Ethernet link is normal. Blink: Data is active.

Ethernet RJ45 Definition

Pin	Signal
1	TD+
2	TD-
3	RD+
4	N/A
5	N/A
6	RD-
7	N/A
8	N/A

UTP Port Definition

Pin	Signal
1	PoW+
2	PoW+
3	PoW-
4	PoW+
5	PoW+
6	PoW-
7	PoW-
8	PoW-

Notes:

★ Please use straight-through cable rather than cross-over cable.

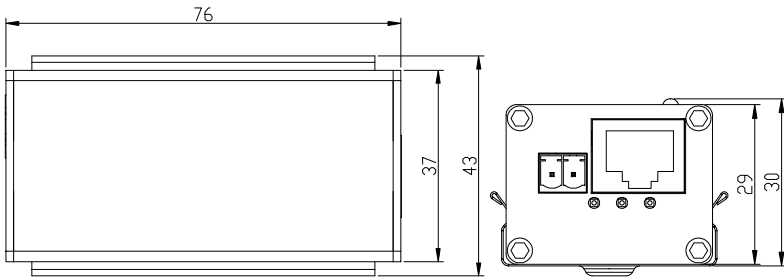
8 wires transmission: all 8 wires need to be connected.

4 wires transmission: any 2 wires of PIN 1,2,4 and 5 as "+", any 2 wires of PIN 3,6,7 and 8 as "-".

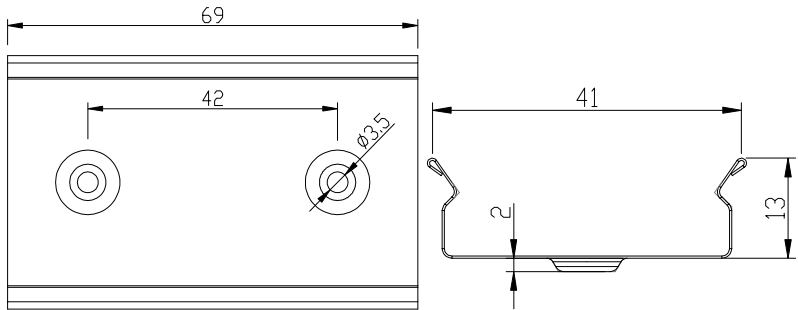
2 wires transmission: any 1 wire of PIN 1,2,4 and 5 as "+", any 1 wire of PIN 3,6,7 and 8 as "-".

Dimensions (Unit = mm)

Equipment:



Installation Accessories:



Specifications

	Items	Description
Power	Power supply	48VDC/1A
	Consumption	<2W
Cable	Transmission medium	Cat5e/6 cable
	Operating frequency	2M-28M
	Modulation	Wavelet-OFDM
	Transmission rate	210Mbps (Max.)
	Power negotiation cycle	1S
	Overcurrent	720mA
	Overcurrent protection time	<2mS
	Transmission distance	*400m
Ethernet Port	Transmission medium	Cat5e/6
	Standard	IEEE802.3, IEEE802.3U
	Ethernet delay	<1mS
Protection	ESD	IEC61000-4-2
	Anti-thunder protection	IEC61000-4-5 level 3
Operation Environment	Operating temperature	-20°C~+70°C
	Storage temperature	-40°C~+85°C
	Humidity (Non-Condensing)	0-90%
Mechanical	Dimension(L×W×H)	76mm*37mm*29mm
	Material	Aluminum
	Color	Black
	Weight	0.2Kg

*Transmission distance depends on signal source and cable quality.

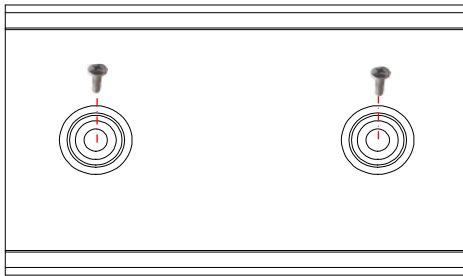
Installation Instructions

Please check the following items before installation. If any are missing, please contact the dealer.

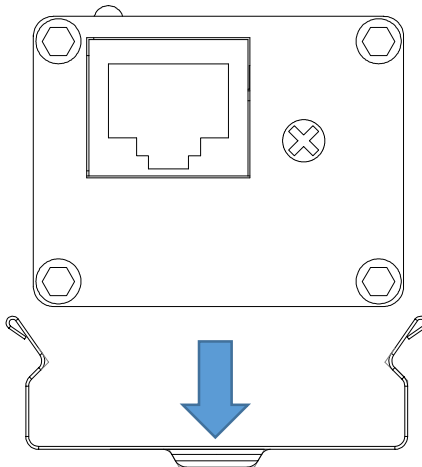
- EoU receiver ----- x1
- Wall mounting clamp ---- x1
- QSG/User manual ----- x1
- Screws ----- x2

Please follow the installation steps below:

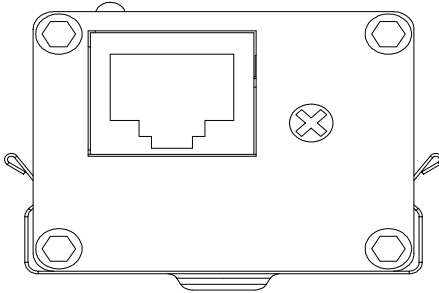
- 1) Attach the clamp to the wall using the 3X10mm screws.



- 2) Press the receiver into the clamp.



- 3) Use a network cable to connect the RJ45 port of the receiver and the Ethernet switch and then plug the network cable into the UTP port of the receiver. Use a grounding wire to connect the grounding terminal.



- 4) Check that the installation is correct and power on the device to be sure it is operating normally.

Troubleshooting

Please refer to the following information if the device does not work:

- Confirm the installation is done according to factory installation requirements.
- Confirm if the RJ45 cable order is following the EIA/TIA568A or 568B industry standards.
- The maximum transmission distance depends on the signal source and cable quality. Please do not exceed the maximum transmission distance.
- Please replace the failed device with a known working unit to determine if you have a damaged or faulty unit.
- If the problem persists, please contact your nearest KBC office or dealer.

Need Help?

Please visit our website www.kbcnetworks.com or contact your nearest KBC office or dealer.