

Introduction

The KBC EECF1-LS1-T-MN-B is a fully ruggedized Ethernet over Coax one channel transmitter. This transmitter provides connectivity for one 10/100Mbps IEEE standard twisted pair copper port over a 75ohm coaxial cable. Power is supplied from one of the headend receivers, EECF16-GN3-R, EECF8-GN3-R, EECF4-DN1-R, or EECF1-LN1-R Ethernet over Coax switch through the coaxial cable by Power over Coax (PoC) technology. This transmitter provides PoE/PoE+ support. Varying data rates are supported depending on cable distance and quality. The plug-and-play design ensures ease of installation with no electrical adjustment needed. LED indicators are provided to clearly show the operational status of the unit.

The size of the transmitter is suited for fitting inside camera housing and where space is minimal.

Features

- IEEE 802.3af/802.3at compliant
- PoE+ (30W) and Power over Coax
- Coax data rate >50Mbps (300m) based on coax quality
- PoE+ is supported up to 300m based on coax quality and applied voltage to headend
- Powered by PoC from headend: EECF16-GN3-R, EECF8-GN3-R, EECF4-DN1-R, or EECF1-LN1-R
- Complete protection design including surge protection and lightning protection
- Unique PoC transmission protection design together with 1, 4, 8 and 16 channels

Downloads

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

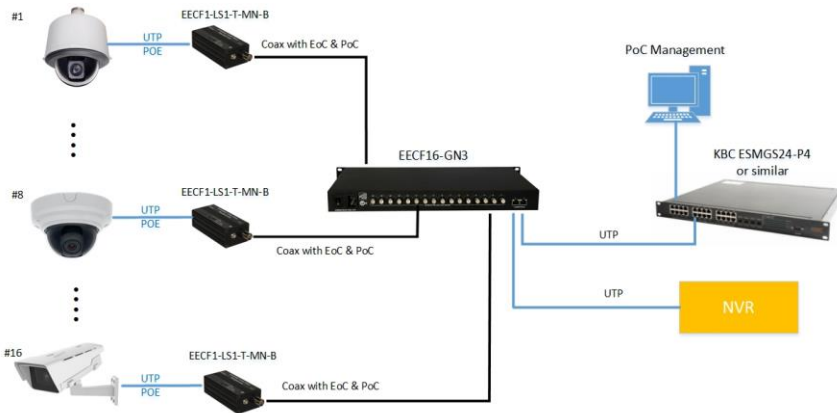
General

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

Physical Deployment

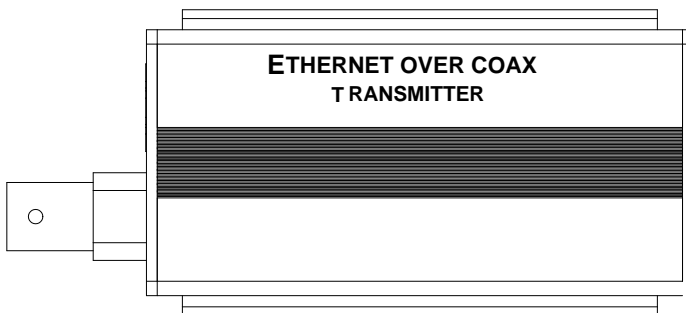
This equipment must be installed and operated in accordance with instructions found in this document. Failure to comply with these instructions will invalidate warranty.

Application

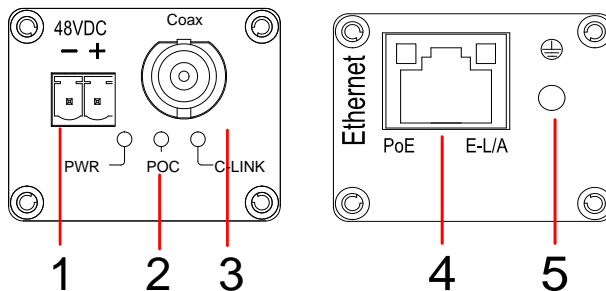


Panel Views

Top View



Panel View



Coax panel

Ethernet panel

1 - Power input; 2 - LED indicators; 3 - Coax cable connector;

4 - Ethernet RJ45 port; 5 – Grounding terminal

LED	Color	Status	Description
PWR	Orange	On	Power supply is normal.
PoC	Green	On	PoC power supply is normal.
C-LINK	Green	On	EoC connection is normal.
PoE	Green	On	Successful handshake with PD and supplying power to PD.
E-L/A	Orange	On/Blink	On: Ethernet link is normal. Blink: The data is active.

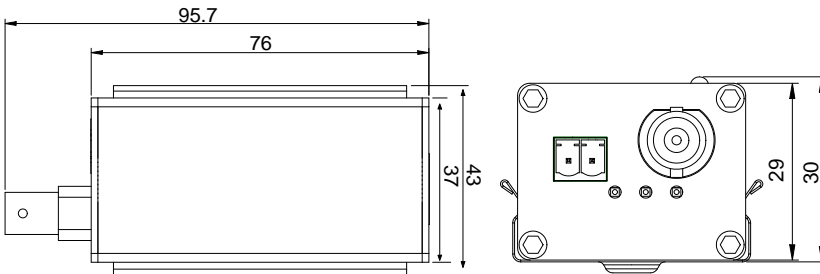
RJ45 Definition

Pin	Signal	PoE
1	TD+	PoE-

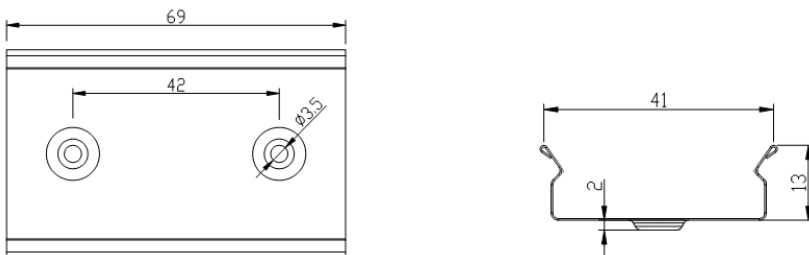
2	TD-	PoE-
3	RD+	PoE+
4	N/A	N/A
5	N/A	N/A
6	RD-	PoE+
7	N/A	N/A
8	N/A	N/A

Dimensions (Unit = mm)

Equipment:



Installation Accessories:



Specifications

	Item	Description
Power	Power Input	>40VDC PoC
	Consumption	<2W (without PoE)
Cable	Transmission Medium	75-5 or above coaxial cable and 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	500m
	Ethernet Port	Transmission Medium
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	Dimensions (L×W×H)	76mm*37mm*29mm
	Material	Aluminum
	Color	Black
	Weight	0.2Kg

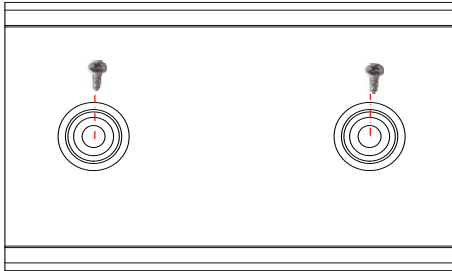
Installation Instructions

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

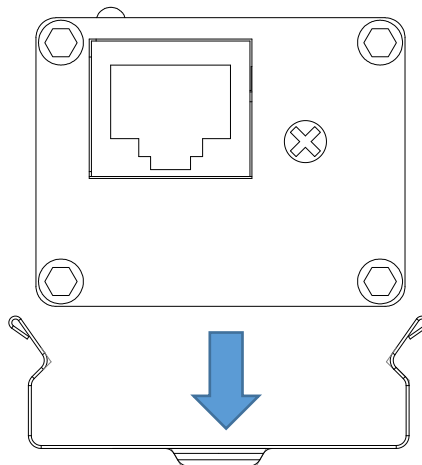
- EoC transmitter -----x1
- Wall mounting clamp----- x1
- QSG/User manual----- x1
- Screw ----- x2

Please follow the installation steps below:

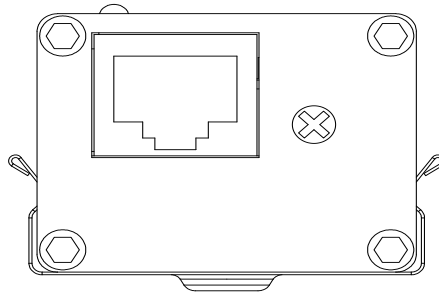
- 1) Attach the clamp to the wall using the 3X10mm screws.



- 2) Press the transmitter into the clamp.



- 3) Use a network cable to connect the RJ45 port of the transmitter and the powered device, use a coaxial cable to connect the BNC port of the transmitter and the receiver, and use a grounding wire to connect the grounding terminal.



- 4) Check if the installation is correct and the device is operating normally.

Trouble Shooting

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

- Please confirm the installation has been done according to the factory installation requirements.
- Please confirm if the RJ45 cable order is in accordance with 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 proper one to check if the device is damaged; if the problem still exists, please contact the dealer.

Warranty Information

KBC Networks extends the Limited Warranty to the original owner/purchaser of this product in according to the Warranty Policy posted on the KBC Networks' website at www.kbcnetworks.com.

KBC Networks extends the following Limited Warranty to the original owner/purchaser of this product: if this product, or any part or portion thereof, shall prove upon examination by KBC Networks, to be defective in material or workmanship, KBC Networks will repair or replace such part or portion at KBC Networks' option. The warranty period on the repaired or replaced part or portion of this product shall be limited to the unexpired term of the original warranty. The buyer shall be responsible for all shipping and transportation of the product to KBC Networks for any performance under this warranty.

Conditions and Exceptions:

- a) Any accident to this product, any misuse or abuse, alternation, use in modified form, or any attempt to repair this product shall void this warranty. These conditions to the warranty include, but are not limited to, incorrect power connections, physical damage due to mechanical shock, exposure to moisture, and circuit modification.
- b) Should this product prove defective following purchase, the buyer, not the manufacturer, distributor, or retailer, assumes the entire cost of all servicing or repair, except as otherwise provided by the terms of this warranty.
- c) For breach of any written or implied warranty on this product, the buyer is limited to the following damages:
- i. The cost of labor to repair or replace defective parts or portions of this product, and
 - ii. The cost of the repaired or replaced parts or portions of this product.
- d) No other expressed or implied warranties have been made or will be made on behalf of KBC Networks with respect to the sale, repair, installation, operation, or replacement of this product. KBC Networks disclaims any implied warranty of merchantability of this product or its fitness for any purpose, and the buyer agrees that this product is sold "as is" and that the entire risk of the quality and performance of this product is with the buyer, except as otherwise provided by the terms of this warranty.
- e) Some states/jurisdictions do not allow exclusions or limitations of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above exclusions or limitations may not apply to you.
- f) If you do not wish to be bound by any of the provisions in this warranty, please return the product(s) immediately.

This warranty does not apply in Australia.

Contact KBC Networks at info@kbcnetworks.com regarding return authorization for out-of-warranty repairs and any further product information.