



*data delivered*

eCopper™

## Quick Start Guide

### EECF1-LS4-T-WN-B

#### 4-Channel EoC Transmitter with PoC and PoE+

## Introduction

The EECF1-LS4-T-WN-B series is a fully ruggedized Ethernet over Coax transmitter. This transmitter provides connectivity for four 10/100Mbps IEEE standard twisted pair copper ports over a 75ohm coaxial cable. Power is supplied from one of the headend receivers, EECF16-GN3-R-RX-B, EECF8-GN3-R-RX-B, EECF4-DN1-R-XN-B, or EECF1-LN1-R-MN-B 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.

## Features

- 4\*10/100M Ethernet ports with PoE+, 802.3af/802.3at compliant
- Power over Coax technology and PoC management
- Coax data rate >50Mbps (300m) based on coax quality
- PoE+ (30W per port) is supported up to 300m based on coax quality and applied voltage to the headend
- Powered by PoC from headend: EECF16-GN3-R-RX-B, EECF8-GN3-R-RX-B, EECF4-DN1-R-XN-B, EECF1-LN1-R-MN-B, or with 45-57VDC local power supply
- 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](http://www.kbcnetworks.com).

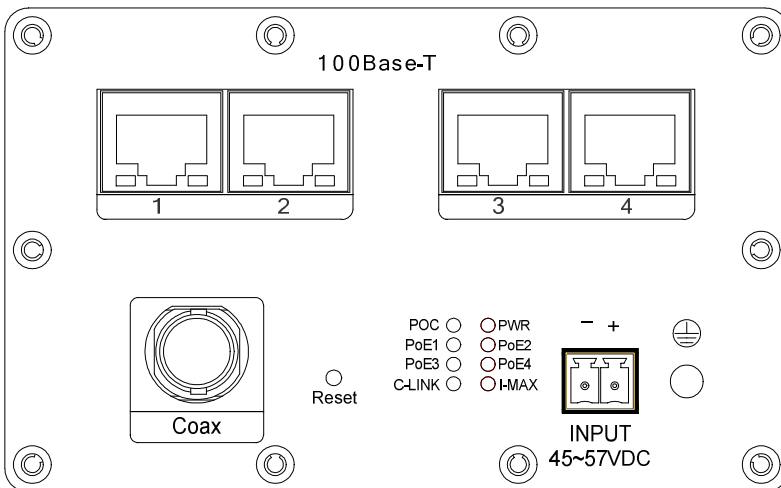
## General

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

## Physical Deployment

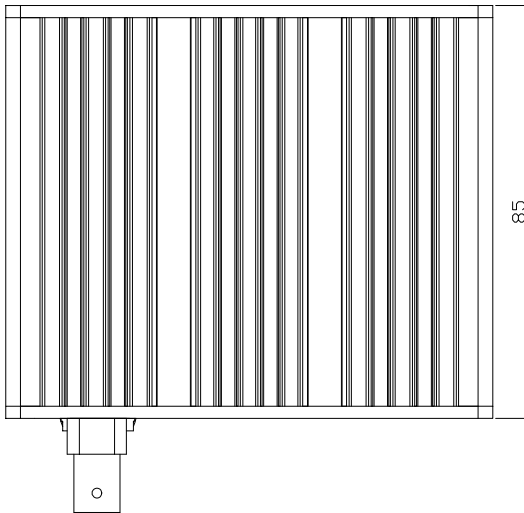
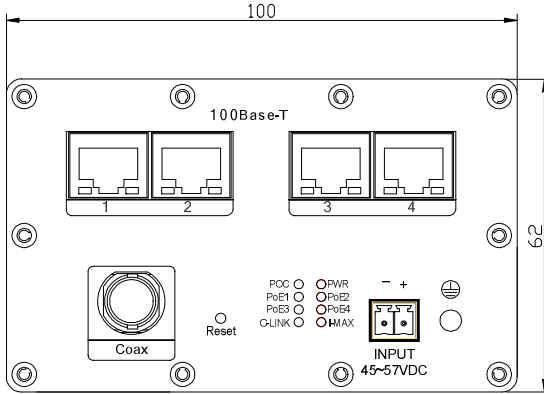
This equipment must be installed and operated in accordance with instructions found in this document. Failure to comply with these instructions will invalidate the warranty.

## Panel View



LED	Color	Status	Description
PWR	Orange	On	Power supply is normal.
PoC	Orange	On/Off	On: PoC input only Off: PoC input AND external power supply.
PoE1	Green	On	Channel 1 PoE power on.
PoE2	Green	On	Channel 2 PoE power on.
PoE3	Green	On	Channel 3 PoE power on.
PoE4	Green	On	Channel 4 PoE power on.
C-LINK	Green	On	EoC connection is normal.
I-MAX	Red	On	When the total power of 4 channels more than 175W.

# Dimensions (Unit = mm)



## Specifications

Item		Description
Power	Power Supply	48VDC/2.5A
	Consumption	<5W without PoC
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	RJ45	10/100M
	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~+60°C
	Storage Temperature	-40°C~+85°C
	Humidity (non-condensing)	0-90%
Mechanical	Dimension (L×W×H)	100mm*85mm*62mm
	Material	Aluminum
	Color	Black
	Weight	0.6Kg

\*Transmission distance depends on signal source and cable quality.

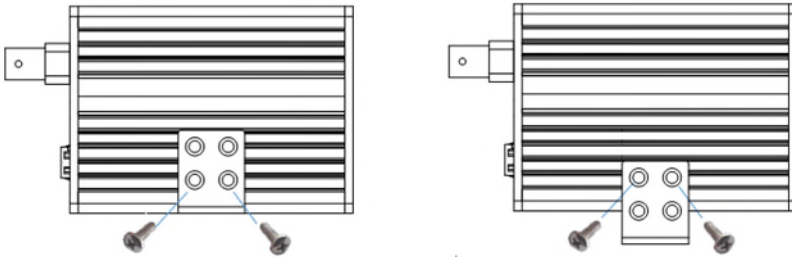
# Installation Instructions

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

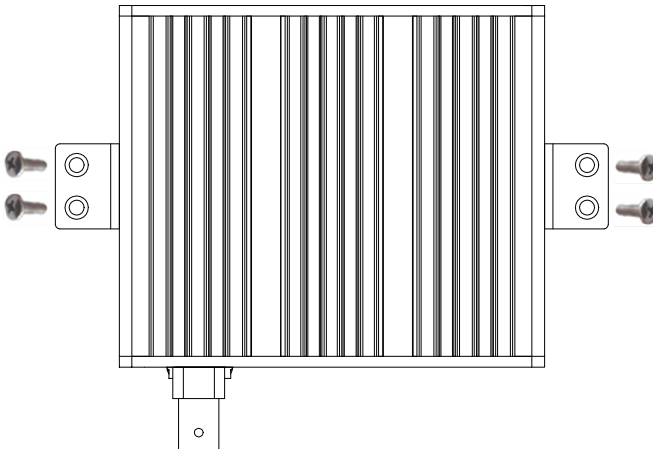
- EoC transmitter----- x1
- Wall mount accessories----- x2
- QSG/User manual----- x1
- Screws----- x4

Please follow the installation steps below:

1) Attach the fitting to the transmitter using screws.



2) Fix the transmitter to the wall or box.



- 3) Use network cable to connect the RJ45 port(s) of transmitter and the powered device(s), use a coaxial cable to connect the BNC port of the transmitter and EoC receiver (and/or plug in the power adapter), and 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 according to the factory installation requirements.
- Confirm 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.
- Try replacing each end 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](http://www.kbcnetworks.com) or contact your nearest KBC office or dealer.

