



## Product Description

The KBC FTLS1 series is a fully ruggedized 10/100 Ethernet Media Converter with PoE (Power over Ethernet). The unit acts as a PSE (Power Sourcing Equipment) providing 25.5W @ 48Vdc and is fully-compliant with the IEEE 802.3at specification. It supports transmission of an Ethernet channel over either one or two, multimode or singlemode optical fibers. Full-duplex operation enables distances in excess of 30km on singlemode fiber. The plug-and-play design ensures ease of installation with no electrical or optical adjustment needed. LED indicators are provided to clearly show the operational status of the unit.

KBC 10/100 media converters are designed for transmission distances up to 4km for multimode fiber and 50km on singlemode fiber (for distances up to 80km, please contact us). If the media converter is to be connected to an SFP port, please contact us for advice since SFPs can vary in the level at which they saturate.

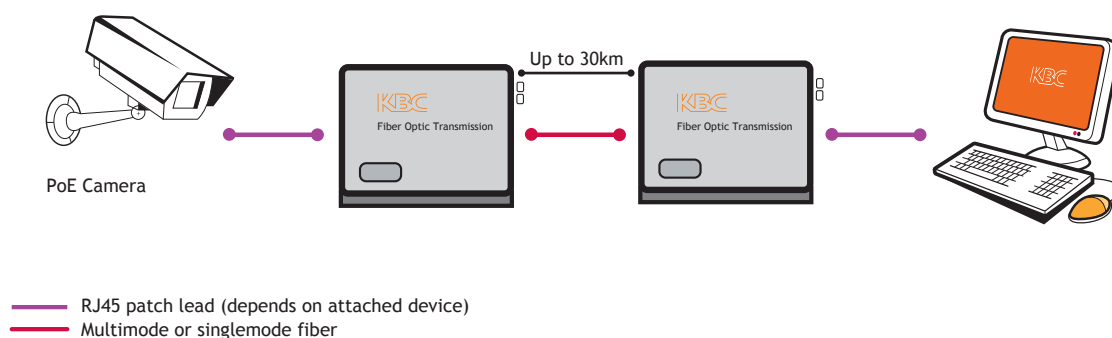
The FTLS1 series is available in a wall-mount configuration only.



## Product Features

- IEEE 802.3at compliant
- Wide operational temperature range
- Mode A Mode B Switchable
- 100BASE-FX on 2 fiber units
- 10/100 auto sensing
- Multimode and singlemode interfaces
- Single and dual fiber

## Typical System Configuration



## Specifications

### Data

Data Formats	Ethernet
Two Way Channels	1
Data Rate	10 / 100Mbps Auto Sensing Half & Full Duplex
Standard	IEEE 802.3 10BASE-T, 100BASE-TX

### PoE

Standard	IEEE 802.3at
Power Supplied	+48Vdc @ 25.5W

### Optical

Wavelength	1310nm / 1550nm
Fiber	Multimode or Singlemode
Number of Fibers	1 or 2
Standard <sup>(1)</sup>	IEEE 802.3 100BASE-FX

### Power

Power Input	+48Vdc
Power Supply for Wall-mount <sup>(2)</sup>	Input: 100 ~ 240 Vac; Output: +48 Vdc

### Environmental

Operating Temperature	-40 ~ +70 °C / -40 ~ +158 °F
Storage Temperature	-40 ~ +70 °C / -40 ~ +158 °F
Operating Humidity	0 to 95% non-condensing
Mean time Between Failure (MTBF)	>100,000 Hours

### Mechanical

Dimensions (Wall-mount L x W x H <sup>(6)</sup> )	135mm x 102mm x 42mm (5.31" x 4.02" x 1.65")
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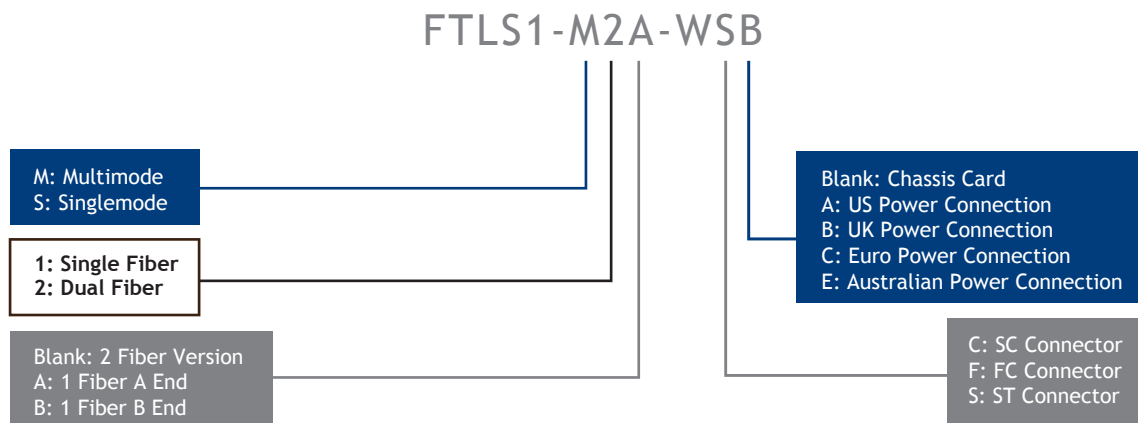
### Connectors

Ethernet	RJ45
Fiber	ST, SC or FC (ST fitted as standard)
Power <sup>(4)</sup>	Screw Block Terminal

### Switch Settings

PoE mode	A or B
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## Part Number Configurator



## Optical Budget

Part Code	Fiber Type	No.	Optical Budget			Wavelength nm	Approximate Transmission Distance <sup>(4)</sup>
			50µm	62.5µm	9µm		
FTLS1-M2*	Multimode	2	8dB	12dB		1310	0-4km
FTLS1-M1*	Multimode	1	8dB	12dB		1310/1550nm	0-4km
FTLS1-S2*	Singlemode	2			20dB	1310	0-30km
FTLS1-S1*	Singlemode	1			20dB	1310/1550nm	0-30km

Transmission distances up to 80km are available please contact KBC Networks for details. All KBC Networks optical transmitters are LASER based.  
SFPs can vary in the level at which they saturate, so if the media converter is to be connected directly to an SFP port, please contact us for advice.

1. 100BASE-FX compliant on 2 fiber interface only.

2. Please select the power plug from US Standard, Euro 2 Circular or UK 3 Pin square when placing order.

3. Supports maximum of up to 14 single slot cards in each 3U Chassis. .

4. Power lines are crimped and fitted to screw block connector in factory.

5. Transmission distance is limited by optical loss of the fiber and loss introduced by connectors, splices and patch panels. Fiber bandwidth also limits the transmission distance.

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