



Product Description

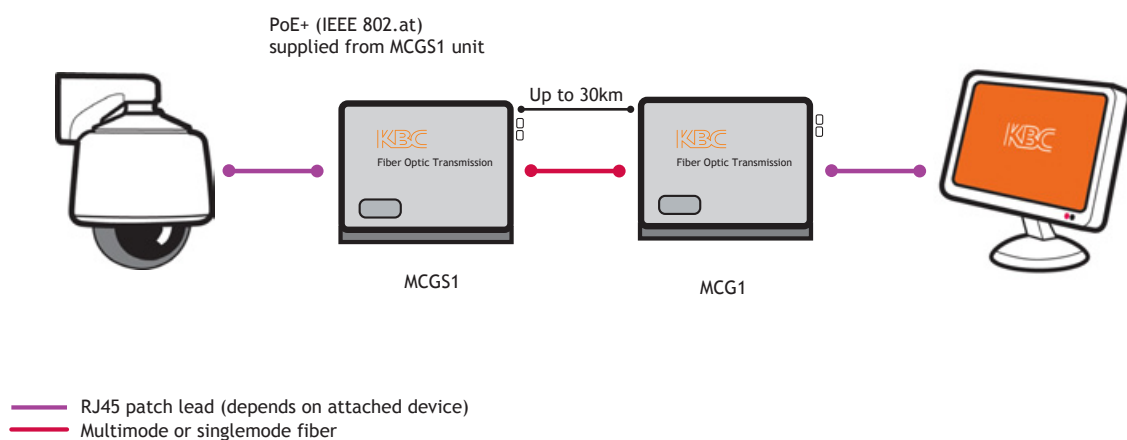
The KBC MCGS1 series is a fully ruggedized 10/100/1000 Ethernet media converter with PoE (Power over Ethernet). The unit acts as a PSE (Power Sourcing Equipment) providing 25.5W @ 48Vdc and is fully compliant with the IEEE802.3at specification. It supports transmission of an Ethernet channel over either 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 show the operational status of the unit clearly. The series is available in wall-mount configuration.



Product Features

- IEEE802.3at high power PoE+
- IEEE802.3ab compliant
- 10/100/1000 auto-sensing
- MDI/MDIX
- Multimode and singlemode interfaces
- Single and dual fiber
- Up to 30km on singlemode fiber
- Wide operational temperature range

Typical System Configuration



Specifications

Standards

IEEE Standard

IEEE 802.3 10BASE-T
IEEE 802.3u 100BASE-TX
& 100BASE-FX
IEEE 802.3ab 1000BASE-T
IEEE 802.3x Full duplex

Data

Data Formats
Two Way Channels
Data Rate

Ethernet
1
10/100/1000Mbps auto-sensing
half & full duplex

Standards

IEEE Standard
Power Supplied

IEEE 802.3at
+48Vdc @25.5W

Optical

Wavelength
Fiber
Number of Fibers

1310nm / 1550nm
Multimode or Singlemode
1 or 2

Power

Power Input
Power Supply⁽¹⁾

+48Vdc
Input: 100 ~ 240Vac; Output: +48Vdc

Environmental

Operating Temperature
Storage Temperature
Operating Humidity
Mean Time Between Failure (MTBF)

-40° ~ +74° C / -40° ~ +165° F
-40° ~ +74° C / -40° ~ +165° F
0 to 95% non-condensing
>100,000 Hours

Mechanical

Dimensions (W x H x D)
Compact & DIN rail

135mm x 115mm x 42mm
(5.31" x 4.53" x 1.65")

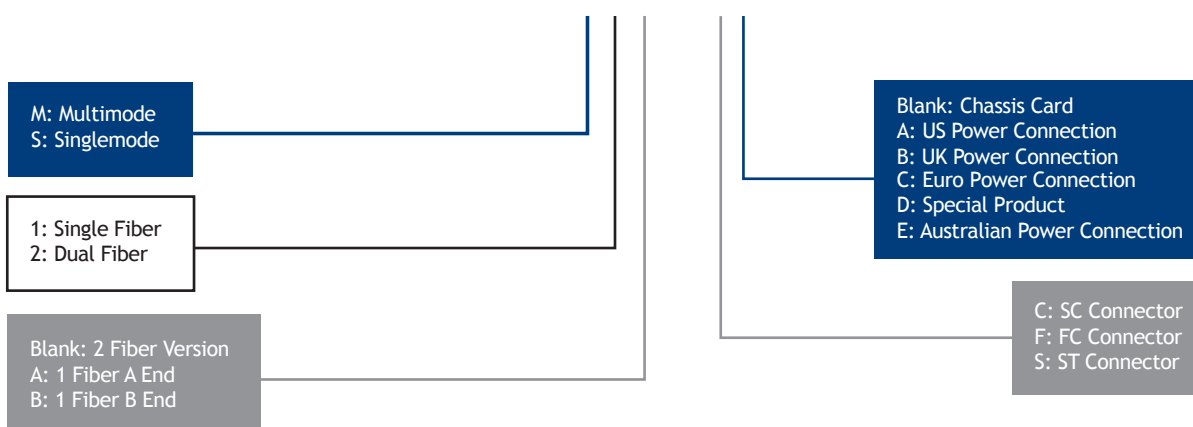
Connectors

Ethernet
Fiber
Power⁽²⁾ Compact & DIN Rail

1 x RJ45
ST, SC or FC
(ST fitted as standard)
Screw block terminal

Part Number Configurator

MCGS1-M1A-WSB



Optical Budget

Part Code	Fiber Type	No.	Optical Budget			Wavelength nm	Approximate Transmission Distance ⁽³⁾
			50µm	62.5µm	9µm		
MCGS1-M2*	Multimode	2	6dB			1310	0~1.5km
MCGS1-M2*	Multimode	2		10dB		1310	0~2km
MCGS1-M1*	Multimode	1	6dB			1310/1550	0~1.5km
MCGS1-M1*	Multimode	1		10dB		1310/1550	0~2km
MCGS1-S2*	Singlemode	2			17dB	1310	0~30km
MCGS1-S1*	Singlemode	1			17dB	1310/1550	0~30km

Transmission distances up to 80km are available please contact KBC Networks for details. All KBC Networks optical transmitters are LASER based.

1. Please select the power plug from US Standard, Euro 2 Circular or UK 3 Pin square when placing order
2. Power lines are crimped and fitted to screw block connector in factory.
3. 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.

Due to ongoing technological improvements, product specifications are subject to change without notice. KBC is not liable for any errors, omissions or changes of any description of the goods contained herein. This information is for the sole purpose of identifying the products, and KBC makes no warranty that the products conform to any description contained herein. Do not rely solely on any representations, statements, or assertions concerning these Products contained herein.