D-Link®
Building Networks for People

DMC-G01LC
Version 1.00

10/100/1000BASE-T to SFP Media Converter

User Manual

Business Class Networking

FCC Class A Certification

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with this user's guide, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

CE Mark Warning

This is a Class A product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

VCCI Class A Compliance (Japan)

This is a product of VCCI Class A Compliance

この装置は，クラスA情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。

VCCI－A



Introduction

Thank you for choosing the 10/100/1000BASE-T to SFP Gigabit Ethernet Media Converter, The Converter introduced here provides one channel media conversion between 10BASE-T, 100BASE-TX, 1000BASE-T and 100BASE-FX, 1000BASE-SX/LX/ZX through mini-GBIC module.

About Media Converter

The Media Converter is a network technology specified by IEEE 802.3 10BASE-T, IEEE 802.3u 100BASE-TX/FX, IEEE 802.3ab 1000BASE-T and IEEE 802.3z 1000BASE-SX/LX/ZX standards.

Product Features

- Used as a stand-alone converter
- Compliance with IEEE802.3 10BASE-T, IEEE802.3u 100TX/FX, IEEE802.3ab 1000BASE-T and IEEE802.3z 1000BASE-SX/LX/ZX
- One-channel media conversion between 10/100/1000BASE-T and 100BASE-FX & 1000BASE-SX/LX/ZX SFP module
- Extends network connection to various lengths depending on SFP transceiver capability
- Auto negotiation of speed and duplex mode on TX port
- Auto MDI/MDI-X for TX port
- Provides intelligent functions such as LLR (Link Loss Return) and LLCF (Link Loss Carry Forward)
- Front panel status LEDs

Installation

This chapter gives step-by-step installation instructions for the Converter.

Selecting a Site for the Equipment

As with any electric device, you should place the equipment where it will not be subjected to extreme temperatures, humidity, or electromagnetic interference. Specifically, the site you select should meet the following requirements:

1. The ambient temperature should be between 32 and 122 degrees Fahrenheit (0 to 50 degrees Celsius).
2. The relative humidity should be less than 90 percent, non-condensing.
3. Surrounding electrical devices should not exceed the electromagnetic field (RFC) standards for IEC 801-3, Level 2 (3V/M) field strength.
4. Make sure that the equipment receives adequate ventilation. Do not block the ventilation holes on each side of the switch or the fan exhaust port on the side or rear of the equipment.
5. The power outlet should be within 1.8 meters of the switch.

Connecting to Power

1. This Converter is a plug-and-play device.
2. Connect the supplied AC to DC power adaptor with a power voltage of 5VDC/1A to the DC-Jack on the converter, and then attach the plug into a standard AC outlet.

LED Indicators

The LED indicators give you instant feedback on status of the converter:

LED	Color	Status	Description
Power (per system)	Green	Light on	Power On
		Light off	Power Off
Link/Act/ Speed (10/100/1000Mbps port)	Green	Light on	Connection (or link) at 1000Mbps
		Blinking	Reception or transmission at 1000Mbps
	Amber	Light on	Connection (or link) at 10/100Mbps
		Blinking	Reception or transmission at 10/100Mbps
Link/Act/ Speed (Fiber port)	Green	Light on	Connection (or link) at 1000Mbps
		Blinking	Reception or transmission at 1000Mbps
	Amber	Light on	Connection (or link) at 100Mbps
		Blinking	Reception or transmission at 100Mbps

Refer to figure 1 to check the LED location on the front panel.



figure 1

Specifications

Standards:	IEEE 802.3 10BASE-T IEEE 802.3u 100BASE-TX/FX IEEE802.3ab 1000BASE-T IEEE802.3z 1000BASE-SX/LX/ZX
Data Transfer Rate:	10/20Mbps, 100/200Mbps, 2000Mbps
Duplex Mode:	Half/Full Duplex Mode
LED indicators:	PWR, RJ-45, SFP
Supported SFP Transceivers	DGS-712: 1000BASE-T Copper SFP Transceiver DEM-310GT:(1000Base-LX, Single-mode, 10km) DEM-311GT:(1000ase-SX, Mutli-mode, 550m) DEM-312GT2:(1000Base-SX, Multi-mode, 2km) DEM-314GT:(1000BASE-LHX, Single-mode, 50km) DEM-315GT:(1000BASE-ZX, Single-mode, 80km) DEM-330T/R:(Gigabit WDM transceiver, Single-Mode 10km) DEM-331T/R:(Gigabit WDM transceiver, Single-Mode 40km) DEM-211:(100Base-FX, Multi-mode, 2km) DEM-210:(100Base-FX, Single-mode, 15km) DEM-220T:(100Base-BX WDM transceiver, Single-mode, 20km) DEM-220R (100Base-BX WDM transceiver, Single-mode, 20km)
Dimensions	L95 × W70 × H25 mm
Power	5V/1A
Media Interface:	RJ-45, mini-GBIC
Temperture:	Storage: -10°C ~ 70°C Operating: 0°C ~ 50°C

Humidity:	10% ~90% non-condensing
Power Consumption:	3.46 Watts (maximum)
EMI Compatiblity:	FCC part 15 Class A CE Certification, Class A VCCI Class A
Safety Compatiblity:	UL/cUL/LVD



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