

DMC-G01LC

Version 2.00

# 10/100/1000Base-T to SFP Media Converter

## User Manual

Business Class Networking

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# Preface

D-Link reserves the right to revise this publication and to make changes in the content hereof without obligation to notify any person or organization of such revisions or changes.

## Manual Revisions

| Revision | Date         | Description       |
|----------|--------------|-------------------|
| 2.00     | May 12, 2015 | • Initial release |

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The purpose of this product is to create a constant network connection for your devices. As such, it does not have a standby mode or use a power management mode. If you wish to power down this product, please simply unplug it from the power outlet.

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# Certifications

D-Link reserves the right to revise this publication and to make changes in the content hereof without obligation to notify any person or organization of such revisions or changes.

## 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.

# Table of Contents

|  |           |
|--|-----------|
| <b>Preface</b> .....                           | <b>i</b>  |
| Manual Revisions .....                         | i         |
| Trademarks .....                               | i         |
| <b>Certifications</b> .....                    | <b>ii</b> |
| FCC Class A Certification .....                | ii        |
| CE Mark Warning .....                          | ii        |
| VCCI Class A Compliance (Japan) .....          | ii        |
| <b>Product Overview</b> .....                  | <b>1</b>  |
| Package Contents .....                         | 1         |
| <b>Introduction</b> .....                      | <b>2</b>  |
| Features .....                                 | 3         |
| Hardware Overview .....                        | 4         |
| Rear Panel .....                               | 4         |
| Front Panel .....                              | 5         |
| <b>Installation</b> .....                      | <b>6</b>  |
| Selecting a Site for the Equipment .....       | 6         |
| Setting up the DMC-G01LC Media Converter ..... | 7         |
| LED Indicators .....                           | 8         |
| <b>Technical Specifications</b> .....          | <b>9</b>  |

# Package Contents



DMC-G01LC 10/100/1000Base-T to SFP Media Converter



User Manual



5 V DC, 1 A Power Adapter

If any of the above items are missing, please contact your reseller.

**Note:** *Using a power supply with a different voltage rating than the one included with the DMC-G01LC will cause damage and void the warranty for this product.*

# Introduction

The D-Link DMC-G01LC 10/100/1000 BASE-T to SFP Gigabit Ethernet Media Converter is a stand-alone plug-and-play device designed to offer flexibility in the use of networking media technologies. The converter provides one channel media conversion between 10BASE-T, 100BASE-TX, or 1000BASE-T and 100BASE-FX or 1000BASE-SX/LX/ZX through an SFP module. The DMC-G01LC Media Converter allows network administrators to grow networks on an as needed basis while offering compatibility with existing equipment.

This Product Manual additional information about the D-Link DMC-G01LC Media Converter. The model you have purchased may appear slightly different from the images shown in this document. For more detailed information about the media converter, making network connections, and technical specifications, please refer to visit <http://www.dlink.com>

# Features

- Used as a standalone converter
- Complies 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 or 1000BASE-SX/LX/ZX SFP modules
- 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

# Hardware Overview

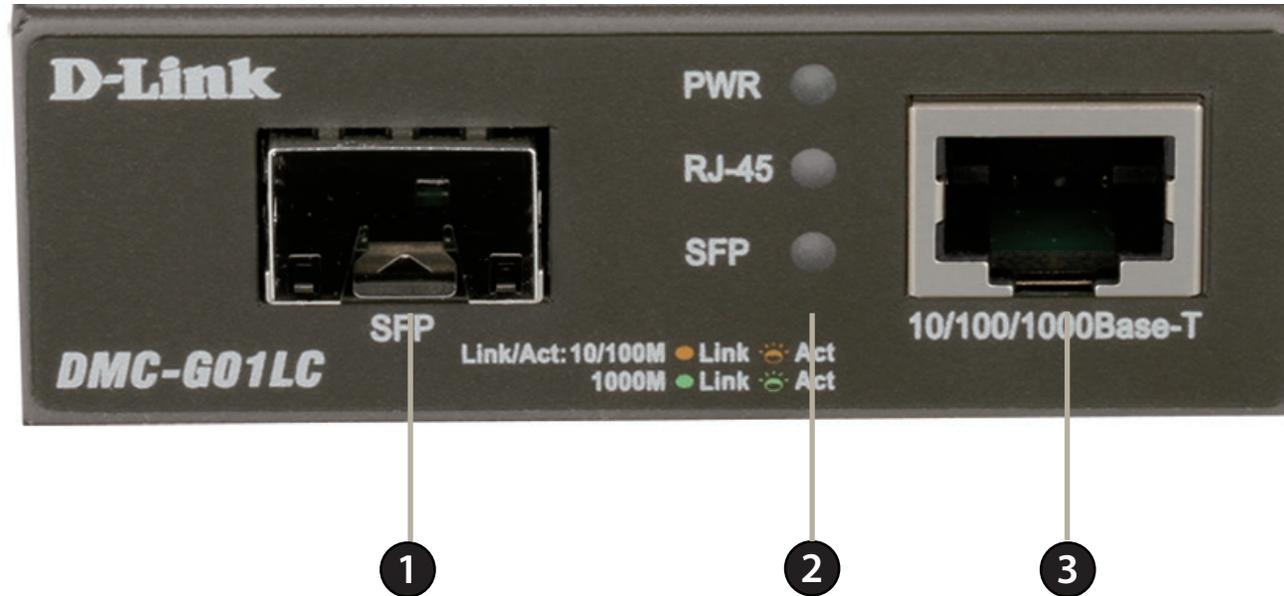
## Rear Panel



|          |                        |   |
|----------|------------------------|---|
| <b>1</b> | <b>Power Connector</b> | Connector for the supplied power adapter. |
|----------|------------------------|---|

# Hardware Overview

## Front Panel



|   |                                  |
|---|----------------------------------|
| 1 | SFP Port                         |
| 2 | Indicator LEDs                   |
| 3 | 10/100/1000 Base-T Ethernet Port |

# Installation

This section gives step-by-step installation instructions for the converter. Placement of the router is very important. Do not place the router in an enclosed area such as a closet, cabinet, or in the attic or garage.

## Selecting a Site for the Equipment

As with any electronic 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:

- A. The ambient temperature should be between 0 to 50 degrees Celsius (32 and 122 degrees Fahrenheit).
- B. The relative humidity should be less than 90 percent, non-condensing.
- C. Surrounding electrical devices should not exceed the electromagnetic field (RF) standards for IEC 801-3, Level 2 (3V/M) field strength.
- D. Make sure that the equipment receives adequate ventilation. Do not block the ventilation holes on either side of the media converter.
- E. The power outlet should be within 1.2 meters of the device.

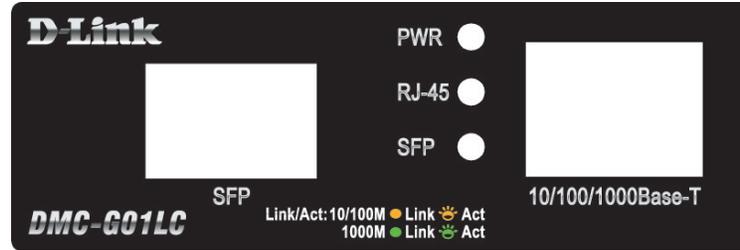
# Setting up the DMC-G01LC Media Converter

This converter is a plug-and-play device.

1. Connect the supplied AC to DC power adapter with a power voltage of 5 V DC/1 A to the receptacle on the rear panel of the converter, and then attach the plug into a standard AC outlet with a voltage range from 100 to 240 V AC.
2. Insert an SFP Transceiver Module into the SFP in accordance with SFP manufacturer recommendations. Refer to SFP Transceiver Module documentation for additional installation instructions.
3. Insert an Ethernet cable with an RJ45 connector to the 10/100/1000 Base-T Ethernet port.

# LED Indicators

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



| LED                       | Color | State     | Indication                               |
|---------------------------|-------|-----------|--|
| <b>Power (PWR)</b>        | Green | Light on  | Power on                                 |
|                           |       | Light off | Power off                                |
| <b>10/100/1000 Base-T</b> | Green | On        | Connection (or link) at 1000 Mbps        |
|                           |       | Blinking  | Reception or Transmission at 1000 Mbps   |
|                           | Amber | On        | Connection (or link) at 10/100 Mbps      |
|                           |       | Blinking  | Reception or Transmission at 10/100 Mbps |
| <b>SFP</b>                | Green | On        | Connection (or link) at 1000 Mbps        |
|                           |       | Blinking  | Reception or Transmission at 1000 Mbps   |
|                           | Amber | On        | Connection (or link) at 10/100 Mbps      |
|                           |       | Blinking  | Reception or Transmission at 10/100 Mbps |

# Technical Specifications

|                        |                            |  |
|------------------------|----------------------------|--|
| <b>Media Converter</b> | Standards                  | IEEE 802.3 10BASE-T<br>IEEE 802.3u 100BASE-TX/FX<br>IEEE802.3ab 1000BASE-T<br>IEEE802.3z 1000BASE-SX/LX/ZX   |
|                        | Data Transfer Rate         | 10/20 Mbps<br>100/200 Mbps<br>2000 Mbps  |
|                        | Duplex Mode                | Half/Full Duplex Mode  |
|                        | Supported SFP Transceivers | DGS-712: 1000BASE-T Copper SFP Transceiver<br>DEM-310GT: 1000Base-LX, Single-mode, 10 km<br>DEM-311GT: 1000ase-SX, Mutli-mode, 550 m<br>DEM-312GT2: 1000Base-SX, Multi-mode, 2 km<br>DEM-314GT: 1000BASE-LHX,Single-mode, 50 km<br>DEM-315GT: 1000BASE-ZX, Single-mode, 80 km<br>DEM-330T/R: Gigabit WDM transceiver, Single-Mode 10 km<br>DEM-331T/R: Gigabit WDM transceiver, Single-Mode 40 km<br>DEM-211: 100Base-FX, Multi-mode, 2 km<br>DEM-210: 100Base-FX, Single-mode, 15 km<br>DEM-220T: 100Base-BX WDM transceiver, Single-mode, 20 km<br>DEM-220R:100Base-BX WDM transceiver, Single-mode, 20 km |
| <b>Physical</b>        | Media Interface:           | RJ-45 Ethernet Port<br>SFP Port  |
|                        | LED indicators             | PWR<br>RJ-45<br>SFP  |
|                        | Power                      | 5 V/1A through an external power adapter   |
|                        | Dimensions                 | 95 x 70 x 25 mm (3.74 x 2.76 x 0.98 inches)  |