Chassis-based Media Converters

System Overview

The Chassis-based Media Converters include a number of independent media converters and a chassis capable of housing up to 16 media converters. You can start with single media converters, each equipped with its own housing and AC power adapter. When your requirements grow big, you can mount a chassis in your equipment rack and install your media converters in the chassis. The housing of each media converter can be easily removed, and the media converter PC board can be slid into the chassis.

Chassis & Power Supply

The chassis lets you install multiple media converters in an equipment rack together with the network devices for which they provide media conversion. This provides for space saving, and the cabling will look neat. The chassis comes with its own universal AC to DC power supply. For maximum power availability, an optional redundant power supply is available for installation in chassis.

Management Option

You can select to configure your chassis with or without management functions. If you configure it with management, a management module is available for installation in the chassis. It lets you monitor in real-time the status of all media converters and power supplies in the chassis, it also sends out alarms to alert you of all anormal situations. Management follows industry standards, including SNMP and http, allowing you to monitor and manage from a third-party SNMP management workstation or via a web browser.

Media Conversion Solutions

The following media conversion solutions are available:
- *Fast Ethernet twisted-pair to Fast Ethernet 100BASE-FX fiber (single-mode and multi-mode)*
- *Fast Ethernet 100BASE-FX fiber multi-mode to single-mode*
- *1000BASE-T Gigabit twisted pair to 1000BASE-SX and 1000BASE-LX Gigabit fiber*

For fiber cables, MT-RJ and SC types of connectors are supported.

Media Converters Stand-alone or Installed in Chassis

The media converters convert signals capable of transmission on one type of cable to signals capable of transmission on another type of cable. This allows you to connect longer distance fiber cables between devices that are designed only for shorter distance cables, such as the Cat. 5 twisted-pair cable.

All media converters in this system come with their own solid metal case housing, LED status indicators and AC to DC power adapters. They can be used as stand-alone converters, or installed in the chassis. In case you install them in the chassis, you will remove their metal cases and slide in their PC boards into the chassis slots. The chassis's power supply will be used instead of the media converters' own AC to DC power adapters. All media converters are hot-swappable when used with the chassis.

Chassis Features

- *16 bays to house up to 16 media converters*
- *Front panel LEDs for bay and fan power status*
- *Standard 19-inch rack-mountable with, 2U height*
- *Non-stop operation & minimal downtime*
- *Allows hot-swapping of media converters*
- *Hot swappable redundant power supplies*
- *Cooling fans on back side (together with power supplies)*
- *1 universal internal AC to DC power supply provided*
- *SNMP and web-based management capabilities (optional)*
- *Second AC to DC power supply for load-sharing purpose (optional)*
- *Media converter power isolation for electrical isolation from each bay*

DMC-1000 Chassis

LED indicators
- Power LED - Fan LED

Housing Dimensions
415 x 390 x 89 mm

AC input
- 100-240 VAC, 50/60Hz
- Internal universal power supply

Operation Temperature
0 - 40 C

Storage Temperature
-10 - 50 C

Operation Humidity
10% - 90%

Storage Humidity
5% - 90%

Emission (EMI)
- FCC class A
- VCCI class A
- CE Class A

DMC-300M, DMC-300SC Media Converters

These converters convert 10/100Mbps 10BASE-T/ 100BASE-TX Fast Ethernet twisted-pair signals to 100BASE-FX Fast Ethernet multi-mode fiber signals. Maximum fiber cable distance is 2km. 1 RJ-45 twisted-pair port and 1 fiber port are provided.

- DMC-300M: the fiber port on this media converter is the MT-RJ connector.
- DMC-300SC: the fiber port on this media converter is the SC connector.

Media Converter Features

- One-channel media conversion between 10BASE-T/ 100BASE-TX and 100BASE-FX
- Fiber MT-RJ or SC connector
- Auto negotiation of speeds and duplex modes on twisted-pair port
- Auto MDI-II and MDI-X
- One slide switch for configuring fixed half/full duplex modes
- Store-and-forward mechanism
- Back-pressure & IEEE 802.3x Flow Control compliant
- Full wire-speed forwarding rate
- Front panel status LEDs
- Can be used as a stand-alone device or with chassis
- Hot-swappable when used with chassis

Technical Specifications

LED Indicators
- Power
- 100Mbps Speed (for twisted-pair port)
- Full Duplex/Collision (for twisted-pair and fiber ports)
- LINK/ACT (for twisted-pair port)

Dimensions
120 x 88 x 25 mm

Power Input
- 7.5V 1.5A
- Through external AC power adapter

Operation Temperature
0˚- 40˚C

Storage Temperature
-25˚- 70˚C

Humidity
10 ~ 90% non-condensing

Emission (EMI) - FCC Class B
- VCCI Class B
- CE Class B
- C-Tick

DMC-515SC, DMC-530SC, DMC-560SC Media Converters

These converters convert 10/100Mbps 10BASE-T/100BASE-TX Fast Ethernet twisted-pair signals to 100BASE-FX Fast Ethernet single-mode fiber signals. Maximum fiber cable distance is 15 - 60 km. 1 RJ-45 twisted-pair port and 1 fiber port (SC connector) are provided.

- DMC-515SC: this media converter supports maximum 15km fiber cable distance.
- DMC-530SC: this media converter supports maximum 30km fiber cable distance.
- DMC-560SC: this media converter supports maximum 60km fiber cable distance.

Media Converter Features

- One-channel media conversion between 10BASE-
- T/100BASE-TX and 100BASE-FX
- Fiber SC connector
- Auto negotiation of speeds and duplex modes on
- twisted-pair port
- Auto MDI-II and MDI-X
- One slide switch for configuring fixed half/full duplex modes
- Store-and-forward mechanism
- Back-pressure & IEEE 802.3x Flow Control compliant
- Full wire-speed forwarding rate
- Front panel status LEDs
- Can be used as a stand-alone device or with chassis
- Hot-swappable when used with chassis

Technical Specifications

LED Indicators
- Power
- 100Mbps Speed (for twisted-pair port)
- Full Duplex/Collision (for twisted-pair and fiber ports)
- LINK/ACT (for twisted-pair port)

Housing Dimensions
120 x 88 x 25 mm

Power Input
- 7.5V 1.5A
- Through external AC power adapter

Operation Temperature
0˚- 40˚C

Storage Temperature
-25˚- 70˚C

Humidity
10 ~ 90% non-condensing

Emission (EMI)
- FCC Class B
- VCCI Class B
- CE Class B
- C-Tick

DMC-615SC Media Converter

This converter converts 100BASE-FX Fast Ethernet multi-mode fiber signals to 100BASE-FX Fast Ethernet single-mode fiber signals. Maximum fiber cable distance is 15km. 2 fiber ports (SC connectors) are provided.

Media Converter Features

- One-channel media conversion between 100BASE-FX multi-mode to 100BASE-FX single-mode fiber
- 2 fiber SC connectors
- Store-and-forward mechanism
- Full wire-speed forwarding rate
- Front panel status LEDs
- Can be used as a stand-alone device or with chassis
- Hot-swappable when used with chassis

Technical Specifications

LED Indicators
- Power
- LINK-1
- LINK-2

Dimensions
120 x 88 x 25 mm

Power Input
- 7.5V 1.5A
- Through external AC power adapter

Operation Temperature
0˚- 40˚C

Storage Temperature
-25˚- 70˚C

Humidity
10 ~ 90% non-condensing

Emission (EMI)
- FCC Class B
- VCCI Class B
- CE Class B
- C-Tick

DMC-1002 Management Module

This module provides SNMP-based and web-based management of all media converter and power supply modules installed in the DMC-1000 chassis. It features a 32-bit, high performance RISC microprocessor executing a real-time operating system. It provides a 10/100Mbps Fast Ethernet port for network connection, allowing you to configure and monitor the system through an SNMP management station or from a PC running an Internet browser. An RS-232 port is also provided to let you connect to a console (PC) to set configuration.

The management module periodically polls all converters and power supplies in the chassis to collect information regarding status and configuration settings. It also receives traps for events such as module hot-swaps and power failures as soon as they occur, as well as warning traps, upon which alarms may be sounded out to alert you.

Management Module Features

- SNMP and web-based standards
- 10/100Mbps Fast Ethernet port & RS-232 console port
- Real-time display of link, speed, duplex status of media converters
- Menu-driven terminal program provided for managment via console port or Telnet
- Built-in SNMP v.1 agent with MIB-II and enterprise MIBs
- Supported traps: cold start, warm start, authentication fail, power fail, fan fail, module insertion, module pullout, port link down and port link up
- Supports factory reset and remote software reboot
- Supports redundant backup of media converters
- Supports remote setting of configurations of Smart Media Converter modules, like LLCF enable, LLR enable, port enable, auto-negotiation enable
- Password protection against unauthorized access
- Configuration setting upload/download through TFTP and the web
- Firmware upgrade through TFTP and the web

Technical Specifications

Management Information & Functions Supported

Chassis
- Part Number
- Revision
- Description
- Chassis Reset
- Power status

Media Converter Modules
- Link Status
- Converter Type
- Slot Occupied
- Part Number
- Revision

Alarms
- Cold Start
- Warm Start
- Link Up
- Link Down
- Authentication Failure
- Power Supply On/Off
- Power Supply Inserted
- Power Supply Removed
- Module Insertion
- Module Removal
- Module Unknown
- Module Failure

Active Control
- Link Loss Carry Forward
- Link Loss Return
- Module Name
- IP address
- Reset Module
- Redundant Backup
- Download software via tftp / http
- Subnet Mask
- Default Gateway
- Telnet to Console Commands

Protocols Supported
- IP
- UDP
- SNMP
- TCP
- TFTP
- ARP
- ICMP
- HTTP

Physical & Environmental

LED Indicators
- Power 1, 2
- Power Fail 1, 2
- Fan Fail 1, 2 - MGM
- Console
- Link/Activity

Dimensions (no housing)
120 x 88 x 25 mm

Operation Temperature
0° - 40°C

Storage Temperature
-25°- 70°C

Operation Humidity
10% - 90%

Storage Humidity
5% - 90%

Emission (EMI)
- FCC Class B
- CE Mark Class B
- VCCI Class B

Ordering Information

Chassis-based Media Converter

DMC-1000	Media Converter Chassis

Optional Media Converter Modules

DMC-300M	Fast Ethernet Twisted-pair to Fast Ethernet Multi-mode Fiber (2km, MT-RJ) Media Converter Module
DMC-300SC	Fast Ethernet Twisted-pair to Fast Ethernet Multi-mode Fiber (2km, SC) Media Converter Module
DMC-515SC	Fast Ethernet Twisted-pair to Fast Ethernet Single-mode Fiber (15km, SC) Media Converter Module
DMC-530SC	Fast Ethernet Twisted-pair to Fast Ethernet Single-mode Fiber (30km, SC) Media Converter Module
DMC-560SC	Fast Ethernet Twisted-pair to Fast Ethernet Single-mode Fiber (60km, SC) Media Converter Module
DMC-615SC	Fast Ethernet Multi-mode Fiber (2km SC) to Fast Ethernet Single-mode Fiber (15km, SC) Media Converter Module

Optional Management Module

DMC-1002	Management Module

Optional Redundant Power Supply

DMC-1001	Redundant Power Supply

ACN 052 202 838

D-Link®

U.S.A.	TEL: 1-949-788-0805	FAX: 1-949-753-7033
Canada	TEL: 1-905-829-5033	FAX: 1-905-829-5095
Europe	TEL: 44-20-8731-5555	FAX: 44-20-8235-5511
U.K.	TEL: 44-20-8731-5555	FAX: 44-20-8235-5511
Germany	TEL: 49-61- 96779900	FAX: 49-61-967799300
France	TEL: 33-1-30.23.86.88	FAX: 33-1-30.23.86.89
Italy	TEL: 39-02-2900-0676	FAX: 39-02-2900-1723
Iberia	TEL: 34-93-4965751	FAX: 34-93-4965701
Sweden	TEL: 46-(0)8-564-61900	FAX: 46-(0)8-564-61901
Norway	TEL: 47-22-991890	FAX: 47-22-207039
Denmark	TEL: 45-43-96.90.40	FAX: 45-43-42.43.47
Finland	TEL: 358-9-622-91660	FAX: 358-9-622-91661
Singapore	TEL: 65-6774-6233	FAX: 65-6774-6322
Australia	TEL: 61-2-9417-7100	FAX: 61-2-9417-1077
Japan	TEL: 81-3-5434-9678	FAX: 81-3-5434-9868
China	TEL: 86-10-88097777	FAX: 86-10-88096789
India	TEL: 91-22-652-6696	FAX: 91-22-652-8914
Middle East	TEL: 202-2456176	FAX: 202-2456192
South America	TEL: 56-2-232-3185	FAX: 56-2-232-0923
Brasil	TEL: 55-11-3094-2910	FAX: 55-11-3094-2921
South Africa	TEL: 27(0)126652165	FAX: 27(0)126652186
Russia	TEL: 7-095-737-3389	FAX: 7-095-737-3390
Taiwan	TEL: 886-2-2910-2626	FAX: 886-2-2910-1515
D-Link Corp.	TEL: 886-2-2916-1600	FAX: 886-2-2914-6299

RECYCLABLE
Rev. 02 (July 2002)
Printed in Taiwan