



#### **Expandable Chassis System**

The Chassis-based Media Converter product lineup includes various independent media converters and a chassis capable of housing up to 16 media converters. You can start with a single media converter, equipped with its own housing and AC power supply. As your requirements grow, you can mount a chassis in your equipment rack and install all your media converters in the chassis. The housing of each media converter can be easily removed, and the media converter unit can be slid into the chassis.

#### **Management Options**

You may configure your chassis with management functions. To do this, a management module is available for installation in the chassis. This module lets you monitor the real-time status of all media converters and power supplies in the chassis, and also sends out alarms to alert you of all abnormal situations. The management module follows industry standards, including SNMP and HTTP, allowing you to monitor and manage media converters and power supplies from a third-party SNMP management workstation or via a web browser.

#### **Media Conversion Solutions**

The following media converter 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
- 10G CX4 to 10G fiber

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

#### **Standalone or Chassis Based Installation**

The media converters convert signals that can be transmitted on one type of cable so that they can be 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 on Cat. 5 twisted-pair cables.

The DMC-805X 10G CX4 to 10G SFP+ Media Converter is the first 10G media converter on the market, converting 10G CX4 signals to 10G SFP+ fiber signals. The DMC-805X extends network distances via the selection of 10G SFP+ modules. The DMC-805X is ideal for extending link distances for servers with built-in 10G CX4 ports. 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 be installed in the chassis. When installed in a chassis, you must first remove the converters' metal cases and slide their PC boards into the chassis slots. This allows the chassis's power supply to 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 width,
   2U height
- Non-stop operation & minimal downtime

### **Hot Swapping**

- Allows hot-swapping of media converters
- Hot swappable redundant power supplies

### **Power Supply and Cooling**

- Cooling fans on backside (together with power supplies)
- Universal internal AC to DC power supply provided
- SNMP and web-based management capabilities
- Second AC to DC power supply for loadsharing purpose (optional)
- Media converter power isolation for electrical isolation from each bay

## DMC-1000 Chassis



The DMC-1000 chassis lets you install multiple media converters in an equipment rack together with the network devices for which they provide media conversion, saving space and optimizing cable placement. The chassis comes with its own universal AC to DC power supply. An optional redundant power supply is also available for installation in the chassis for maximum power availability.

### Technical Specifications

Physical & Environmental	LEDs	Power, Fan
	Dimensions	415 x 390 x 89 mm (16.34 x 15.35 x 3.50 inches)
	Weight	7 kg (15.43 pounds)
	AC Input	100-240 V AC, 50/60 Hz internal universal power supply
	Operating Temperature	0 to 40 °C (32 to 104 °F)
	Storage Temperature	-10 to 50 °C (14 to 122 °F)
	Operating Humidity	10% to 90% non-condensing
	Storage Humidity	5% to 90% non-condensing
	EMI	FCC Class A, VCCI Class A, CE Class A



# DMC-1002 Management Module

#### **Management Module Features**

- SNMP and web-based standards
- 10/100 Mbps Fast Ethernet port & RS-232 console port
- Real-time display of link, speed, and duplex status of media converters
- Menu-driven terminal program provided for management 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, and autonegotiation enable
- Password protection to prevent unauthorized access
- Upload/download configuration settings through TFTP and the web
- Upgrade firmware through TFTP and the web



This DMC-1002 Management 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 offers a 10/100 Mbps 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 included to let you connect to a console (PC) to set up 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, and can send you alerts of these events.

### Technical Specifications

Physical & Environmental	LEDs	Power 1, Power 2, Power Fail 1, Power Fail 2, Fan Fail 1, Fan Fail 2 (MGM), Console, Link/Activity
	Dimensions	120 x 88 x 25 mm (4.72 x 3.46 x 0.98 inches)
	Weight	0.117 kg (0.258 pounds)
	Operating Temperature	0 to 40 °C (32 to 104 °F)
	Storage Temperature	-25 to 70 °C (-13 to 158 °F)
	Operating Humidity	10% to 90% non-condensing
	Storage Humidity	5% to 90% non-condensing
	EMI	FCC Class A, CE Class A, VCCI Class A
Management Information & Functions	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

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#### **Media Converter Features**

- One-channel media conversion between 10 Gbps SFP+ and 10 Gbps CX4
- Supports various fiber distances using different 802.3ae/aq-compliant SFP+ transceivers
- Supports link pass through
- Sliding switch for configuring fixed half/ full duplex modes
- Sliding switch for setting to Forced mode or Auto-negotiation
- Sliding switch for setting the speed
- Sliding switch for setting the LLCF, LLR function
- Store-and-forward mechanism
- Back-pressure & IEEE 802.3x compliant flow control
- Full wire-speed forwarding rate
- Front panel status LEDs
- Can be used as a standalone device or installed in a rack-mount chassis (DMC-1000)
- Manageable through user-friendly Web Graphical User Interface (GUI)

## DMC-805X 10G CX4 to 10G SFP+ Media Converter



The DMC-805X 10G CX4 to 10G SFP+ Media Converter converts 10G CX4 signals to 10G SFP+ fiber signals. The DMC-805X comes with an SFP+ slot for user-selectable fiber transceivers and extends the network connection to various lengths depending on SFP+ transceiver capability. The DMC-805X is a high-performance 10G media converter which provides flexible distance extension for servers equipped with CX4 NICs or older 10G switches with 10G CX4 ports.

The DMC-805X can be used as a standalone converter or installed in a standard rack-mount chassis (DMC-1000). A management option is available for the DMC-805X installed in a chassis (DMC-1000). The management module (DMC-1002) lets users monitor in real-time the status of the DMC-805X and power supplies in the chassis. It also sends out alarms to alert users of abnormal situations. The management module follows industry standards, including SNMP and HTTP, allowing users to monitor and manage the chassis from a third-party SNMP management workstation or via a web browser.

### **Technical Specifications**

Physical &
Environmental

LEDs	Power, Link/Act/Speed
AC Input	3.4 watts
Maximum Power Consumption	Power On (Standby) DC input: 1.63 watts AC input: 2.26 watts
Dimensions	120 x 88 x 25 mm (4.72 x 3.46 x 0.98 inches)
Weight	0.29 kg (0.64 pounds)
Operating Temperature	0 to 40 °C (32 to 104 °F)
Storage Temperature	-10 to 70 °C (14 to 158 °F)
Operating Humidity	10% to 90% non-condensing
EMI	CE Class A, LVD



# DMC-1580SC Smart Media Converter

#### **Media Converter Features**

- One-channel media conversion between 10/100BASE-TX and 100BASE-FX
- Supports single-mode fiber using an SC connector
- Auto-negotiation of speed and duplex mode on 100BASE-TX port
- Supports link pass through
- Supports Auto MDI/MDIX on 100BASE-TX port
- Sliding switch for configuring fixed half/ full duplex modes
- Sliding switch for setting to Forced mode or Auto-negotiation
- Sliding switch for setting the speed
- Sliding switch for setting the LLCF, LLR function
- Store-and-forward mechanism
- Back-pressure & IEEE 802.3x compliant flow control
- Full wire-speed forwarding rate
- Front panel status LEDs
- Can be used as a stand-alone device or installed in a chassis
- Hot-swappable when used with chassis
- Manageable through Intelligent Chassis System



This DMC-1580SC Smart Media Converter provides intelligent functions like LLCF, LLR, store-and-forward mechanism, back-pressure, and 802.3x flow control.

It converts 10/100BASE-TX Fast Ethernet twisted-pair signals to 100BASE-FX Fast Ethernet single-mode fiber signals. The maximum fiber cable distance is 80 km. One RJ-45 twisted-pair port and one fiber port (SC connector) are provided.

### **Technical Specifications**

Physical & Environmental	LEDs	Power, Speed (for twisted-pair port), Full Duplex/Collision (for twisted-pair and fiber ports), LINK/ACT (for twisted-pair and fiber ports),  Fail (for twisted-pair and fiber ports)
	AC Input	7.5 V 1.5 A external power adapter
	Maximum Power Consumption	7.2 watts
	Dimensions	120 x 88 x 25 mm (4.72 x 3.46 x 0.98 inches)
	Weight	305 g (0.67 pounds)
	Operating Temperature	0 to 40 °C (32 to 104 °F)
	Storage Temperature	-25 to 70 °C (-13 to 158 °F)
	Operating Humidity	10% to 90% non-condensing
	EMI	FCC Class A, CE Class A, VCCI Class A
	Fiber Wavelength	1550 nm



## DMC-1530SC Smart Media Converter

#### **Media Converter Features**

- One-channel media conversion between 10/100BASE-TX and 100BASE-FX
- Supports single-mode fiber using an SC connector
- Auto-negotiation of speed and duplex mode on 100BASE-TX Port
- Supports link pass through
- Supports Auto MDI/MDIX on 100BASE-TX port
- Sliding switch for configuring fixed half/ full duplex modes
- Sliding switch for setting to Forced mode or Auto-negotiation
- Sliding switch for setting the speed
- Sliding switch for setting the LLCF, LLR function
- Store-and-forward mechanism
- Back-pressure & IEEE 802.3x compliant flow control
- Full wire-speed forwarding rate
- Front panel status LEDs
- Can be used as a stand-alone device or installed in a chassis
- Hot-swappable when used with chassis
- Manageable through Intelligent Chassis System



This DMC-1530SC Smart Media Converter provides intelligent functions like LLCF, LLR, store-and-forward mechanism, back-pressure, and 802.3x flow control. It converts 10/100 Mbps 10BASE-T/100BASE-TX Fast Ethernet twisted-pair signals to 100BASE-FX Fast Ethernet single-mode fiber signals. The maximum fiber cable distance is 30 km. One RJ-45 twisted-pair port and one fiber port (SC connector) are included.

### **Technical Specifications**

Physical & Environmental	LEDs	Power, 100 Mbps Speed (for twisted-pair ports), Full Duplex/Collision (for twisted-pair and fiber ports), LINK/ACT (for twisted-pair and fiber ports), Fail (for twisted-pair and fiber ports)
	AC Input	7.5 V 1.5 A external power adapter
	Maximum Power Consumption	7.2 watts
	Dimensions	120 x 88 x 25 mm (4.72 x 3.46 x 0.98 inches)
	Weight	305 g (0.67 pounds)
	Operating Temperature	0 to 40 °C (32 to 104 °F)
	Storage Temperature	-25 to 70 °C (-13 to 158 °F)
	Operating Humidity	10% to 90% non-condensing
	EMI	FCC Class A, CE Class A, VCCI Class A
	Fiber Wavelength	1310 nm



## DMC-920 Media Converter

#### **Media Converter Features**

- Auto negotiation of speed and duplex mode on TX port
- Auto MDI/MDIX on TX port
- 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
- Manageable through Intelligent Chassis System



This DMC-920 Media Converter combines transmit and receive signals onto one fiber strand by using two wavelengths. This design avoids the budget losses incurred by single-wavelength single-fiber technology, and minimizes the possibility of reflections in the system. The units on both ends of a link are different. One module uses one wavelength to transmit and a second wavelength to receive, while the other module reverses that relationship. For this reason these units must be used in pairs. A pair of one-channel single fiber is used for media conversion between 10/100BASE-TX and 100BASE-FX.

- DMC-920R: This media converter implements 1310 micron for TX, 1550 micron for RX.
- DMC-920T: This media converter implements 1550 micron for TX, 1310 micron for RX.

The DMC-920 supports 9/125 um and 10/125 um single mode fiber up to 20 km in length.

#### **Technical Specifications**

Physical & Environmental	LEDs	Per device: Power, Speed (100 Mbps) Per port: Full Duplex/Collision, LINK/ACT
	AC Input	7.5 V 1.5 A external power adapter
	Maximum Power Consumption	7.2 W
	Dimensions	120 x 88 x 25mm (4.72 x 3.46 x 0.98 inches)
	Weight	305 g (0.67 pounds)
	Operating Temperature	0 to 40 °C (32 to 104 °F)
	Storage Temperature	-25 to 70 °C (-13 to 158 °F)
	Operating Humidity	10% to 90% non-condensing
	ЕМІ	FCC Class A, CISPR Class A, CE Class A, VCCI Class A
	Fiber Wavelength	DMC-920R: Tx 1310 nm, Rx 1550 nm DMC-920T: Tx 1550 nm, Rx 1310 nm



#### **Media Converter Features**

- One-channel media conversion between 1000BASE-T and 1000BASE-SX/LX
- Auto negotiation of duplex mode on twisted-pair port
- Auto MDI/MDIX for twisted-pair port
- Full wire-speed forwarding rate
- Front panel status LEDs
- Can be used as a standalone device or with chassis
- Hot-swappable when used with chassis
- Link pass through function

## DMC-700SC, DMC-805G, DMC-810SC Media Converters



DMC-700SC Media Converter: This converter converts 1000BASE-T Gigabit twisted-pair signals to 1000BASE-SX Gigabit multi-mode fiber signals. The maximum fiber cable distance is 550 m. One RJ-45 twisted-pair port and one fiber port (SC type connector) are provided.

DMC-805G Media Converter: This converter converts 1000BASE-T Gigabit twisted-pair signals to 1000BASE-SX/LX Gigabit fiber signals. It comes with an SFP slot for user-selectable fiber transceivers and extends the network connection to various lengths depending on SFP transceiver capability.

DMC-810SC Media Converter: This converter converts 1000BASE-T Gigabit twisted-pair signals to 1000BASE-LX Gigabit single-mode fiber signals. The maximum fiber cable distance is 10 km. One RJ-45 port and one fiber port (SC type connector) are provided.

### **Technical Specifications**

# Physical & Environmental

LEDs	Power (PWR), LINK/ACT
AC Input	7.5 V 1.5 A external power adapter
Dimensions	120 x 88 x 25 mm (4.72 x 3.46 x 0.98 inches)
Weight	DMC-700SC: 0.299 kg (0.659 pounds)
	DMC-805G: 0.298 kg (0.657 pounds)
	DMC-810SC: 0.299 kg (0.659 pounds)
Operating Temperature	0 to 40 °C (32 to 104 °F)
Storage Temperature	-25 to 70 °C (-13 to 158 °F)
Operating Humidity	10% to 90% non-condensing
EMI	FCC Class A, CISPR Class A, CE Class A, VCCI Class A
Fiber Wavelength	DMC-700SC: 850 nm
Ů	DMC-810SC: 1300 nm



### **Media Converter Features**

- One-channel media conversion between 10BASET/100BASE-TX and 100BASE-FX
- Fiber SC connector
- Auto negotiation of speeds and duplex modes on twisted-pair port
- Auto MDI/MDIX
- 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

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



These converters convert 10/100 Mbps 10BASE-T/100BASETX Fast Ethernet twisted-pair signals to 100BASE-FX Fast Ethernet single-mode fiber signals. One RJ-45 twisted-pair port and one fiber port (SC connector) are provided.

- DMC-515SC: This media converter supports a fiber cable distance of up to 15 km.
- DMC-530SC: This media converter supports a fiber cable distance of up to 30 km.
- DMC-560SC: This media converter supports a fiber cable distance of up to 60 km.

### **Technical Specifications**

Physical & Environmental	LEDs	Power, 100 Mbps Speed (for twisted-pair ports), Full Duplex/Collision (for twisted-pair and fiber ports), LINK/ACT (for twisted-pair ports)
	AC Input	7.5 V 1.5 A external power adapter
	Dimensions	120 x 88 x 25 mm (4.72 x 3.46 x 0.98 inches)
	Operating Temperature	0 to 40 °C (32 to 104 °F)
	Storage Temperature	-25 to 70 °C (-13 to 158 °F)
	Operating Humidity	10% to 90% non-condensing
	EMI	FCC Class A, CE Class A, VCCI Class A, C-Tick
	Fiber Wavelength	DMC-515SC: 1310 nm
		DMC-530SC: 1310 nm
		DMC-560SC: 1310 nm



## **DMC-615SC Media Converter**

#### **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



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

## **Technical Specifications**

Physical &
Environmental

LEDs	Power, LINK-1, LINK-2
AC Input	7.5 V 1.5 A external power adapter
Dimensions	120 x 88 x 25 mm (4.72 x 3.46 x 0.98 inches)
Operating Temperature	0 to 40 °C (32 to 104 °F)
Storage Temperature	-25 to 70 °C (-13 to 158 °F)
Operating Humidity	10% to 90% non-condensing
EMI	FCC Class A, CE Class A, VCCI Class A, C-Tick
Fiber Wavelength	Multi-mode: 850 nm
	Single-mode: 1310 nm



## DMC-300M, DMC-300SC Media Converters

#### **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/MDIX
- 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 a chassis
- Hot-swappable when used with a chassis





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

- DMC-300M: This media converter uses a fiber port with an MT-RJ connector.
- DMC-300SC: This media converter uses a fiber port with an SC connector.

### **Technical Specifications**

Physical & Environmental	LEDs	Power, 100 Mbps speed (for twisted-pair ports), Full Duplex/Collision (for twisted-pair and fiber ports), LINK/ACT (for twisted-pair ports)
	AC Input	7.5 V 1.5 A external power adapter
	Dimensions	120 x 88 x 25 mm (4.72 x 3.46 x 0.98 inches)
	Operating Temperature	0 to 40 °C (32 to 104 °F)
	Storage Temperature	-25 to 70 °C (-13 to 158 °F)
	Operating Humidity	10% to 90% non-condensing
	EMI	FCC Class A, CE Class A, VCCI Class A, C-Tick
	Fiber Wavelength	DMC-300M: 1300 nm
		DMC-300SC: 1300 nm



# Media Converter Solutions Overview

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

DMC-615SC	Fast Ethernet Multi-mode Fiber
	(2 km SC) to Fast Ethernet Single-
	mode Fiber (15 km, SC) Media
	Converter Module
DMC-700SC	1000BASE-T Gigabit Twisted-pair
	to 1000BASE-SX Gigabit Fiber
	Multi-mode Fiber (550 m, SC) Media
	Converter Module
DMC-810SC	1000BASE-T Gigabit Twisted-pair
	to 1000BASE-LX Gigabit Fiber
	Single-mode Fiber (10 km, SC) Media
	Converter Module
DMC-920	Fast Ethernet Twisted-pair to Fast
	Ethernet Single-mode Fiber (20 km,
	SC) Singe Fiber Media Converter
	Module

DMC-1530SC	Fast Ethernet Twisted-pair to Fast
DIVIO 130000	Ethernet Single-mode Fiber (30 km,
	SC) Smart Media Converter Module
D140 450000	
DMC-1580SC	Fast Ethernet Twisted-pair to Fast
	Ethernet Single-mode Fiber (80 km,
	SC) Smart Media Converter Module
Managemen	t Module
DMC-1002	Management Module
Redundant P	Power Supply
DMC-1001	Redundant Power Supply







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