DMC Series

Copper to Fiber Mini Media Converters

Allied Telesis DMC Series media converters are among the smallest in the market today, and can be powered by either standard power adapter or USB.

Overview

At just 1.25 × 3.6 × 0.85 inches, the Allied Telesis DMC Series can easily fit into the palm of a hand. In addition to being compact—with a small carbon footprint—the DMC Series can be powered with the included Micro USB-to-USB cable, or via the standard AC/DC adapter. Using the USB option saves installation time and cabling, as there are no further power requirements.

Fiber connections

The Allied Telesis range of Gigabit media converters provides a complete family of conversion devices, allowing users to extend the size of UTP networks with fiber cabling. Supporting SC, ST and LC fiber connectors, these converters can be used to extend networks with up to 500m of multi- mode fiber.

VLAN support

Many new backbone switch products now support the industry-standard IEEE 802.1Q specification for Virtual LANs (VLANs) that send data packets on the network. DMC Series media converters are fully compatible with these packets, enabling them to be used in modern networks. Media converters that do not support this feature discard these packets, making them unsuitable for today's networks.

Smart MissingLink (SML)

The Smart MissingLink™ (SML) feature monitors network connections and provides notification when network segments fail, allowing network managers to quickly identify the source and location of failed segments and minimize downtime.

Simple installation

All Allied Telesis media converters feature auto MDI/MDI-X, allowing the converter to be connected to either a PC, hub or switch with a simple UTP cable. DMC Series media converters also allow the installer to test the integrity of the fiber connection, by forcing converters to communicate over the fiber cable. This 'link test' feature allows installers to check for cable faults—without the need for expensive fiber-optic test equipment.

Smart link restoration

In cases of power failure, link loss or other interrupted service, smart link restoration allows the DMC Series to automatically restore the link, without the need to restart or reset.

Power saving

The DMC Series continues the Allied Telesis commitment to the environment with over 50% power savings.* With just 1.5W of power usage, DMC Series media converters are some of the most efficient in the market today.

*Over previous models

Key Features

- Auto-negotiation
- Transparent to IEEE 802.1Q packets
- Auto MDI/MDI-X
- Smart MissingLink
- Smart link restoration
- Link test
- RoHS-compliant
- Wall-mountable using DMCWLMT (sold separately)
- Available in TAA (Trade Agreement Act) Compliant models (-90)
- Compact size

	Fiber Type	Fiber-Optic Diameter	Optical Wavelength	Launch Power		Receive Power			Max Distance
				Min	Max	Min	Typical	Saturation	
DMC100	MMF	50/125	1310 nm	-19 dBm	-14 dBm	-32 dBm	-34 dBm	-3 dBm	2 km
	MMF	62.5/125	1310 nm	-22.5 dBm	-14 dBm	-32 dBm	-34 dBm	-3 dBm	2 km
DMC1000	MMF	50/125	850 nm	-9.5 dBm	-4 dBm	-17 dBm	-20 dBm	-3 dBm	550 m
	MMF	62.5/125	850 nm	-9 dBm	-4 dBm	-17 dBm	-20 dBm	-3 dBm	220 m

SPECIFICATIONS

Status LEDs

- SYS
  - ON — System operating normally
  - OFF — System not operating normally
  - Blinking — Fault condition
- Fiber
  - OFF — No link is established
  - ON — Link is established
  - Blinking — Activity is detected
- RJ45 port (Left)
  - OFF — No link is established
  - ON — Link is established
  - Blinking — Activity is detected
- RJ45 port (Right)
  - OFF — Half duplex
  - ON — Full duplex
  - Blinking — Collisions occurring

Operational Characteristics

- Forwarding/filtering rate
  - 1,488,000 for 1000Mbps
  - 148,880pps for 100Mbps
  - 14,880pps for 10Mbps

Physical Specifications

- Dimensions
  - SC models (W × D × H): 3.49 cm × 9.21 cm × 2.54 cm; 1.38 in × 3.63 in ×1 in
  - ST models (W × D × H): 3.49 cm × 9.91 cm × 2.54 cm; 1.38 in × 3.90 in ×1 in
  - LC models (W × D × H): 3.49 cm × 9.56 cm × 2.54 cm; 1.38 in × 3.75 in ×1 in
- Weight: 6 oz

Power Characteristics

- Powered by
  - Micro to USB to USB 5VDC cable
  - or
  - External power Supply 100-240VAC, 50/60Hz
  - Input Supply Voltage 5V
  - Max Current 400mA
  - Typical Power Consumption 1.4W

Environmental Specifications

- Operating temperature: 0°C to 40°C (32°F to 104°F)
- Operating humidity (non-condensing): 5% to 95% relative humidity
- Storage temperature: -15°C to 65°C (5°F to 149°F)
- Storage humidity: 5% to 95% relative humidity (non-condensing)
- Altitude Up to 3048 m (10000 ft)

Electrical and Mechanical Approvals

- Safety: UL60950-1, EN60950-1
- Emissions (EMI): FCC Class A, EN55022 Class A, CISPR 22 Class A, C-TICK, VCCI
- Immunity: EN55024, EN61000-3-2, EN61000-3-3

ORDERING INFORMATION

AT-DMC100/SC-xx	100TX to 100FX/SC Fast Ethernet Media Converter
AT-DMC100/ST-xx	100TX to 100FX/ST Fast Ethernet Media Converter
AT-DMC100/LC-xx	100TX to 100FX/LC Fast Ethernet Media Converter
AT-DMC1000/SC-xx	1000T to 1000SX/SC Gigabit Ethernet Media Converter
AT-DMC1000/ST-xx	1000T to 1000SX/ST Gigabit Ethernet Media Converter
AT-DMC1000/LC-xx	1000T to 1000SX/LC Gigabit Ethernet Media Converter
Associated Components	
AT-DMCWLMT-005	Wall mount for DMC Series media converters (5 pack)

Where xx =
- 00 for USB power cable only (no external PSU)
- 30 for UK power supply & USB cable
- 50 for EU power supply & USB cable
- 90 for NA power supply & USB cable, TAA

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