

# DMC Series

## Desktop USB-Powered Media Converters

The Allied Telesis DMC Series of Gigabit mini media converters are among the smallest media converters in the market today.



### Overview

At just 1.25 inches wide × 3.6 inches deep × 0.85 inches high, Allied Telesis DMC Series media converters can easily fit into the palm of a hand. In addition to being compact—with a small carbon footprint—the DMC Series can also be powered with the included Micro USB to USB cable, and plugged directly into a laptop or PC or may also be powered via the optional AC/DC adapter. This 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 the use of 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 not supporting this feature discard these packets, making them unsuitable for modern 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. The media converters also allow the installer to test the integrity of the fiber connection, by forcing the 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

Smart Link Restoration allows the devices, in cases of power failure, link loss or other interrupted service, to automatically restore the link without the need to restart/reset them.

### 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 AT-DMCWLMT (sold separately)

| MODEL         | FIBER TYPE | FIBER-OPTIC DIAMETER | OPTICAL WAVELENGTH | LAUNCH POWER (dBm) |     | RECEIVE POWER (dBm) |         |            | MAX DISTANCE |
|---------------|------------|----------------------|--------------------|--------------------|-----|---------------------|---------|------------|--------------|
|               |            |                      |                    | Min                | Max | Min                 | Typical | Saturation |              |
| AT-DMC100/XX  | MMF        | 50/125               | 1310 nm            | -19                | -14 | -32                 | -34     | -3         | 2 km         |
|               | MMF        | 62.5/125             | 1310 nm            | -22.5              | -14 | -32                 | -34     | -3         | 2 km         |
| AT-DMC1000/XX | MMF        | 50/125               | 850 nm             | -9.5               | -4  | -17                 | -20     | -3         | 550m         |
|               | MMF        | 62.5/125             | 850 nm             | -9                 | -4  | -17                 | -20     | -3         | 220m         |

## Specifications

### Status LEDs

|            |                             |
|------------|-----------------------------|
| SYS        |                             |
| ON         | System operating normally   |
| OFF        | System not running normally |
| Slow Blink | 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 | 1,488,00pps for 1000Mbps |
|                           | 148,880pps for 100Mbps   |
|                           | 14,880pps for 10Mbps     |

### Physical Specifications

|             |                             |
|-------------|-----------------------------|
| Dimensions  | 3.18 cm × 9.14 cm × 2.16 cm |
| (W × D × H) | 1.25 in × 3.6 in × 0.85 in  |
| Weight      | 4 oz                        |

### Power Characteristics

Micro-B USB connector, 5VDC  
 Powered from a PC USB port or by optional AC/DC adapter (AT-DMCPWR-60)

### Environmental Specifications

|                       |  |
|-----------------------|--|
| Operating temperature | 0°C to 40°C (32°F to 104°F)                  |
| Operating humidity    | 5% to 95% relative humidity (non-condensing) |
| 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<br>EN60950-1   |
| Emissions (EMI) | FCC Class A<br>EN55022 Class A<br>CISPR 22 Class A<br>C-TICK<br>VCCI |
| Immunity        | EN55024<br>EN61000-3-2<br>EN61000-3-3                                |



## Ordering Information

### AT-DMC100/SC-xx

100TX to 100FX/SC Fast Ethernet Desktop USB-powered media converter with multi-mode SC fiber connector

### AT-DMC100/ST-xx

100TX to 100FX/ST Fast Ethernet Desktop USB-powered media converter with multi-mode ST fiber connector

### AT-DMC100/LC-xx

100TX to 100FX/LC Fast Ethernet Desktop USB-powered media converter with multi-mode LC fiber connector

### AT-DMC1000/SC-xx

1000T to 1000SX/SC Gigabit desktop USB-powered media converter with multi-mode SC fiber connector

### AT-DMC1000/ST-xx

1000T to 1000SX/ST Gigabit desktop USB-powered media converter with multi-mode ST fiber connector

### AT-DMC1000/LC-xx

1000T to 1000SX/LC Gigabit desktop USB-powered media converter with multi-mode LC fiber connector

## Associated Components

### AT-DMCWLMT-05

Wall mount for DMC Series media converters (5 pack)

Where xx = 00 for USB power cord, no power supply  
 50 for EU power supply  
 90 for NA power supply