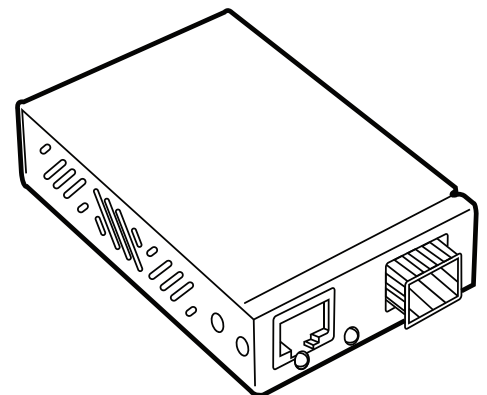


# Seamlessly integrate disparate networks

## Introduction

In an era of ever-expanding connectivity and increased appetite for bandwidth there is a need to maximize existing infrastructures and connect dissimilar networks. As network complexities increase and distance requirements grow, network administrators are challenged with meeting new requirements and integrating new with old infrastructures; whether it be connecting copper to fiber, or single mode to multimode fiber networks.

ProLabs offers a range of media converters that support a variety of cable and connector types to seamlessly integrate disparate networks.



# Robust options to maximize and transform your connectivity

## Mini Media Converters (MiMCs)

Mini Media Converters reduce space due to their compact size. If used in a cabinet, 12 MiMCs can be used in a 1U rack space. MiMCs come with SFP or fixed connectors. A DIP switch on the back lets the user change between 100base and 1G, as well as Link Fault Pass Through (LFPT) functions.

## Managed Media Converters

Managed Media Converters can be installed in a 2U-16 slot chassis providing the user with information such as Port status and Ethernet statistics on both TP and Fiber interface. This is achieved through SNMP and Event traps. QoS can be applied to differentiate traffic flows.

OAM / Loop Back Test are available for fault and maintenance diagnostics. They are powered the same way as the standard converters, and a maximum of 16 slot cards can be inserted into a 2U chassis. The managed converters come with SFP connections.

## Power over Ethernet (PoE) Media Converters

Power over Ethernet allows for power to be delivered to low voltage equipment, such as VoIP phones, CCTV cameras and wireless access points. ProLabs offers 1G with POE 15.4w, POE+ 25.5w and POE+ Industrial temp products. The PoE converters are offered with SFP connections.

## Industrial Media Converters

In harsh environments, industrial media converters are a smart choice, ensuring stable conversion of data. The converters are rated to IP40, and with a working temperature between -40°C~+85°C. ProLabs provides industrial media converters in both the standard form factor for basic conversion and for the PoE range. These are mounted on DIN rails when installed. The industrial range of converters come with SFP connections.

## Unmanaged Media Converters

Unmanaged media converters have plug-and-play capabilities and are easily installed remotely or in cabinets, offering a simple, cost-effective solution without the same level of detection as managed converters.

ProLabs media converter range covers both multimode 850nm up to 550m, and single mode 1310nm up to a range of 40km. The converters are equipped with functions such as Auto MDI/MDI-X and support low-time lag transmission. Additionally, ProLabs offers both fixed and open-slot SFP versions of media converters, providing flexibility for your networking project needs.

## Power

ProLabs media converters are powered by an AC to DC 5-12v input with a power rating less than 3w. A maximum of 4 standard converters can be installed into a 2U rack.

## Certifications:

### EMI:

FCC part 15, Subpart B Class A, EN55022 Class A  
Vibration: IEC 60068-2-6  
Freefall: IEC 60068-2-32  
Shock: IEC60028-2-27  
Rail Traffic: EN50121-4  
CE Mark  
CE/LVD EN60950

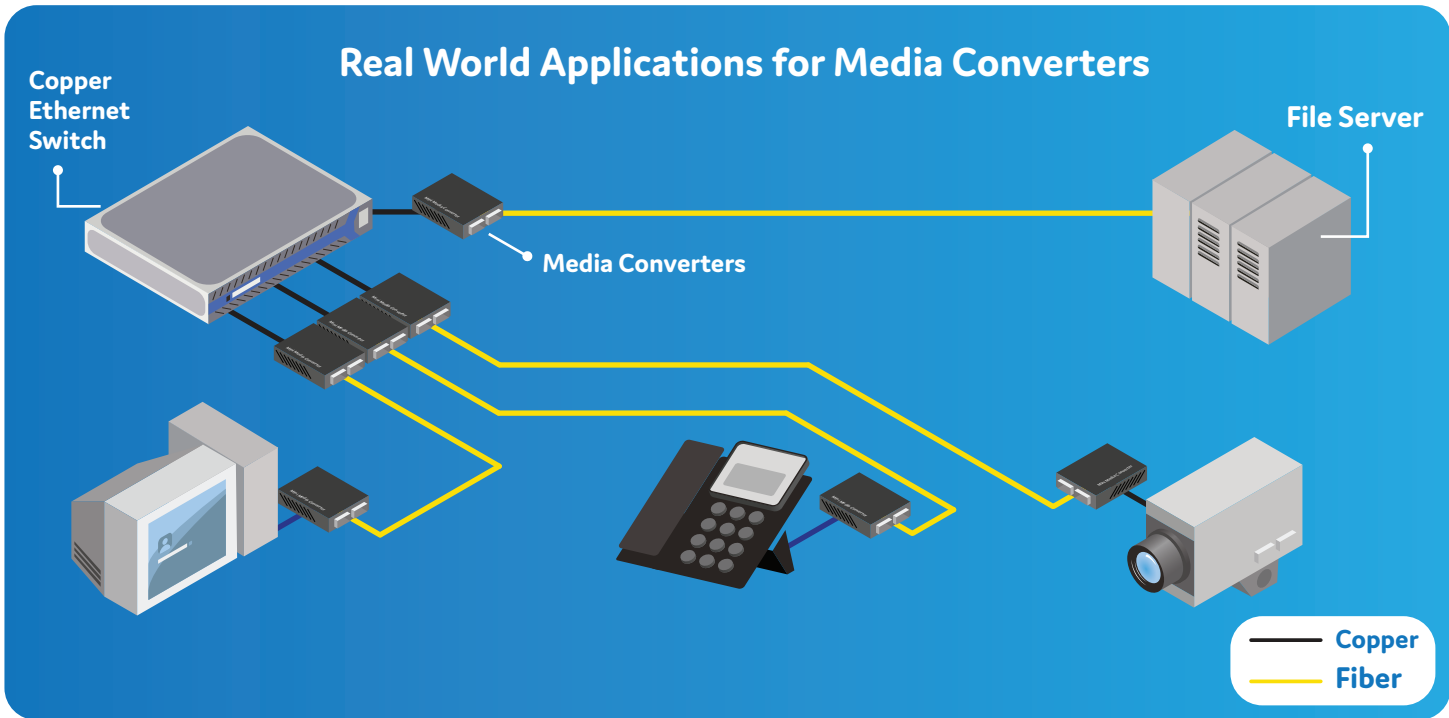
### EMS:

EN61000-4-2 (ESD) Level 3  
EN61000-4-3 (RS) Level 3  
EN61000-4-4 (EFT) Level 3  
EN61000-4-5 (Surge) Level 3  
EN61000-4-6 (CS) Level 3  
EN61000-4-8

### Warranty:

ProLabs offers a 5-year replacement warranty on all media converters that fail under normal working conditions.

# Real World Applications for Media Converters



## Open SFP Port (LC) - RJ45

1000BASE-1GB/s		
Size	Part Number	Description
Standard	C-GMC-SFP	10/100/1000Base-TX(RJ-45) to Open SFP Port Media Converter
Mini	C-GMCMN-SFP	10/100/1000Base-TX(RJ-45) to Open SFP Port Mini Media Converter
SFP Options - Fiber Type/Distance		
Multimode	Part Number	Description
550m/850nm	SFP-1000BASE-SX-C	MSA and TAA Compliant 1000Base-SX SFP Transceiver (MMF, 850nm, 550m, LC)
2km/1310nm	SFP-1000BASE-MX-C	MSA and TAA Compliant 1000Base-MX SFP Transceiver (MMF, 1310nm, 2km, LC)
Singlemode	Part Number	Description
20km/1310nm	SFP-1000BASE-LX-C	MSA and TAA Compliant 1000Base-LX SFP Transceiver (SMF, 1310nm, 10km, LC)
40km/1310nm	SFP-1000BASE-EX-C	MSA and TAA Compliant 1000Base-EX SFP Transceiver (SMF, 1310nm, 40km, LC)
80km/1550nm	SFP-1000BASE-ZX-C	MSA and TAA Compliant 1000Base-ZX SFP Transceiver (SMF, 1550nm, 80km, LC)
100BASE - 100Mb/s		
Size	Part Number	Description
Standard	C-FMCMN-SFP	10/100Base-TX(RJ-45) to Open SFP Port Mini Media Converter
Mini	C-FMC-FX-SFP	10/100Base-TX(RJ-45) to Open SFP Port Media Converter
SFP Options - Fiber Type/Distance		
Multimode	Part Number	Description
2km/1310nm	SFP-100BASE-FX-C	MSA and TAA Compliant 100Base-FX SFP Transceiver (MMF, 1310nm, 2km, LC)
Singlemode	Part Number	Description
20km/1310nm	SFP-100BASE-LX-C	MSA and TAA Compliant 100Base-LX SFP Transceiver (SMF, 1310nm, 10km, LC)
40km/1310nm	SFP-100BASE-EX-C	MSA and TAA Compliant 100Base-EX SFP Transceiver (SMF, 1310nm, 40km, LC)
80km/1550nm	SFP-100BASE-ZX-C	MSA and TAA Compliant 100Base-ZX SFP Transceiver (SMF, 1550nm, 80km, LC)

### NOTES:

- 1) Standard Media Converter Dimensions: (3.75" x 2.75" x 1.0")
- 2) Mini Media Converter Dimensions: (3.75" x 2.25" x 0.75")
- 3) Other Media Converter options available: Hardenend, 10G, 40G, Multi-Port, Managed, POE/+
- 4) Additional SFP options available: Hardenend, BiDirectional, WDM

## Media Converter: Fixed SC - RJ45

### 1000BASE-1GB/s

Multimode	Size	Part Number	Description
550m/850nm	Standard	C-GMC-SX-5SC	10/100/1000Base-TX(RJ-45) to 1000Base-SX(SC) MMF 850nm 550m Media Converter
550m/850nm	Mini	C-GMCMN-SX-SC	10/100/1000Base-TX(RJ-45) to 1000Base-SX(SC) MMF 850nm 550m Media Converter
2km/1310nm	Standard	C-GMC-MX-SC	10/100/1000Base-TX(RJ-45) to 1000Base-MX(SC) MMF 1310nm 2km Media
2km/1310nm	Mini	C-GMCMN-FX-SC	10/100/1000Base-TX(RJ-45) to 1000Base-FX(SC) MMF 1310nm 2km Mini Media
Singlemode	Size	Part Number	Description
20km/1310nm	Standard	C-GMC-LX-2SC	10/100/1000Base-TX(RJ-45) to 1000Base-LX(SC) SMF 1310nm 20km Media Converter
20km/1310nm	Mini	C-GMCMN-LX-2SC	10/100/1000Base-TX(RJ-45) to 1000Base-LX(SC) SMF 1310nm 20km Mini Media
40km/1310nm	Standard	C-GMC-LX-4SC	10/100/1000Base-TX(RJ-45) to 1000Base-LX(SC) SMF 1310nm 40km Media Converter
40km/1310nm	Mini	C-GMCMN-LX-4SC	10/100/1000Base-TX(RJ-45) to 1000Base-LX(SC) SMF 1310nm 40km Mini Media

### 100BASE - 100MB/s

Multimode	Size	Part Number	Description
2km/1310nm	Standard	C-FMC-FX-SC	10/100Base-TX(RJ-45) to 100Base-FX(SC) MMF 1310nm 2km Media Converter
550m/850nm	Mini	C-FMCMN-SX-SC	10/100Base-TX(RJ-45) to 100Base-SX(SC) MMF 850nm 550m Mini Media Converter
2km/1310nm	Mini	C-FMCMN-FX-SC	10/100Base-TX(RJ-45) to 100Base-FX(SC) MMF 1310nm 2km Mini Media Converter
Singlemode	Size	Part Number	Description
20km/1310nm	Standard	C-FMC-FX-SC	10/100Base-TX(RJ-45) to 100Base-FX(SC) MMF 1310nm 2km Media Converter
20km/1310nm	Mini	C-FMCMN-LX-2SC	10/100Base-TX(RJ-45) to 100Base-LX(SC) SMF 1310nm 20km Mini Media Converter
40km/1310nm	Standard	C-FMC-FX-4SC	10/100Base-TX(RJ-45) to 100Base-LX(SC) SMF 1310nm 40km Media Converter
40km/1310nm	Mini	C-FMCMN-LX-4SC	10/100Base-TX(RJ-45) to 100Base-LX(SC) SMF 1310nm 40km Mini Media Converter

#### NOTES:

- 1) Standard Media Converter Dimensions: (3.75" x 2.75" x 1.0")
- 2) Mini Media Converter Dimensions: (3.75" x 2.25" x 0.75")
- 3) Other Media Converter options available: Hardenend, Multi-Port, Single Fiber, Managed, POE/+



We offer a range of media converters to suit your connectivity needs

## Media Converter: Fixed ST - RJ45

1000BASE-1GB/S			
Multimode	Size	Part Number	Description
550m/850nm	Standard	C-GMC-SX-5ST	10/100/1000Base-TX(RJ-45) to 1000Base-SX(ST) MMF 850nm 550m Media Converter
550m/850nm	Mini	C-GMCMN-SX-ST	10/100/1000Base-TX(RJ-45) to 1000Base-SX(ST) MMF 850nm 550m Mini Media
2km/1310nm	Standard	C-GMC-MX-ST	10/100/1000Base-TX(RJ-45) to 1000Base-MX(ST) MMF 1310nm 2km Media Converter
2km/1310nm	Mini	C-GMCMN-FX-ST	10/100/1000Base-TX(RJ-45) to 1000Base-FX(ST) MMF 1310nm 2km Mini Media
Singlemode	Size	Part Number	Description
20km/1310nm	Standard	C-GMC-LX-2ST	10/100/1000Base-TX(RJ-45) to 1000Base-LX(ST) SMF 1310nm 20km Media Converter
20km/1310nm	Mini	C-GMCMN-LX-2ST	10/100/1000Base-TX(RJ-45) to 1000Base-LX(ST) SMF 1310nm 20km Mini Media
40km/1310nm	Standard	C-GMCMN-LX-4ST	10/100/1000Base-TX(RJ-45) to 1000Base-LX(ST) SMF 1310nm 40km Mini Media
100BASE - 100MB/s			
Multimode	Size	Part Number	Description
2km/1310nm	Standard	C-FMC-FX-ST	10/100Base-TX(RJ-45) to 100Base-FX(ST) MMF 1310nm 2km Media Converter
550m/850nm	Mini	C-FMCMN-SX-ST	10/100Base-TX(RJ-45) to 100Base-SX(ST) MMF 850nm 550m Mini Media Converter
2km/1310nm	Mini	C-FMCMN-FX-ST	10/100Base-TX(RJ-45) to 100Base-FX(ST) MMF 1310nm 2km Mini Media Converter
Singlemode	Size	Part Number	Description
20km/1310nm	Standard	C-FMC-FX-2ST	10/100Base-TX(RJ-45) to 100Base-LX(ST) SMF 1310nm 20km Media Converter
20km/1310nm	Mini	C-FMCMN-LX-2ST	10/100Base-TX(RJ-45) to 100Base-LX(ST) SMF 1310nm 20km Mini Media Converter
40km/1310nm	Standard	C-FMC-FX-4ST	10/100Base-TX(RJ-45) to 100Base-LX(ST) SMF 1310nm 40km Media Converter
40km/1310nm	Mini	C-FMCMN-LX-4ST	10/100Base-TX(RJ-45) to 100Base-LX(ST) SMF 1310nm 40km Mini Media Converter

### NOTES:

- 1) Standard Media Converter Dimensions: (3.75" x 2.75" x 1.0")
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- 3) Other Media Converter options available: Hardenend, Multi-Port, Single Fiber, Managed, POE/+



Visit [www.prolabs.com](http://www.prolabs.com) for  
more connectivity solutions

