

MC-PRO-1000AS-SFP

RJ45 to Fibre

10/100/1000Mbps RJ45 to Fibre Media Converter

Key Features

- Accepts a wide range of ProLabs SFP transceivers; including FE, GbE, Bidi and WDM.
- 2 x 10/100/1000Mbps SFP fibre ports
- Protocol independence supporting OC3, OC12, OC48 and Fibre channel
- 9K Jumbo frame supported, 512kb data storage integrated
- A store-and-forward switching mechanism
- 6 LEDs for simple diagnostics
- Flow control mode: full duplex with IEEE 802.3x standard, half-duplex with Back pressure standard.
- Operating environment temperature: 0 ° ~ 50 ° c
- Compact size



Ordering Information

Part Number	Description
MC-PRO-1000AS-SFP	10/100/1000Base Auto Sensing RJ45 to SFP Media converter

Introduction

The ProLabs MC-PRO-1000AS-SFP is a 10/100/1000 Mbps Auto-sensing RJ45 to fibre Media Converter, is designed to achieve distances greater than 100m over Ethernet networks through the use of a wide range of ProLabs pluggable SFP LC transceivers. Suited to a wide range of fields requiring high-reliability data transmission or IP data transfer. The MC-PRO-1000AS-SFP meets IP30 protection degree, passes through dangerous environmental certification and complies with FCC and CE standards. Please note, regional specific power cables are orderable separately.

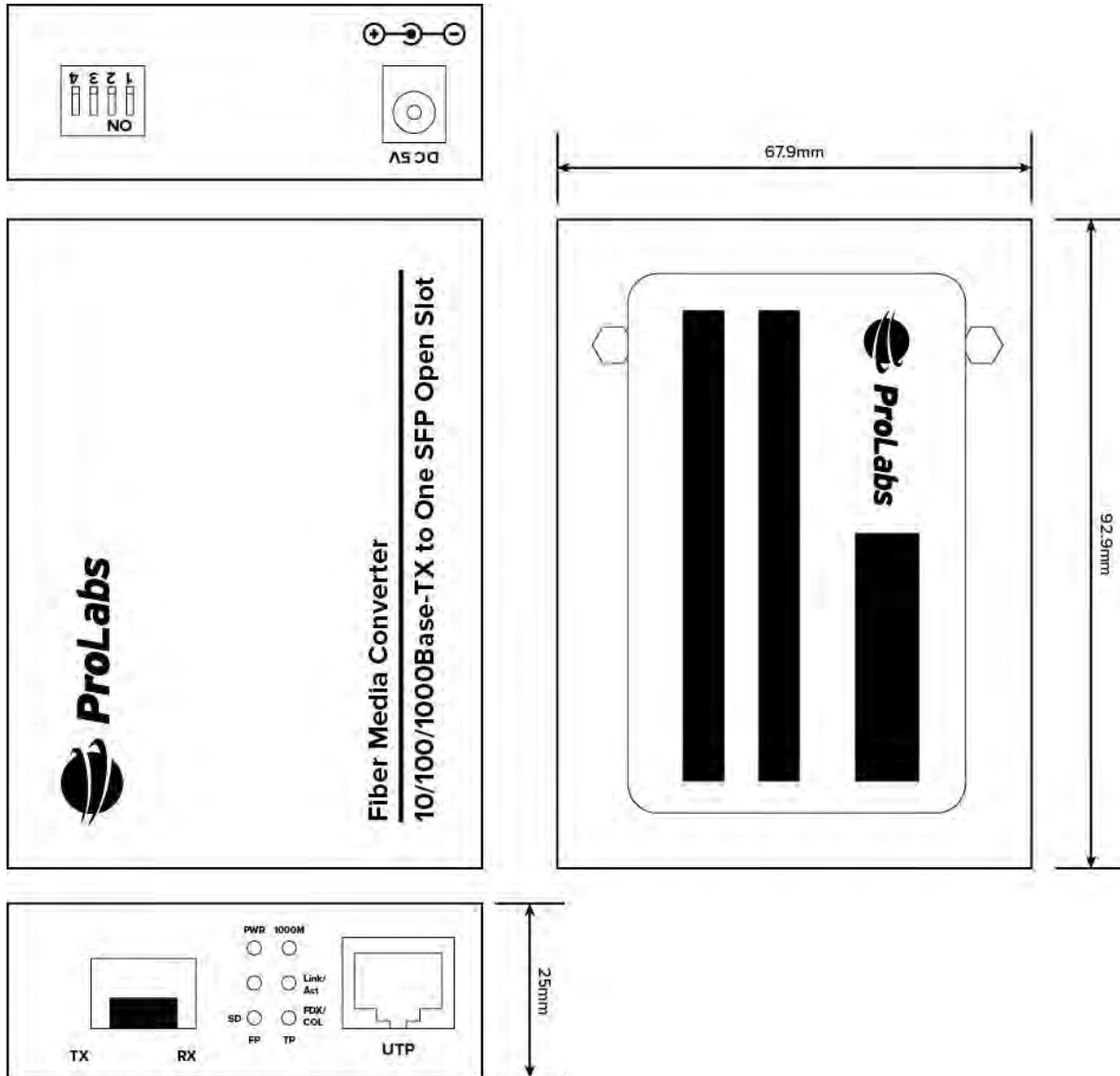
Specification

Product Name	10/100/1000Mbps RJ45 to Fibre Media Converter
Model No.	MC-PRO-1000AS-SFP
Port	1 x 10/100/1000Mbps RJ45 port 1 x 1000Mbps SFP port
Transmission types	Modified cut through Storage and forward Smart pass through Pass through
Network media	10BASE-T: CAT3, CAT4, CAT5 un-shielded twisted pair(≤100m) 100/1000BASE-TX: CAT5 or above shielded twisted pair(≤100m) SFP port, Transmission distance is transceiver dependent (see table below): 20Km, 40Km, 60Km, 80Km, 100Km
LEDs	Power, 1000M, LINK/ACT Fibre and Copper, SD optical signal, FDX Full duplex.
Power supply	External Power cable available separately. Input voltage: 5V, 2A Max Power consumption: <3W
Environment	Working temperature: 0°~ 50°C Storage temperature: -10°~ 70°C Working humidity: 10%~90%, non-condensing
Industry Standards	EMI: FCC Part 15 Subpart B Class A, EN 55022 Class A EMS: EN 61000-4-2 (ESD) Level 3, EN 61000-4-3 (RS) Level 3, EN 61000-4-4 (EFT) Level 3, EN 61000-4-5 (Surge) Level 3, EN 61000-4-6 (CS) Level 3, EN 61000-4-8 Vibration: IEC 60068-2-6 Freefall: IEC 60068-2-32 Shock: IEC 60068-2-27 Rail Traffic: EN 50121-4
Safety	CE Mark, commercial CE/LVD EN60950
Mechanical information	Shell: Metal shell Safety class: IP30 Product Weight: 170g Product Dimension: 93 x 68 x 25mm
Warranty	Advance Replacement within 3 years

LED indicator status

- Power Indicator Light. ON means normal operation of DC 5V power supply
- 1000M Indicator Light. ON means the rate of the electric port is 1000Mbps. OFF means the rate of 100Mbps.
- LINK/ACT (FP). ON means optical circuit connection. FLASHING means data transfer in the channel. OFF means non-connectivity of the optical channel.
- LINK/ACT (TP). ON means electrical circuit connection. FLASHING means data transfer in the channel. OFF means non-connectivity of the electrical channel.
- SD Indicator light. ON means input of optical signal. OFF means no input
- FDX/COL. ON means full-duplex electric port. OFF means half-duplex electric port.

Product Diagram



Link Fault Pass Through (LFP)

The LFP function can alert network administrators to a problem with the link media and provide an efficient solution to monitor. The DIP switch on the reverse of the unit allows the user to disable or enable the LFP function.

When the LFP function is enabled, both the Fibre Port (FP) and the Copper Port (TP) do not transmit a link signal until they receive a link signal from the opposite port.

The DIP switch #1 must be in the ON position for both media converters in this arrangement. Next, you must set one of the two media converters to enter Centre MC mode. To do this, set DIP switch #4 to the ON position. The other Media converter in this arrangement must be set to MC terminal mode. To do this, please set DIP switch #4 to the OFF position. If both media converters have the DIP switch #4 set to ON or OFF mode, The LFP function will not be achieved.

Configuration of the DIP switch

DIP Switch Number	Switch Status	Description of function
1	ON	LFP function is enabled*
	OFF	LFP function is disabled*
3/2	OFF/OFF	Store and forward mode
	OFF/ON	Modified cut through mode
	ON/OFF	Smart pass through mode
	ON/ON	Pass through mode
4	ON	Centre MC
	OFF	Terminal MC

Key Accessories

Configurable Media Converters. Step 1- Choose the Transceiver

MC-SFP-100-FX	100BASE SFP	MC Transceiver 100BASE-FX, 1310nm up to 2km over MMF
MC-SFP-100-LX	100BASE SFP	MC Transceiver 100BASE-LX, 1310nm up to 10km over SMF
MC-SFP-100-ZX	100BASE SFP	MC Transceiver 100BASE-ZX, 1550nm up to 80km over SMF
MC-SFP-1000-SX	1000BASE SFP	MC Transceiver 1000BASE-SX, 850nm up to 550m over MMF
MC-SFP-1000-SX2	1000BASE SFP	MC Transceiver 1000BASE-SX2, 1310nm up to 2km over MMF
MC-SFP-1000-LX	1000BASE SFP	MC Transceiver 1000BASE-LX, 1310nm up to 20km over SMF
MC-SFP-1000-BX20-D	1000BASE SFP	MC Transceiver 1000BASE-BXD, Tx1490/Rx1310nm up to 20km over SMF
MC-SFP-1000-BX20-U	1000BASE SFP	MC Transceiver 1000BASE-BXU, Tx1310/Rx1490nm up to 20km over SMF
MC-SFP-1000-LX40	1000BASE SFP	MC Transceiver 1000BASE-LX40, 1310nm up to 40km over SMF
MC-SFP-1000-ZX	1000BASE SFP	MC Transceiver 1000BASE-ZX, 1550nm up to 80km over SMF

If deployed in a standalone format please choose the Regional power cable, 1 cable per Media Converter

MC-PWR-UK	UK power cable	UK Power cable for Fibre to Fibre Media converter
MC-PWR-EU	EU power cable	EU Power cable for Fibre to Fibre Media converter
MC-PWR-US	USA power cable	USA Power cable for Fibre to Fibre Media converter
CAB-ACU	UK chassis power cable	UK Power cable for MC Chassis
CAB-ACE	EU chassis power cable	EU Power cable for MC Chassis
CAB-AC	US chassis power cable	US Power cable for MC Chassis

Specialist Transceivers

Specialist CWDM Transceivers

MC-SFP-1000-EX-1470	1000BASE SFP CWDM	MC Transceiver 1000BASE-EX, CWDM 1470nm up to 40km over SMF
MC-SFP-1000-EX-XXXX	1000BASE SFP CWDM	MC Transceiver 1000BASE-EX, CWDM XXXXnm up to 40km over SMF. *Populate XXXX with the desired wavelength 1490~1590nm, using 20nm increments.
MC-SFP-1000-EX-1610	1000BASE SFP CWDM	MC Transceiver 1000BASE-EX, CWDM 1610nm up to 40km over SMF
MC-SFP-1000-ZX-1470	1000BASE SFP CWDM	MC Transceiver 1000BASE-ZX, CWDM 1470nm up to 80km over SMF
MC-SFP-1000-ZX-XXXX	1000BASE SFP CWDM	MC Transceiver 1000BASE-ZX, CWDM XXXXnm up to 80km over SMF. *Populate XXXX with the desired wavelength 1490~1590nm, using 20nm increments.
MC-SFP-1000-ZX-1610	1000BASE SFP CWDM	MC Transceiver 1000BASE-ZX, CWDM 1610nm up to 80km over SMF

Specialist DWDM Transceivers

MC-SFP-1000-EX-CH21	1000BASE SFP DWDM	MC Transceiver 1000BASE-EX, DWDM, 100Ghz spacing 1560.61nm up to 40km over SMF
MC-SFP-1000-EX-CHYY	1000BASE SFP DWDM	MC Transceiver 1000BASE-EX, DWDM 100Ghz spacing CHYY up to 40km over SMF. *Populate YY with the desired 100Ghz Channel# 22~59.
MC-SFP-1000-EX-CH60	1000BASE SFP DWDM	MC Transceiver 1000BASE-EX, DWDM 100Ghz spacing 1529.55nm up to 40km over SMF
MC-SFP-1000-ZX-CH21	1000BASE SFP DWDM	MC Transceiver 1000BASE-ZX, DWDM 100Ghz spacing 1560.61nm up to 80km over SMF
MC-SFP-1000-ZX-CHYY	1000BASE SFP DWDM	MC Transceiver 1000BASE-EX, DWDM 100Ghz spacing CHYY up to 80km over SMF. *Populate YY with the desired 100Ghz Channel# 22~59.
MC-SFP-1000-ZX-CH60	1000BASE SFP DWDM	MC Transceiver 1000BASE-ZX, DWDM 100Ghz spacing 1529.55nm up to 80km over SMF

Rack Mountable Accessories

You are able to deploy the ProLabs MC-PRO-1000AS-SFP Media converter into a 14 slot, 2U Rack mountable Chassis. This allows the user to consolidate power requirements into a single cable, or dual cable for redundancy.

If multiple Media Converters are to be deployed in a Chassis please choose the Regional Chassis PSU, 1 PSU per Chassis

MC-PRO-1000-CHASSIS	MC Chassis	Chassis for 1G Media Converter, Rack mountable, 2U, 14 slots.
CAB-ACU	UK Power cable	UK power cable for Media Converter Chassis
CAB-ACE	EU Power cable	EU power cable for Media Converter Chassis
CAB-AC	US Power cable	US power cable for Media Converter Chassis