

# MC901 mediaconverter

## Gigabit Ethernet First Mile fiber access for FTTH networks



The MC901 provides a cost-effective fiber-to-copper termination for customer premises. This media converter provides fiber optic bandwidth and link distance advantages to existing Ethernet networks with minimum upgrade costs.

The MC901 converts 1000BASE-SX/LX to 1000BASE-T. All traffic is forwarded transparently between interfaces. The 1000BASE-T port supports full-duplex Gigabit connection at wire speed through a single RJ45 connector.

### Single fiber WAN connection

Support for 100BASE-BX-10 and 1000BASE-BX-10 allows a single fiber to be used for both downstream and upstream traffic, which makes efficient use of the fiber plant, resulting in reduced costs for installation and maintenance.

### Dual speed WAN port

The media converter supports 100 and 1000 Mbit/s speeds on the fiber WAN port. The fiber signal is converted to an electrical signal on the copper interface, which operates at 10/100/1000 Mbit/s depending on the capabilities of the connected device.

This functionality provides a low-cost integration option for migrating from conventional 10/100 Mbit/s networks to a high performance Gigabit Ethernet to the Home (GTTH) solution. The MC901 can be introduced into existing 100 Mbit/s FTTH networks, allowing the access switches to be gradually upgraded to 1000 Mbit/s.

### Universal FTU

The MC901 is compliant with the Universal FTU defined for the Netherlands. This compatibility allows the MC901 to be widely used on Ethernet access networks in the Netherlands.

### Fault management

Support for IEEE 802.3ah Loopback Control allows the operator to quickly verify the status of the fiber connection to the customer's site.

Support for IEEE 802.3ah link fault management provides the following functionality:

- Discovery
- Link Monitoring
- Loopback Control

### Gui management

A easy-to-use GUI allows the operator to view the MC901 status and perform firmware upgrades.

## Features

- Gigabit Ethernet WAN and LAN
- Dual speed fiber WAN uplink
- Compatible with Universal FTU
- IEEE 802.3ah OAM fault management
- GUI-based operator status and firmware management

# Features & specifications

## Connectors supported

Fiber interface	Integrated SC/UPC, supports 100BASE-FX and 1000BASE-X
Copper interface	RJ-45, supports 1000BASE-T, 100BASE-TX and 10BASE-T

## Optical parameters

Optical power range (Tx)	-9 to -3 dBm
Optical power range (Rx)	-3 to -23 dBm
Optical wavelength (Tx)	1310 nm
Optical wavelength (Rx)	1490/1550 nm

## Physical and environmental

Dimensions	32.9 mm (D) x 208.4 mm (H) x 104 mm (W)
Weight	212 g, 0.46 lb
Power supply	12 V DC, 125 mA external plug-in wall adapter
Power requirement	1.5 W
LED indicators	Power, Glas (WAN), Ethernet
Operating temperature	0 to 40°C, 32 to 104°F
Storage temperature	-40 to 85°C, -40 to 185°F

## Fault management

IEEE 802.3ah OAM Discovery  
IEEE 802.3ah OAM Link Monitoring  
IEEE 802.3ah OAM Loopback Control

## Regulatory compliance

IEC/EN 60825-1/-2  
IEC/EN 60950-1  
EN55022  
EN55024  
2002/95/EC ROHS &WEEE