

### Introduction:

The **MC-1500LC-MM-RFL** media converter is specifically designed to offer high-speed recovery (<10ms) and fiber advantages for mission-critical networks like Telco/ISP backbones, cable operators, banking and enterprise networks. The **MC-1500LC-MM-RFL** can minimize network downtime and increase Quality of Service levels. The converters are completely transparent when installed, so the network performs exactly the way it would do normally – only now, it can incorporate both copper and fiber mediums.

This flexibility in cabling allows network managers to put fiber cables anywhere within a network without changing the arrangement of the copper-based Gigabit segments. Their compact size allows the converters to be wall-mounted to save space. Several converters can be simultaneously installed by using the MC-1600-4 4-slot or MC-1600-12 12-slot, 19" rack-mountable chassis.

The **MC-1500SC-MM-RFL** takes advantage of intelligent connection technology to support Auto-negotiation, thereby eliminating the hassle of manually configuring or monitoring settings. This ensures plug-n-play operability.

### Standards:

- ◆ Complies with IEEE 10/100Base-TX, IEEE 802.3ab 1000Base-T and IEEE 802.3z 1000Base-SX/LX standards

### Interface:

- ◆ One 10/100/1000 Mbps Ethernet port
- ◆ Supports Auto MDI/MDI-X on RJ-45 port
- ◆ Two SFP slots for Gigabit links
- ◆ Extends distances up to 220m for multi-mode SX (80km with long-haul single-mode) under full duplex mode

### Redundancy:

- ◆ Fail-over on dual fiber links
- ◆ Issuing an alarm if a fiber link fails
- ◆ Link Fault Signaling occurs when copper link or both fiber links fail
- ◆ Automatically switches back to the primary fiber link if it recovers after a failure and fail-over to the redundant fiber link

### Management:

- ◆ Alarm LED illuminates to indicate link failure
- ◆ Status LEDs for easy monitoring of device's status

### Mechanical & Environmental:

- ◆ External power supply
- ◆ Chassis-compliant (internal power supply)
- ◆ FCC Class A & CE approved RoHS compliant



**Specifications:**

|                         |  |
|-------------------------|--|
| Standards Conformity:   | IEEE 10/100Base-TX & IEEE 802.3ab 1000Base-T<br>& IEEE 802.3z 1000Base-SX/LX   |
| Connector:              | 1 x RJ-45 or 2 x Fiber   |
| Max. Distance:          | UTP: 100 meters (Cat. 5/5e/6)<br>Fiber: SFP; up to 80km (single-mode)  |
| Unit LEDs:              | PWR: Illuminates for normal operation<br>ALM: Illuminated when failure occurs on any fiber link or on Link-Fault Signaling<br>PRI: Primary link – Illuminated when receiving link pulses from compliant devices – Flashing when data packets are being transmitted / received<br>RDT: Redundant link – Illuminated when receiving link pulses from compliant devices – Flashing when data packets are being transmitted / received |
| MDI/MDI-X:              | Auto Selection   |
| Power:                  | Power Input: 12V DC @ 0.8A, external power supply adapter Frequency: 47Hz to 63Hz  |
| Temperature: Operating: | 0 to 45  |
| Storage:                | -20 to 70  |
| Humidity: Operating:    | 10% to 80%RH   |
| Storage:                | 5% to 90%RH  |
| Emission Compliance:    | FCC Part 15 of Class A & CE approved   |
| Dimensions:             | 109.2 x 73.8 x 23.4mm (D x W x H)  |
| Weigh:                  | 160g   |
| Dip Switches:           | DIP 1 LFS: Enable/disable Link-Fault Singnaling (LFS)  |

**Applications:**

The following illustrates typical applications for the MC-1500SC-MM-RFL series. The actual distances will depend on several factors, including the quality of cables used and the terminal equipment employed.

**Ordering Information:**

**MC-1500LC-MM-RFL**

Gigabit Triple-Speed to 2-1000SX/LX (SFP)  
Converter 220m

**MC-1500LC-MM-RFL-550M**

Gigabit Triple-Speed to 2-1000SX/LX (SFP)  
Converter 550m

**MC-1500LC-MM-RFL-2Km**

Gigabit Triple-Speed to 2-1000SX/LX (SFP)  
Converter 2Km

**Rack mount chassis available**

**MC-1600C-4** 4 Bay

**MC-1600C-12** 12 Bay

