

## Overview

The Smart Gigabit Ethernet Media Converters support media conversion between IEEE 802.3ab 1000Base-T and 802.3z 1000Base-SX/LX network with SC connector. The converters can be used as a standalone unit or as a slide-in module to the Vilink 19" Intelligent Media Converter Chassis MC-1600 (up to 16 units). With the chassis, the smart mediaconverter can be managed through the RS-232 console, Telnet, Web or a SNMP agent.

The MC1000 series Smart Gigabit Ethernet Media Converters provide a DIP-switch for auto-negotiation/forced and LLR configuration with the LLCF function enabled by default. When LLCF (Link Loss Carry Forward) is enabled, the ports do not transmit a link signal until they receive a link signal from the opposite port. Link loss is "carried forward" to the managed switch or hub that is sending the link. LLCF can be used for either copper or fiber ports. When LLR (Link Loss Return) is enabled, the fiber port's transmitter shuts down if its receiver fails to detect a valid receive link. If one of the optical conductors is bad, the converter with LLR enabled will return a no link condition to its link partner. LLR is used to detect link problems only on the fiber port. Both can immediately alert administrators to problems with the link media, and provide an efficient solution for network monitoring.

The MC1000 Smart Gigabit Ethernet Media Converters are available in Multimode and Singlemode configurations as well as Dual Fiber and Single Fiber solutions.



## Features

- One-channel media conversion between 1000Base-T and 1000Base-SX/LX
- Fiber media allows: multi-mode fiber and single-mode fiber using SC connector
- Supports Link Pass Through function with LLCF and LLR mechanisms
- DIP switch for Forced mode or Auto-negotiation and LLR (enable/disable)
- Full wire speed forwarding rate
- Front panel status LEDs
- Used as a stand-alone device or with the Intelligent Chassis System

## Ordering Information

Model	Description
MC1000SC03	1000Base-T to 1000Base-LX Standalone Smart Gigabit Converter (1310 SM, SC, dual fiber)
MC1000SC05	1000Base-T to 1000Base-LX Standalone Smart Gigabit Converter (1550 SM, SC, dual fiber)
MC1000RSC03	1000Base-T to 1000Base-LX Rackmount Smart Gigabit Converter (1310 SM, SC, dual fiber)
MC1000RSC05	1000Base-T to 1000Base-LX Rackmount Smart Gigabit Converter (1550 SM, SC, dual fiber)
MC1000SC35	1000Base-T to 1000Base-LX Standalone Smart Gigabit Converter (1310 SM, SC, single fiber)
MC1000SC53	1000Base-T to 1000Base-LX Standalone Smart Gigabit Converter (1550 SM, SC, single fiber)
MC1000RSC35	1000Base-T to 1000Base-LX Rackmount Smart Gigabit Converter (1310 SM, SC, single fiber)
MC1000RSC53	1000Base-T to 1000Base-LX Rackmount Smart Gigabit Converter (1550 SM, SC, single fiber)

\* Other options are available (SC/ST connectors, Multimode). Please call for availability

### Specifications

Model:	MC1000	MC1000S	MC1000R	MC1000RS
Standards	1000Base-T 1000Base-SX/LX			
Connectors	RJ-45 Copper Port Dual Fiber SC/ST	RJ-45 Copper Port Single Fiber SC/ST	RJ-45 Copper Port Dual Fiber SC/ST	RJ-45 Copper Port Single Fiber SC/ST
Speed	Gigabit Ethernet: 2000Mbps for full-duplex			
Cable	1000Base-T: 4-pair STP Cat5 up to 100m 1000Base-SX: 62.5/125µm MM fiber optic cable up to 220m 50/125µm MM fiber optic cable up to 550m 1000Base-LX: 62.5/125µm or 50/125µm MM fiber optic cable, up to 550m 9/125µm SM fiber optic cable up to 50km			
LED Indicators	Power, Link, Activity			
DIP Switch	Forced / Auto-negotiation, LLR enable/disable			
Power Consumption	5.5 W (maximum)			
Power Input	7.5V, 1.5A			
Dimensions	120 x 88 x 25mm (L x W x H)			
Configuration	Standalone		Rackmount	
Environment	Operating Temperature: 0 ~ 70°C Storage Temperature: -25 ~ 90°C Humidity: 10% ~ 90% RH (operating), 5% ~ 90% RH (storage)			

### Application

