

Features

- 8 10/100/1000Base-T GbE UTP ports and 2 1000Base-LX GbE fiber ports (enabled with optional SFP transceiver modules)
- Highly flexible, easily configurable support with SFPs for transmission at 1310nm, 1550nm, or 1 of 15 CWDM wavelengths (in the ranges 1270-1350nm and 1430-1610nm, in 20nm steps)
- GbE transport (with optical handoff)
- Transparent VLAN
- Supports QinQ for multiple services (TLS and Internet access)
- Broadcast / Multicast Storm Control
- SNMP management features with Web-based and CLI user interfaces
- Supports TFTP for upgrades
- Programmable trap and alarm settings (SNMP traps and alarm can be issued by e-mail)
- RS-232 console port on rear panel
- Compatible with Aurora's chassis-mounted MC2401B and MC2410B series SMART Media Converter modules
- Fanless design for noise-free operation
- AC power cord and 19" rack mounting accessories included

8-Port Gigabit Ethernet Standard Media Converter



Aurora Networks' MC1810M Standard Media Converter enables network planners to connect 10 Mbps, 100 Mbps or 1000 Mbps twisted pair network segments to fiber optic access networks. The unit is equipped with eight 10/100/1000Base-T GbE UTP ports and two 1000Base-LX GbE fiber ports (enabled with optional SFP transceiver modules). When one or both of the GbE fiber ports are enabled, one (or two) of the corresponding shared UTP port(s) are disabled, providing flexibility for network connections.

For CWDM network architectures, SFP (plug-in) transceivers for the fiber ports are available in 15 different wavelengths from 1270 to 1350 nm and from 1430 to 1610 nm (in 20 nm increments), and other transceiver options are available (e.g., for single-mode 1310nm FO access networks) for short, medium, or long distance fiber backbone attachment.

To limit broadcast/multicast flooding in the network, broadcast/multicast storm control is used to restrict excess traffic. Threshold values are available to control the rate limit for each port.

MC1810M Standard Media Converters are supported with user-friendly SNMP management features, as well as Web-based and CLI clients, for management and monitoring in mission critical enterprise and service provider applications.

The MC1810M is ideally suited for workgroups, small to medium size businesses, SOHOs, and WAN edge applications.

MC1810M

Product Specifications

Physical:

· Ports:

Eight 10/100/1000Base-T GbE UTP ports Two 1000Base-LX GbE fiber ports DB-9 RS-232 console port

- Dimensions: 8.6" L x 5.3" W x 1.7" H
 (21.8 cm x 13.5 cm x 4.4 cm)
- Weight: 3.2 lbs (1.5 kg)

General:

- LED indicators: Power, CPU, UTP ports (Act/Link) and fiber ports (Act/Link)
- Flow control: IEEE802.3x for full duplex
- 1RU rack-mountable (accessory kit included)

Electrical:

- AC voltage: 100–240 VAC, 50/60 Hz (power cord included)
- · Power consumption: 20 Watts maximum

Environmental:

- Operating temperature range:
 0° to +50°C (32° to 122°F)
- Storage temperature range:
 -20° to +70°C (-4° to 158°F)
- · Humidity: 5% to 90% non-condensing

VLAN:

- Port-based VLAN (IEEE802.1q tag-base VLAN for up to 256 active VLANs)
- QinQ for enabling multiple services (TLS and Internet access)

Switching Capacity:

- 8 GbE ports with non-blocking wire speed performance
- · 8K MAC addresses
- 144kB on-chip frame buffer
- Supports jumbo frame (up to 9K)
- Broadcast/Multicast Storm Suppression

Twisted-Pair Port Interface:

- Connectors: Shielded/Unshielded RJ-45, 8-pin jacks
- Impedance: $100~\Omega$ nominal Supported link length: 100~m
- · Cable type: CAT 5 UTP

Fiber Optic Port Interface:

The two optical ports can be populated with a variety of SFP (plug-in) 2.125 Gbps transceivers depending on the network application. Please refer to the appropriate data sheets for the selected transceivers for detailed specifications. Following is a summary of available transceiver options (model numbers and brief descriptions) for these ports.

- TR4000-PI (transmit at 1310nm for links up to 10 km)
- TR4040-PI (transmit at 1310nm for links up to 40 km)
- TR4540-0000-PI (transmit at 1550nm for links up to 40 km)
- TR4440B-xxxx-PI (transmit at CWDM wavelength of xxxx = 1270, 1290, . . ., 1350, or 1430, 1450, . . ., 1610 nm for links up to 40 km)

Management Support:

Management interface:

 In-band: Web-based, CLI
 Out-of-band: RS-232

SNMP management agent:
 MIB II (RFC 1213), Private MIB

• Software upgrade: via TFTP

Regulatory:

- Compliance: IEEE802.3x flow control, IEEE802.1q VLAN, SNMPv1/v2c
- · Safety: UL
- Emissions: FCC Part 15, Class A, and CE Mark

Ordering Information

GbE 8-Port Media Converter, CPE

Transceiver Plug-in Modules

SFP modules for the FO port(s) must be ordered separately. Please refer to the above list of available transceivers and appropriate data sheets for specific complete model numbers and ordering information.



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