aurora
NETWORKS

Features

- **One 10/100Base-TX Fast Ethernet STP port and one 100Base-FX Fast Ethernet Fiber port**
- **SNMP management provided by CX2001B Management Module in CH2016B chassis**
- **Accessible via 802.3ah OAM, serial port, Telnet**
- **BiDi transmission at 1310nm or 1550nm with SC/UPC connectors, or 1 of 15 CWDM wavelengths with duplex LC/UPC connector (supporting links up to 80 km), or 1310nm multi-mode laser with LC/UPC connector**
- **LED displays for power, STP port (Act/Link/Speed), fiber port (Act/Link), FDX/collision and power**
- **Rack-powered and hot-swappable**
- **Supports IEEE802.1q Management VLAN**
- **Max packet length 1916 bytes (mini jumbo frames)**
- **Bandwidth rate limiting function**
- **Link fault passthrough**
- **Export and import of configuration file**
- **MEF and RoHS compliant**

www.aurora.com

Fast Ethernet SMART Media Converter (10/100Base-TX to 100Base-FX)

MC2701B Fast Ethernet (at left) and MC2710B Gigabit Ethernet (at right) SMART Media Converters™ in CH1202B CPE Chassis

Aurora Networks' MC2701B series SMART Media Converter modules are designed to enable MSOs to deliver 100 Mbps Ethernet service over fiber using any of 15 CWDM wavelengths or transmitting at 1310 nm or 1550 nm.

When installed in a CH2016B Chassis, the MC2701B is supported by user-friendly rack-based SNMP management (implemented in the CX2001B Management Module in the chassis) to manage and monitor fiber optic conversions in mission critical enterprise and service provider applications.

Installed in a CH1202B Chassis, the MC2701B becomes customer premises equipment with remote monitoring and management VLAN capability.

The embedded Intelligent Converter Software of the MC2701B, with its own auto-detection capability, can determine whether it is deployed as a module blade in a CH2016B Chassis at the Headend or as CPE in an enclosed CH1202B Chassis at a remote site.

With Web- and CLI-based management, the network administrator can logon to the converter to monitor, configure and control each port. In addition, the converter has bandwidth rate limiting management capability via its intelligent software. Overall network management is enhanced, and network efficiency is improved to accommodate and deliver high bandwidth applications.

When the MC2701B is installed in a CH1202B chassis, the following are supported: remote loopback test; "Dying Gasp" function; redundant power failure indication and remote power monitoring; Web UI, CLI, and SNMP management; and IP/IP-less mode selection.

Access Services Equipment

Physical:

- Ports:

  One 10/100M RJ-45 STP port and one 100Base-FX fiber port

- Dimensions:

  5.3" L x 2.6" W (13.6 cm x 6.7 cm) (1 slot in CH2016B chassis)

- Weight:

  0.25 lbs (0.11 kg)

General:

- LED indicators:

  TP port: Link/Activity/Speed (100 Mbps), FDX and Collision

  Fiber port: Link/Activity, Power, and CPU/Loop

Electrical:

- Input power: 5V ± 5% (rack-powered)

- Power consumption: 3.65 Watts max

Environmental:

- Operating temperature range: 0º to +50ºC (32º to 122ºF)

- Storage temperature range: –20º to +70ºC (–4º to 158ºF)

- Humidity: 5% to 90% non–condensing

Regulatory:

- Compliance: IEEE802.3, IEEE802.3u, IEEE802.3x, RoHS

- Emissions: FCC Part 15, Class A and CE Mark

Twisted-Pair Port Interface:

- Connector: Shielded RJ-45, 8-pin jack

- Impedance: 100 Ω nominal

- Signal level output (differential): 0.95 to 1.05 V (100Base-TX)

- Signal level input: 350 mV minimum (100Base-TX)

- Supported link length: 100 m

- Cable type (100 Mbps segments): CAT5 UTP (100M)

Fiber Optic Port Interface:

- Connector: As noted in Ordering Information

- Wavelength: 1270–1350 nm and 1430–1610 nm CWDM (15 wavelengths, ITU compliant), or 1310 nm, or 1550 nm

- Receiver input sensitivity: –34 dBm (except 1310M-LC of -32 dBm)

- Output power: 0 dBm to –5 dBm (except 1310M-LC of -14 dBm to -19 dBm)

- Supported link length: 80 km maximum for CWDM; 60 km maximum for BiDi WDM; 2 km for 1310M-LC

- Cable types: 9/125 µm F/O (recommended); 62.5/125 µm for Multi-Mode fiber

Management:

- When installed in the CH2016B chassis, management is handled using the chassis controller.

- When installed in the CH1202B Chassis, the following CPE Remote key features are supported:

  Remote loopback test

  Dying Gasp function

  Redundant power failure indication, remote power monitoring

  Web UI/CLI/SNMP management

  IP / IP-less modes

Ordering Information

MC2701B–*xxxx*–LC	1 RJ-45 STP port and one fixed CWDM laser wavelength (see **Note**)
MC2701B–1310M–LC	1 RJ-45 STP port and one fixed 1310nm multi-mode laser with LC/UPC connector
MC2701B–1310B–SC	1 RJ-45 STP port and one fixed 1310/1550 BiDi WDM laser with SC/UPC connector
MC2701B–1550B–SC	1 RJ-45 STP port and one fixed 1550/1310 BiDi WDM laser with SC/UPC connector

Note: CWDM wavelengths are available for *xxxx* = 1270, 1290, 1310, 1330, 1350; 1430, 1450, 1470, 1490, 1510, 1530, 1550, 1570, 1590, or 1610 nm.

aurora
N E T W O R K S

Corporate Headquarters
5400 Betsy Ross Drive
Santa Clara, CA 95054
Tel 408.235.7000
Fax 408.845.9045