### MC1401B

# N E T W O R K S

#### **Features**

- One 10/100Base-TX Fast Ethernet UTP port and one 100Base-FX Fast Ethernet Fiber port with bridge-based converter
- Out-of-band management of SMART Media Converter modules using industry standard IEEE 802.3ah OAM
- **RS-232 console port**
- SNMP web-based interface with in-band management
- Internal and external loopback test capability
- Supports PING-only mode
- Supports MIB-II, Private MIB, DHCP Client, ICMP
- Supports TFTP for on-line upgrade
- Supports user login management and port enabled/ disabled
- Programmable trap and alarm settings (SNMP traps and alarm can be issued by email)
- Supports detection of single fiber disconnection, case intrusion, power voltage and operating temperature
- Supports trap log if disconnected
- LED displays for power, UTP port (Act/Link, speed and duplex) and fiber port (Act/ Link)

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



Aurora Networks' MC1401B series SMART Media Converter modules are designed to enable network planners to connect both 10 Mbps and 100 Mbps twisted pair network segments to single-mode fiber optic access networks.

These media converters are available in 10 different models that offer fiber port wavelengths from 1430 to 1610 nm (in 20 nm increments) for CWDM architectures. With a receiver input sensitivity of -34 dBm and output power of 0 to -5 dBm from the fiber optic port, these converters can support a fiber link length of 80 kilometers.

MC1401B series SMART Media Converter modules are supported with user-friendly SNMP management features to manage and monitor fiber optic conversions in mission critical enterprise and service provider applications.

## MC1401B

#### **Product Specifications**

#### Physical:

Ports:

One 10/100M RJ-45 UTP port

One 100Base-FX fiber port with Duplex LC connector

DB-9 RS-232 console port

- Dimensions: 5.5" W x 4.0" D x 1.0" H (14.0 cm x 10.2 cm x 2.5 cm)
- Weight: 2.2 lbs (1.0 kg)

#### General:

- LED indicators: Power, UTP port (Act/Link, speed and duplex) and fiber port (Act/Link)
- Memory: 4 Mb flash, 16 Mb main CPU, 2K MAC address, up to 48K packet buffer
- Flow control: back pressure for half duplex, IEEE802.3x for full duplex
- · Wall-mountable with rear slots

#### **Electrical:**

- Input power: 5V ± 5%, 2A from external power adapter
- Power consumption: 4.5 Watts maximum
- AC-DC Adapter: Input: 100–240 VAC, 50/60 Hz Output: 5V @ 2A
- Adapter power consumption: 5V @ 0.9A, 4.5 Watts

#### **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 95% non-condensing

TWORKS

# Ordering Information M C 1 4 0 1 B - \* \* \* - L C CWDM SMART Media Converter, CPE CWDM Wavelength (1430, 1450, 1470, 1490, 1510, 1530, 1550, 1570, 1590 or 1610 nm) LC = Duplex LC Connector Corporate Headquarters 5400 Betsy Ross Drive Santa Clara, CA 95054

#### **Regulatory:**

- Compliance: IEEE802.3, IEEE802.3u, IEEE802.3ah OAM, SNMPv1
- Safety: UL
- Emissions: FCC Part 15, Class A, and CE Mark

#### Management Support:

- Management interface: In-band: Web-based Out-of-band: 802.3ah, RS-232
- SNMP management agent: MIB II (RFC 1213), Private MIB
- Software upgrade: via TFTP

#### **Twisted-Pair Port Interface:**

- Connector: Shielded/Unshielded RJ-45, 8-pin jack
- Impedance:  $100 \Omega$  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: 10 Mbps segments: CAT3, 4 or 5 UTP (100M) 100 Mbps segments: CAT5 UTP (100M)

#### Single-Mode Fiber Optic Port Interface:

- Connector: Duplex LC
- Wavelength: 1430–1610 nm CWDM (10 wavelengths in 20 nm increments, ITU-grid compiant, G.694.2)
- Receive input sensitivity: -34 dBm
- Output power: 0 dBm to -5 dBm
- Supported link length: 80 km maximum
- Cable type: 9/125 μm F/O (recommended)

# Data Transmission / Receiving Rate and Latency at Wire Speed:

• Data rates:

100 Mbps half duplex (Fast Ethernet)200 Mbps full duplex (Fast Ethernet)10 Mbps half duplex (Ethernet)20 Mbps full duplex (Ethernet)

- · Latency:
  - < 9 µs (100 Mbps input)
  - < 59 µs (10 Mbps input)

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