AT-WD1008

Gigabit Ethernet Coarse Wave Division Multiplexer

AT-WD1008-xx
Gigabit Ethernet Coarse Wave Division Multiplexer 8-channel/1550nm, with distance up to 70km

MULTIPLE WAVELENGTHS ON A SINGLE FIBER

Simplifying network design and management by increasing the capacity of fiber-optic networks, the AT-WD1008 multiplexes up to eight Gigabit Ethernet-compliant inputs through two multiplexing fiber-optic ports. By combining multiple data streams onto one fiber-optic cable, the multiplexer uses more of the fiber's latent bandwidth, significantly increasing the efficiency of existing fiber-optic networks.

CWDM systems multiplex four to eight optical channels with 20nm wavelength separation—a much broader separation than what is found DWDM systems (0.4 to 1.6nm). Uncooled lasers—used as transmitters—and sophisticated optical filtering technologies make CWDM a very attractive, low-cost solution.

RICH FEATURE SET

One of the best WDM products on the market, the AT-WD1008 provides a powerful feature-set that includes an operating distance of up to 70km, an embedded Test Link function on each multiplexing port, SNMP support for both in and out of band, and an expansion slot for optional management modules.

HOT-PLUGGABLE & REMOVABLE

The AT-WD1008 provides a removable fan tray to overcome any heating problems and is also available with hot-pluggable redundant AC and DC power supply options for emergency power failures.

MANAGEMENT MODULE

Available with an optional SNMP management module, the AT-WD1008 gives network managers the ability to visualize the network in the event of failure and minimize downtime.

KEY APPLICATIONS

Network managers can put the AT-WD1008 to work to enable the rapid deployment of transparent Local Area Network (LAN) services for Metropolitan Area Network (MAN) networks. The AT-WD1008 can aggregate traffic directly from multiple remote sites or high-speed internet backbones and provide managers with real time monitoring.

KEY FEATURES

- 8 Full-duplex channels
- 2 multiplexing ports with combined maximum bandwidth of 16Gbps
- Maximum operating distance on the multiplexing port of up to 70km
- Embedded test link function on each multiplexing port
- SNMP support for both in & out of band
- Gigabit Ethernet
- Hot-pluggable redundant AC & DC power supplies
- Expansion slot for optional management module

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MULTIPLEXING PORT SPECIFICATIONS (WEST & EAST)

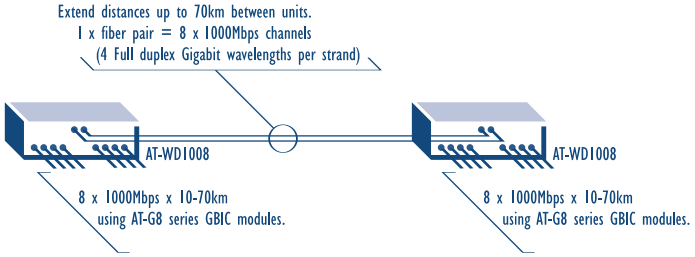
Connector type SC

Nominal wavelengths	Ch#1 = 1470nm
	Ch#2 = 1490nm
	Ch#3 = 1510nm
	Ch#4 = 1530nm
	Ch#5 = 1550nm
	Ch#6 = 1570nm
	Ch#7 = 1590nm
	Ch#8 = 1610nm
Optical output power per channel	-3.5 to 1.5dBm
Optical input power dynamic range per channel	-2 to -26.5dBm
Line to line power budget	21.0dB
Maximum chromatic dispersion	20ps/nm/km
Power budget per channel*	Ch#1: 1470nm, 25.0dB
	Ch#2: 1490nm, 24.0dB
	Ch#3: 1510nm, 23.0dB
	Ch#4: 1530nm, 22.0dB
	Ch#5: 1550nm, 22.0dB
	Ch#6: 1570nm, 22.0dB
	Ch#7: 1590nm, 22.0dB
	Ch#8: 1610nm, 23.0dB
Maximum distance**	Up to 70km depending on fiber quality
Maximum multiplexing speed	16Gbps

* Typical power budget is 1-2dB higher

** Maximum distance for each wavelength can be calculated using the following formula: L = (Power_budget - Ext_losses)/fiber_AT

Where: Power_budget (see above power budget per channel)
Ext_losses are external losses from fiber connectors, attenuators (dB)
Fiber_AT is attenuation used with fiber at specified wavelength (dB/km)



RELIABILITY

MTBF 58,000 hours (approx. 6.5 years)

POWER CHARACTERISTICS

Input voltage:
AC 100-240vAC, 3.2A maximum
DC 36-60vDC, 7.9A maximum
AC input frequency 47-63Hz
Power consumption 75W maximum
Heat dissipation 256BTU/hour maximum

ENVIRONMENTAL SPECIFICATIONS

Operating Temp.	0°C to 40°C (32°F to 104°F)
Storage Temp.	-25°C to 70°C (-13°F to 158°F)
Operating Relative Humidity	5% to 90% non-condensing
Storage Relative Humidity	5% to 95% non-condensing
Operating Altitude Range	Up to 3,000m (9,843ft)

PHYSICAL CHARACTERISTICS

Height	85.1mm (3.351")
Width	438.6mm (17.27")
Depth	304.8mm (12.00")
Weight	8.4kg (18.5lbs)

ELECTRICAL/MECHANICAL APPROVALS

Electrical Safety UL 60950 (CULUL), EN60950 (TUV), CE
EMI/RFI FCC Class A, EN55022 Class A, VCCI
Class A EN6100-3-2,EN6100-3-3
Immunity EN55024

ORDERING INFORMATION

AT-WD1008-xx
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8-channel/1550nm, with distance up to 70km

Where xx = 10 for U.S. power cord
= 20 for no power cord
= 30 for U.K. power cord
= 40 for Australia power cord
= 50 for European power cord
= 80 for -48vDC power cord

MANAGEMENT MODULES

AT-WDM02	Management module for WD1008
AT-S47	Management software for WDM02

FAN MODULE

AT-WDFAN01	Fan module for WD1008

OPTIONAL POWER SUPPLIES

AT-WDRPS-xx	AC Redundant Power Supply (RPS)
AT-WDRPS-xx	48vDC RPS

GIGABIT INTERFACE CONVERTER (GBIC) MODULES

AT-G8SX
500m SX GBIC, based on 50 Micron fiber
220m SX GBIC, based on 62.5 Micron fiber

AT-G8LX10
10km LX GBIC, based on 9 Micron fiber

AT-G8LX25
25km LX GBIC, based on 9 Micron fiber

AT-G8LX40
40km LX GBIC, based on 9 Micron fiber

AT-G8LX70
70km LX GBIC, based on 9 Micron fiber

ABOUT ALLIED TELESYN

Allied Telesyn was founded in 1987 with the goal of producing reliable, standards-based networking products. Focused on Ethernet/IP solutions geared to applications, Allied Telesyn offers access-edge products like switches, fiber/copper MAPs, and CPE. We're also a leading global manufacturer of media converters, unmanaged switches, and NICs. Our customer-driven approach has made Allied Telesyn the ideal choice for IT professionals looking for high-quality, feature-rich network solutions at a lower price. Allied Telesyn – It's Our Network, Too.

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