



Gigabit Ethernet WDM Media Converter

1000Base-T to 1000Base-LX (SC) Single-Mode, 10 km (6.2 mi.), WDM
(RX1310/TX1550)

Part No.: **510523**

The INTELLINET NETWORK SOLUTIONS Gigabit Ethernet WDM (bi-directional wavelength division multiplexing) Media Converter utilizes a single strand of fiber to transmit network traffic on separate receive and transmit wavelengths (1310/1550 nm). This innovative technology allows you to effectively use the two strands for two independent connections or to double the capacity without digging in a second fiber cable. The converter is completely transparent to the network so the network performs exactly the way it did before — only now it can support both copper and fiber mediums.

Expands the Size of an Existing Network

Provides fiber connectivity to Ethernet segments, allowing for even further networking expansion between extended workgroups. Also provides building-to-building connectivity without the need for the cost and disruption associated with the installation of additional routers.

Enhances the Distance between Networking Devices

Connecting the converter to fiber segments can further extend distances between networking nodes. This can be achieved by direct connection between the converter and a fiber-based node or networking device.

Cabling Flexibility

Network managers can install fiber cabling anywhere within a network without changing the arrangement of copper-based Ethernet. The compact size of the converter allows it to be easily deployed in any narrow desktop location or to be used in a wall-mount installation. Several converters can be simultaneously installed into a 19" rack-mountable chassis.

Lifetime Warranty

Strict manufacturing standards ensure the highest quality in all INTELLINET NETWORK SOLUTIONS products. All items carry a full Lifetime Warranty — the strongest quality commitment anyone can make.

Features:

- Data transfer rate: 1000 Mbps
- WDM (wavelength division multiplexing) technology utilizes only one strand of fiber to transmit data on separate receive and transmit wavelengths
- Wavelengths: receive (RX), 1310 nm; transmit (TX), 1550 nm

- 1000Base-T RJ45 port: maximum distance 100 m / 300 ft. (Cat5e and better)
- RJ45 port with Auto MDI/MDI-X support
- 1000Base-LX single-mode Fiber SC port
- Fiber distance support: up to 10 km (6.2 mi.) (9/125 μ m cable)
- Status LEDs for easy monitoring of device status
- Remote and local loop back test
- External power adapter
- Can be used stand-alone or in INTELLINET NETWORK SOLUTIONS converter chassis model 519151 (12 Port) and 517553 (4 Port)
- WDM Media Converter Models 510509 and 510523 need to be installed as pairs on opposite sides of the same fiber cable
- Lifetime Warranty

Specifications:

Standards

- IEEE 802.3ab (Twisted Pair Gigabit Ethernet)
- IEEE 802.3z (Fiber Optic Gigabit Ethernet)

General

- Media support:
 - 1000Base-T Cat5e or higher UTP/STP RJ45
 - 1000Base-LX single-mode 9/125 μ m Fiber
- Connectors:
 - RJ45 port, 1000Base-T
 - Fiber SC port, 1000Base-LX
- Distances:
 - 10 km / 6.2 mi. (9/125 μ m Fiber cable)
 - 100 m / 300 ft. (RJ45 cable)
- Wavelengths:
 - Receive (RX): 1310 nm
 - Transmit (TX): 1550 nm
- Min. TX power: -9 dBm
- Max. TX power: -3 dBm
- RX sensitivity: -21 dBm
- Min. power budget: 12 dB
- Max. power budget: 18 dB
- Safety & EMI certificates: FCC Class A, CE Mark

LEDs

- Power
- Full/Half Duplex
- LINK/TX for RJ45 port
- LINK/TX for Fiber SC port

Dip Switches:

- DIP 1 - Enables/disables local loop back (LLBK)

- DIP 2 - Enables/disables remote loop back (RLBK)

Power

- External power adapter: 12 V DC, 0.5 A
- Power consumption: 3.4 Watts (maximum)

Environmental

- Metal housing
- Dimensions: 109 (L) x 74 (W) x 23 (H) mm (4.2 x 2.9 x 0.9 in.)
- Weight: 160 g (0.34 lbs.)
- Operating temperature: 0 – 50°C (32 – 122°F)
- Operating humidity: 10 – 80% RH, non-condensing
- Storage temperature: -20 – 70°C (-4 – 158°F)

Package Contents

- Gigabit Ethernet WDM Media Converter
- External power adapter
- User manual

