



GigaBit TX to SX/LX Converters

Net Optics GigaBit TX to SX/LX Converters are simple and reliable devices for connecting GigaBit copper traffic to fiber devices and links. Use these bi-directional media converters individually to connect GigaBit copper and fiber devices, or in pairs at each end of long-distance fiber links. These Converters are the perfect solution for dispersed networks where media conversion required between copper network segments separated by long distances.

Net Optics GigaBit TX to SX/LX Converters incorporate Link Fault Signaling, which gives the devices connected to the Converter critical information about link status. If either side of the bi-directional link fails, the Converter immediately communicates the fault to both devices, reducing the time required to activate a redundant path. To control jitter over long optical links, the Converter features Clock and Data Recovery (CDR). CDR ensures that the overall jitter budget is not exceeded when deploying converter pairs with long fiber links.

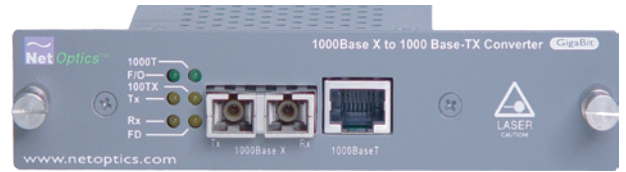
For extra uptime protection, Net Optics Converters offer redundant power connections. Should the primary power source fail, the Converter automatically switches to the backup power source.

Passive, Secure Technology

- Provides transparent conversion at 1000 Mbps without data stream interference or introducing a point of failure
- Link Fault Signaling feature provides critical information about link status
- Clock and Data Recovery (CDR) control overall jitter when deploying converter pairs
- Redundant power ensures monitoring uptime
- Enables auto-negotiation, or fixed speed and duplexing settings for both copper and fiber sides
- Compatible with all singlemode and multimode fibers

Ease of Use

- LED indicators show link status and redundant power
- Front-mounted connectors support easy installation and operation
- Optional 19-inch rack frames hold up to 3 or 12 Taps
- Designed to comply with US Telcordia (Bellcore) GR-1209 and IEEE 802.3
- Designed to comply with Class 1 laser safety requirements, IEC 825-2, UL, CSA, TUV, FCC and VDE EMI standards
- Tested and compatible with all major manufacturers' monitoring devices, including protocol analyzers, probes, and intrusion detection/prevention systems



Technical Specifications:

Operating:

Operating Temperature: 0°C to 40°C

Storage Temperature: -10°C to 70°C

Relative Humidity: 5% min, 95% max, non-condensing

Mechanical:

Power Supply: Input: 100-240 VAC, 50-60 Hz, 0.6A

Output: 5V 2A

Dimensions: 1.25" high x 8.0" deep x 5.5" wide

Fiber Optic Interface:

Laser: Class I, eye-safe, laser emitter type. These Class I Lasers conform to the applicable requirements per US 21 CFR (J) and EN 60825-1, also UL 1950 applications.

Optical Transmitter Wave Length: 850 nm nominal

Output Power: -9.5 dB min, -4 dB max

Optical Receiver Input Sensitivity: 0 dB min, -17 dB max

Optical Transmitter Wave Length: 1310 nm nominal

Output Power: -10 dB min, -3 dB max

Optical Receiver Input Sensitivity: -3 dB min, -20 dB max

Cable Interface:

Copper Cable Type:

22-24 AWG unshielded twisted pair cable, CAT5/CAT5E

Fiber Cable Type: Multimode Corning 62.5/125µm, 220 m

Singlemode Corning 8.5/125µm, 5 km

Connectors:

Monitoring Port: (1) RJ45, 8 pin connector

Network Port: (1) Duplex SC connector

Certifications:

Fully RoHS compliant

Fully IEEE 802.3 compliant

Part Number	Description
CV-SX/GCU*	GigaBit SX to TX Converter
CV-LX/GCU*	GigaBit LX to TX Converter

*Available as stand-alone or rack-mountable units. All products include a 1 year manufacturer's warranty. An additional 1 or 2 year extended warranty may also be purchased.