

# Bidirectional Digital Fiber Optic Link

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## Features:

- Remote PLC Control and Sensor Readout
- Single Fiber Bidirectional Operation
- 24V Logic
- Din Rail Mountable
- Up to 10km Operation
- 0 to 200 KHz per Channel
- Transparent Operation
- RFI and EMI Immunity
- High Voltage Isolation



The LTX-7216 is a Bi-Directional Fiber Optic Data link that conveys 16 independent 24V logic channels over a single optical fiber. It is intended for remote PLC control and sensor readout at distances of up to 10 km.

Each LTX-7216 transceiver is equipped with 5.08 mm pitch connector blocks for connecting the 16 input and 16 output channels and is equipped for DIN Rail mounting.

Each output port can source or sink 200 mA. The bandwidth of each channel exceeds 200 KHz.

The 16 input channels are sampled at a 50 Ms/s rate, transmitter serially at 1 Gb/s and converted back to parallel at the far end. These units are ideal for remote PLC operation and data acquisition over long distances, in environments with high voltage potentials, and where robust data transmission in hostile EMI environments is required.



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## Specifications

Number of Independent Channels	16
Input Impedance	2.5 K Ohms
Output Configuration	Totem-Pole
Output Voltage Open Circuit)	24V
Output Voltage (200mA Load)	23V
Minimum Input Logic "1"	15.4V
Maximum Input Logic "0"	6.0V
Channel Bandwidth	0-200KHz
Signal Latency (with one meter of fiber)	Approximately 300 ns
Optical Transmission Rate	1.0 Gb/S
Fiber Requirements	Singlemode Optical Fiber
Typical Transmission Distance	10 KM with 9/125 micron fiber
Loss Budget	8 dB
Optical Connector	ST, FC available upon request
Laser Wavelength	1310 nm +/- 20 nm
Laser Safety Classification	Class I safety per FDA/CDRH and IEC-825-1 regulations
Electrical Connectors Supplied	Phoenix contact 5.08 mm Pitch Terminal Blocks
Mounting	Din Rail
LED Annunciators Provided	Optical Signal and Power
Power Requirements	24 VDC @ 400 mA plus output load current
Operating Temperature Range	0 - 40 C
Dimensions	8.5" L x 4.5" W x 2.5" H (215mm L x 114mm W x 64mm H)
Weight	1.2 lbs (0.544 Kg)
Standard Warranty	Two Years, Components and Workmanship, 30 day Satisfaction Guarantee

TTI reserves the right to change specifications without notice.

**The LT87216 is shipped  
ready to accept DIN Rail  
mounting brackets**



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