



Product Facts

- Low power dissipation
- 1100m reach at 2.5 Gb/s channel speed
- Single MT-style multimode fiber connector
- CML data I/O
- Asynchronous, internal AC coupled inputs and DC coupled outputs
- Standard FCI electrical connector
- Passively cooled design
- Backward compatibility to current 1x12 @ 1.25/2.5/3.125 Gb/s multimode transceivers
- Up to 3.125 Gb/s per channel
- Up to 72 channels
- 60% power reduction
- 65% smaller footprint
- 5.5x higher card edge density
- 6x the bandwidth
- Programmable Pre-Emphasis

Applications

- Chip-to-chip
- Board-to-board
- Rack-to-rack
- Floor-to-floor
- Building-to-building
- Telecommunications
- Data Communications
- **■** Corporate Networking
- Computing
- Data Storage



Tyco Electronics, using the Xanoptix optically enabled integrated circuit (OEIC) technology, offers the XTM Series of high-speed PARA-OPTIX™ Transceivers. These transceivers offer unparalleled reliability, lifetime, and scalability for optical interconnect applications. Tyco Electronics' PARA-OPTIX™ Transceivers have the flexibility to address a wide range of telecom, datacom, computing, and data storage applications and can be used in a variety of architectures from chip-to-chip to campus and enterprise solutions.

The Tyco Electronics' scalable product set is comprised of full-duplex modules (XTM®-16, XTM®-24, XTM®-32, XTM®-48, and XTM®-72) and half-duplex (XTM®-12 Tx and Rx) modules.

The units have aggregate bandwidth from just a few Gb/s to 245 Gb/s and channel speeds of up to 3.125 Gb/s. Each module uses only one single MTP-style multimode fiber connector.

Regardless of application size and depth, Tyco Electronics offers a solution that will dramatically increase the speed and efficiency of optical networks, while reducing system complexity, part count, and cost.

Tyco Electronics also offers a wide variety of Small Form Factor (SFF) and Small Form-factor Pluggable (SFP) transceivers for both singlemode and multimode applications.

Please contact your local Tyco Electronics Sales Representative or Tyco Electronics for detailed performance characteristics and specifications.

For Tyco Electronics' "NEW" high density PARA-OPTIX™ cable assemblies, see the Cable Assemblies & Backplane Interconnects Section 2, pages 87 & 88 of the Fiber Optic Products Catalog #1307895.

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"NEW" High Speed PARA-OPTIX™ Transceivers (Continued)

High Speed PARA-OPTIX™ Transceivers

XTM®-12 Part Numbers 1511217-X (Tx) 1511218-X (Rx) The XTM-12 is a 12-channel optical transmitter or receiver package with 12 Tx or 12 Rx channels.

Features include:

 37.5 Gb/s optical transmitter/ receiver (12 transmit or 12 receive channels at 3.125 Gb/s per channel)

- 1x12 MTP-style connector
- Compatible with 12 lane Infiniband interface ML data I/O
- Industry standard form factor, MSA compatible
- Dimensions: 44.7mm L x 12.5mm H x 17.5mm W
- Technical Datasheet: TDS 1511217 TDS 1511218



High Speed PARA-OPTIX™ Transceivers

XTM®-16 Part Numbers 1511219-X The XTM-16 is a 16-channel optical transceiver package with 8 Tx and 8 Rx channels.

Features include:

 50 Gb/s optical transmitter (8 transmit and 8 receive channels at 3.125 Gb/s per channel)

- 2x8 MTP-style connector
- Dimensions: 59.6mm L x 12.5mm H x 17.5mm W
- Technical Datasheet: TDS 1511219



High Speed Parallel Optics PARA-OPTIX™ Transceivers

XTM®-24 Part Numbers 1511220-X The XTM-24 is a 24-channel optical transceiver package with 12 Tx and 12 Rx channels.

Features include:

 75 Gb/s optical transceiver (12 transmit and 12 receive channels at 3.125 Gb/s per channel)

- 2x12 MTP-style connector
- Dimensions: 59.6mm L x 12.5mm H x 17.5mm W
- Technical Datasheet: TDS 1511220



Please contact your local Tyco Electronics Sales Representative or Tyco Electronics for detailed performance characteristics and specifications.

For Tyco Electronics' "NEW" high density PARA-OPTIX™ cable assemblies, see the Cable Assemblies & Backplane Interconnects Section 2, pages 87 & 88 of the Fiber Optic Products Catalog #1307895.

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"NEW" High Speed PARA-OPTIX™ Transceivers (Continued)

High Speed PARA-OPTIX™ Transceivers

XTM®-32 Part Numbers 1511221-X The XTM-32 is a 32-channel optical transceiver package with 16 Tx and 16 Rx channels.

Features include:

- 100 Gb/s optical transceiver (16 transmit and 16 receive channels at 3.125 Gb/s per channel)
- 4x8 MTP-style connector
- Dimensions: 69.1mm L x 12.5mm H x 17.5mm W (without heat sink)
- Technical Datasheet: TDS 1511221



High Speed PARA-OPTIX™ Transceivers

XTM®-48 Part Numbers 1511222-X The XTM-48 is a 48-channel optical transceiver package with 24 Tx and 24 Rx channels.

Features include:

■ 150 Gb/s optical transceiver (24 transmit and 24 receive channels at 3.125 Gb/s per channel)

- 4x12 MTP-style connector
- Dimensions: 69.1mm L x 12.5mm H x 17.5mm W (without heat sink)
- Technical Datasheet: TDS 1511222



High Speed PARA-OPTIX™ Transceivers

XTM®-72 Part Numbers 1511223-X The XTM-72 is a 72-channel optical transceiver package with 36 Tx and 36 Rx channels.

Features include:

 225 Gb/s optical transceiver (36 transmit and 36 receive channels at 3.125 Gb/s per channel)

- 6x12 MTP-style connector
- Dimensions: 69.1mm L x 12.5mm H x 17.5mm W (without heat sink)
- Technical Datasheet: TDS 1511223





All XTM Series Modules are available without heat sink.

Please contact your local Tyco Electronics Sales Representative or Tyco Electronics for detailed performance characteristics and specifications.

For Tyco Electronics' "NEW" high density PARA-OPTIX™ cable assemblies, see the Cable Assemblies & Backplane Interconnects Section 2, pages 87 & 88 of the Fiber Optic Products Catalog #1307895.

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"NEW" High Speed PARA-OPTIX™ Transceivers (Continued)

Parallel Optics Test Selection Charts

-X = Module Speed
-1 = 2.7 Gb/s
-2 = 3.125 Gb/s

Please contact your local Tyco Electronics Sales Representative or Tyco Electronics for detailed performance characteristics and specifications.

Fiber	Modules	Evaluation Kits
12	1511217-X 1511218-X	1511224-Y 1511225-Y
16	1511219-X	1511226-Y
24	1511220-X	1511226-Y
32	1511221-X	1511227-Y
48	1511222-X	1511227-Y
72	1511223-X	1511227-Y

-Y = -1 Includes test board, fan, 3.3V & 5V power cables, CD with LabView Runtime & Graphical User Interface for communicating to the transceiver via the serial interface (either RS-232 or 12C)

> -2 Includes items in -1 plus 4 copper data cables, loopback and fanout fiber optic cables and adapters.

For Tyco Electronics' "NEW" high density PARA-OPTIX™ Cable Assemblies, see the Cable Assemblies & Backplane Interconnects Section 2, pages 87 & 88 of the Fiber Optic Products Catalog #1307895.

Cable Assemblies				
Fiber	Link (connects 2 modules)	Fanout (for loopback)	MPO - SC (fanout)	
12	1588930-3	1588930-3	1693101-1	
16	1588967-3	1693105-1	1693102-1 1693104-1	
24	1588967-3	1693105-1	1693101-1 1693103-1	
32	1588903-2	1693067-1	1693102-1 1693104-1	
48	1588903-2	1693067-1	1693101-1 1693103-1	
72	1588903-2	1693067-1	1693101-1 1693103-1	

Specifications are preliminary and subject to change.

Adapters

Interface	Part Number
MPOAdapter	1588172-1
SC Adapter	1278348-3
FC/SC Hybrid Adapter	1278349-7

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