



#### 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.**

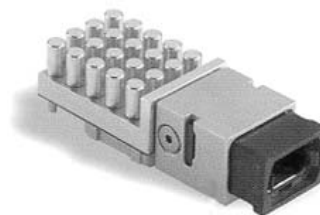
**“NEW” High Speed PARA-OPTIX™ Transceivers (Continued)****High Speed  
PARA-OPTIX™  
Transceivers****XTM®-12  
Part Numbers  
1511217-X (Tx)  
1511218-X (Rx)**

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

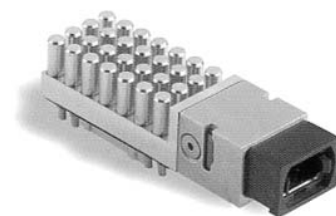
**High Speed  
PARA-OPTIX™  
Transceivers****XTM®-16  
Part Numbers  
1511219-X**

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

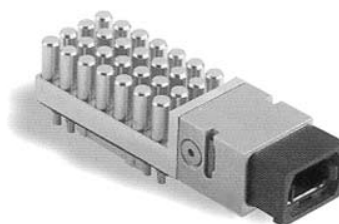
**High Speed Parallel  
Optics PARA-OPTIX™  
Transceivers****XTM®-24  
Part Numbers  
1511220-X**

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.

**“NEW” High Speed PARA-OPTIX™ Transceivers (Continued)**

**High Speed  
PARA-OPTIX™  
Transceivers**

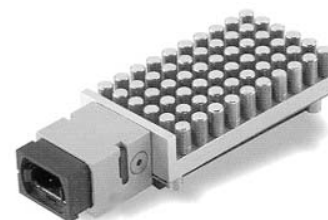
**XTM®-32  
Part Numbers  
1511221-X**

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**

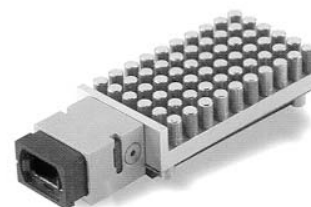
**XTM®-48  
Part Numbers  
1511222-X**

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**

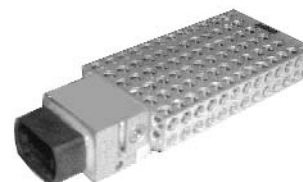
**XTM®-72  
Part Numbers  
1511223-X**

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.**

**“NEW” High Speed PARA-OPTIX™ Transceivers (Continued)**

**Parallel Optics Test Selection Charts**

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

<b>Fiber</b>	<b>Modules</b>	<b>Evaluation Kits</b>
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

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

- 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.

<b>Cable Assemblies</b>			
<b>Fiber</b>	<b>Link (connects 2 modules)</b>	<b>Fanout (for loopback)</b>	<b>MPO - SC (fanout)</b>
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.

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