PRIZM® LightTurn® Cable Assemblies

PRIZM® LIGHTTURN® – MTP (MPO) CABLE ASSEMBLIES

Rapidly increasing bandwidth requirements in all areas of communication and computing place ever-increasing strain on networking I/O equipment. Edge-mount copper or fiber interfaces are reaching their limits. To meet these demands, embedded parallel optics using the PRIZM® LightTurn® connectors have emerged as the preferred solution.

OptoSpan's PRIZM® LightTurn® to MTP (MPO) fiber assemblies feature the PRIZM® LightTurn® connector from US Conec on one end and a 12-, 24-, or 48-fiber MTP connector on the other. These cables are also available as PRIZM® LightTurn® to PRIZM® LightTurn® assemblies with a PRIZM® LightTurn® connector on both ends.

BENEFITS OF PRIZM® LIGHTTURN® ASSEMBLIES:

The PRIZM® LightTurn® connector overcomes the distance and bandwidth limits associated with PCB copper strip lines. It was intended to be a removable miniature connector. When integrated with US Conec's MTP® brand MPO type connector, the PRIZM® LightTurn® solution significantly increases card edge port density when compared to SFP transceivers, standard array transceivers, or parallel active optical cables (AOC). As a result, this approach is primarily used in parallel optic modules for MPO-based pluggable transceivers, Active Optical Cables, and on-board optical engines for printed circuit board (PCB) and high-performance computing (HPC) applications. By aligning the PRIZM® fiber assembly and POD, it is possible to significantly increase optical T/R module density on circuit boards, improve fiber routing by connecting directly to the card edge, and optimize airflow and port density in preparation for migration to next-generation high-speed, high-density networks.

All OptoSpan PRIZM® LightTurn® Assemblies are Cable assemblies are made to Telcordia GR-1435-CORE requirements.

PRIZM® LIGHTURN® SPECIFICATIONS

• Connector Type	Bare Ribbon Housing, 1.8mm Jacketed Housing
• Cable Type	Bare Ribbon, Round Jacket
• Fiber Count	12 / 24 / 48
• Fiber Type	Multimode OM4
• Insertion Loss	2.0dB Typical
• Return Loss	>20dB
• Operating Temperature	-40 C to +80 C

US Conec® owns the registered trademarks PRIZM® LightTurn®, MTP® and MTP Elite®.

Specifications may change without notice. Display product photos shown are examples for viewing, not actual products.

FEATURES & BENEFITS

- Improved optical density on PCBs

- Optimize airflow and fiber routing

- Improved fiber management compared to SFP and parallel optics

- Multiple re-matings to the POD modules

- Customized assembly configurations provide design flexibility

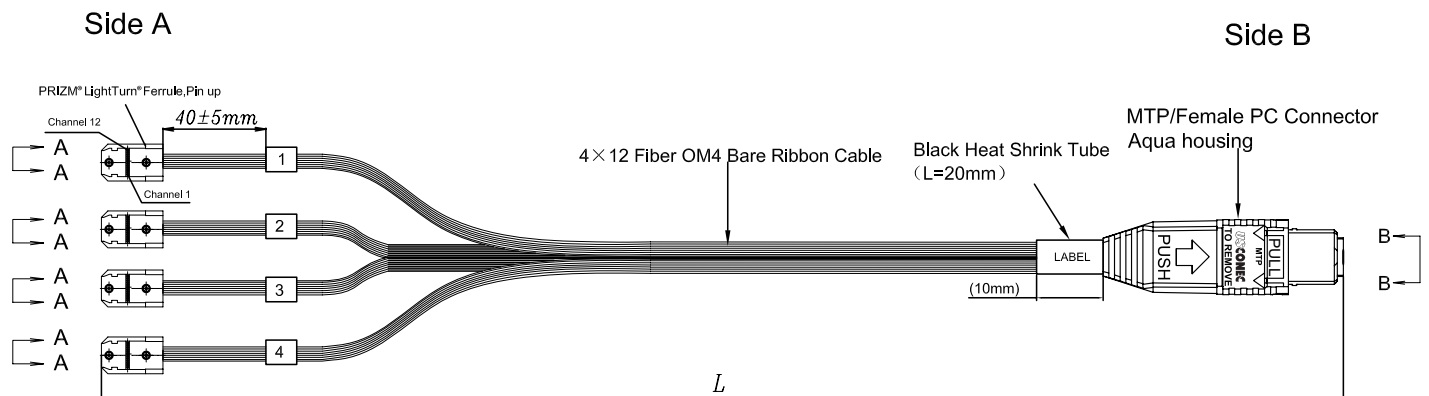- Manufactured for excellent optical performance

APPLICATIONS

- Data Centers (Routers, Switches, Storage)

- High Speed Computing Applications

- High Performance Test Equipment

- IC Testing

AVAILABLE CONFIGURATIONS

PRIZM® LightTurn® - MTP Cables

- 12 fiber MTP to 1x PRIZM® LightTurn® connector OM4 bare ribbon fiber cable.

- 24 fiber MTP to 2x PRIZM® LightTurn® connectors OM4 bare ribbon fiber cable.

- 48 fiber MTP to 4x PRIZM® LightTurn® connectors OM4 bare ribbon fiber cable.

PRIZM® LightTurn® - PRIZM® LightTurn® Cables

- 12 fiber 1x PRIZM® LightTurn® to 1x PRIZM® LightTurn® connector OM4 bare ribbon fiber cable.

Other PRIZM® LightTurn® Cable Combinations

- Round jacket (1.8mm): MTP to PRIZM® LightTurn® OM4 round jacket fiber cable.

- Prizm® MT ferrule: MTP to PRIZM MT ferrule OM4 ribbon fiber cable.

- MT Ferrule: PRIZM® LightTurn® to MT Ferrule OM4 fiber cable.

- MTP Elite Connector: PRIZM® LightTurn® to MTP Elite OM4 ribbon cable.

- LC connector: PRIZM® LightTurn® to LC OM4 round fiber cable.

In addition to the above available configurations, OptoSpan offers Custom PRIZM® LightTurn® Cables that are designed specifically for your application.

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