PRIZM ${ }^{\circledR}$ LightTurn ${ }^{\circledR}$ Solutions

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Designed as a miniature detachable connector for board mounted parallel optic modules, the PRIZM ${ }^{\circledR}$ LightTurn ${ }^{\circledR}$ connector solution provides passive alignment and novel retention features allowing multiple re-matings perpendicular to the printed circuit board. The PRIZM ${ }^{\circledR}$ LightTurn ${ }^{\circledR}$ connector consists of a multi-fiber ferrule with a photonic turn TIR lens array accepting cleaved fibers with an accompanying connector housing. The termination is simple and low cost requiring no polishing of fibers and easy testing, yet providing excellent passive coupling to the VCSEL and photodiode array within the parallel optic module for MPO based pluggable transceivers, Active Optical Cables, and on-board mounted optical engines.

The PRIZM ${ }^{\circledR}$ LightTurn ${ }^{\circledR}$ connector is optimized to be used with US Conec's Mechanical Optical Interface (MOI) which is designed to transmit collimated light between the MOI and PRIZM ${ }^{\circledR}$ LightTurn ${ }^{\circledR}$ ferrule. The MOI has the mechanical features which couple directly to the latches on the PRIZM ${ }^{\circledR}$ LightTurn ${ }^{\circledR}$ housings. The MOI lens array focuses light to a photodetector array and collimates light from a VCSEL array is therefore suitable for both Tx and Rx applications.


## Features:

- TIR (total internal reflection) lens
- Wavelength independent optical grade material
- Bidirectional components
- Integrated alignment pins
- Housing protects TIR lens array
- Ferrule float within the connector
- Pre-alignment latches on connector housing
- Keyed for proper mating orientation
- Quick termination, no polishing
- Collimated light at optical interface


## Specifications

| Material | Performance |
| :---: | :---: | :---: |
| PEI | 50 Remates |

