



Fiber Optic Capabilities



Engineering Capabilities

- Full Assembly Design Services
- Reengineer Copper Systems to Leverage Fiber Optic
- Component Engineering with Global Reach
- Design Ruggedization
- Test Development

Component and Processing Capabilities

- Cleanroom Manufacturing
- Multimode Fiber Optic
- Distribution, Breakout and Tactical Grades of Fiber
- Passive and Active Fiber Optic Assemblies
- PC – Physical Contact
- UPC – Ultra Physical Contact
- APC – Angled Physical Contact
- Ball Lens Expanded Beam
- Graded Index (GRIN) Lens Expanded Beam
- All Standard Inline and Backplane Connector Form Factors (e.g., LC, ST, FC, D38999, ARINC, etc.)
- Expanding to MT/MPO/MPT with US Conec in 2024
- Hybrid Arrangements of Fiber and Copper
- Fully Automated Fiber Cut/Strip/Prep Equipment
- Laser Cleaving
- Mechanical Cleaving



Global Manufacturing, Headquarters in Maple Grove, MN USA

Assembly Level Capabilities

- Upjacketing Cable
- Ribbonizing Cable
- Patch Cables
- Breakout Harnesses
- Fusion Splicing
- Fiber Optic Taps (Closed Loop Tuning)
- Custom Backshells
- Non-Magnetic Solutions
- Ingress Protection
- High Mate Cycle Interfaces
- High Pull Strength Connectors
- Wide Variety of Molding Techniques & Compounds
- Assembly Ruggedization Design & Manufacture

Testing Capabilities

- Encircled Flux Insertion Loss
- Reflective Power
- Endface Geometries
- Qualification Plan Development
- Environmental/Mechanical Stress Testing



Leveraging Fiber Optic in Advanced Solutions

1. Data transmission inside hybrid cables with integrated E-O/O-E transmitters and receivers in custom active optical solutions.
2. Integrate diagnostics to generate real-time performance and stress data on cable and/or system health
3. Combine fiber optics with copper in hybrid cables to provide EMI-immune high-speed data over fiber optic channels, low-speed signals, and power delivery all-in-one.



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