



**Red
Helix**

2024

Solution Portfolio

Key Areas of Expertise

- 1. Fiber Network & Latency Simulation**
- 2. Optical Time Delays & Delay Lines**
- 3. Specialized Manufacturing & Fiber Spooling**



Fiber Network & Latency Simulation

**Accurately Replicate Any Optical Fiber Span, Link, or Network
with
[Fiber Lab](#)**

Fiber Network & Latency Simulation



Fiber Lab Solutions

- Exactly replicates fiber span characteristics and latency
- Custom manufactured to your specifications
- All fiber types from Corning®, OFS®, Prysmian®, and more
- Precision lengths by distance or latency values
- Efficiently organizes and protects valuable fiber
- Ensures consistent performance results and maximizes value
- 100% designed and manufactured in USA

Fiber Lab: Optical Fibers



Specify Any Type of Fiber

Leveraging long-term, established relationships that result in more efficient delivery times, all types of quality fibers from **Corning®**, **OFS®**, **Prysmian®**, **Sumitomo®**, and other entities are available.

Choose your preferred fiber types:

- **Single Mode:** G.652, G.654, G.655, G.657
- **Multimode:** OM1, OM2, OM3, OM4, OM5
- **Specialty:** Dispersion Compensating, Radiation-Hardened, Hollowcore, Large Core, Polarization Maintaining, etc.

Fiber Lab: Rack-mount

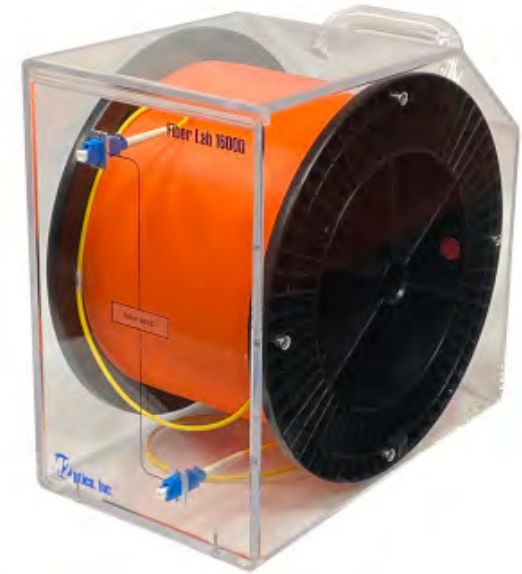


Multi-spool, High-Density Solutions

- Most efficient approach for using & managing multiple fibers
- 1RU to 6RU enclosure options with up to 320km per unit
- Extra-long length and other special setup configurations
- Ideal for test lab applications including device design and certification, evaluating different fiber types, and more

[Learn More - Rack-mount Fiber Lab Solutions](#)

Fiber Lab: Portable



Improved Protection, Easy Handling

- Single-spool, portable enclosures for benchtop lab use
- Designed to fit Corning®, OFS®, and Prysmian® spools
- All fiber types and lengths to 60km per unit
- Ideal for numerous testing applications along with an eye-catching look for demonstrations and training

[Learn More - Portable Fiber Lab Solutions](#)

Fiber Lab: Training & Demo



Fiber Optic Event Simulators

- Rugged enclosures with P2P, FTTx/PON, and Cell fiber spans
- Integrated fiber events: splices, splitters, connectors, and more
- Customizable; great for classroom training and demonstrations
- Each unit transports easily and eliminates the hassle of managing multiple components while protecting fiber

[Learn More - Training/Demo Fiber Lab Solutions](#)

Fiber Lab: Specialty Fibers



Specialty Fiber/Cable Solutions

- Ribbon, Dispersion Compensating, RadHard, and other fibers
- Available in all portable and rack-mount Fiber Lab enclosures
- Useful for a variety of network simulation testing applications

[Learn More - Fiber Lab Solutions with Specialty Fibers](#)

Field Tech Solutions: Launch Fibers



OTDR Launch Fibers

- Rugged and lightweight cases for field use with any OTDR
- User-specified fiber types and lengths to 1km or more
- Bulkhead adapter or pass-through lead options
- Quick production and custom enclosures are also available

[Learn More - OTDR Sidekick](#)



Optical Time Delays & Delay Lines

Precision Fiber Lengths for Latency-driven Applications
using
Fiber Lab

Optical Time Delays & Delay Lines



Solutions for Latency-Driven Networks

- Solve critical timing and equalization challenges with [Fiber Lab](#)
- Precise custom fiber delays; all fiber types and delay values
- High-density setup configurations save valuable rack space
- Easy to deploy, scale, and manage in data center environments

Optical Time Delays: Fiber Lab Flex DC



Maximum Efficiency & Versatility

- Up to 144 customized optical time delays in just 3RU
- Sub-nanosecond precision accuracy
- Modular, reconfigurable, and scalable
- Trusted by leading global data centers and trading exchanges

[Learn More - Fiber Lab Flex DC](#)

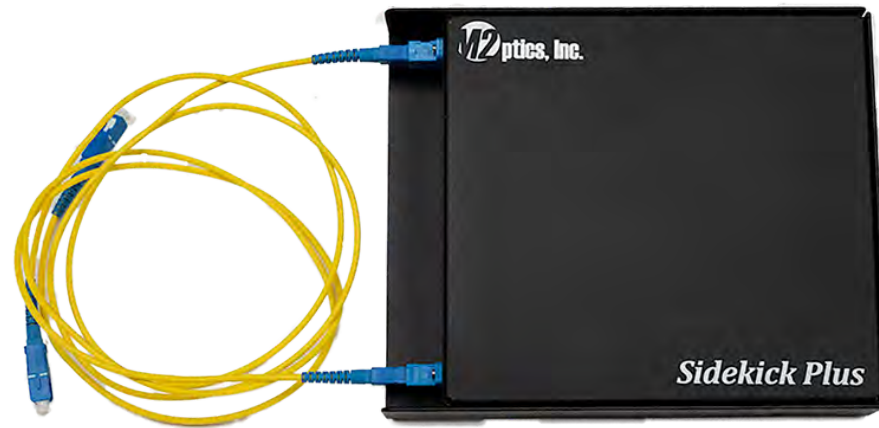


Optical Time Delays: Fiber Lab 250

High-Density, Minimal Rack Space

- Up to 24 customized optical time delays in just 1RU
- Sub-nanosecond precision accuracy
- Saves valuable rack space and is quick to install
- Useful for live network and test lab applications

[Learn More - Fiber Lab 250](#)



Optical Time Delays: Sidekick Plus

Modular Delay Lines

- Rugged, handheld modular delay line
- Sub-nanosecond precision accuracy
- Custom fiber delays up to 30us per module
- Useful for live network and test lab applications

[Learn More - Sidekick Plus](#)

Specialty Fiber Components

Built to Your Project Specs

- Specialty optical fiber couplers and splitters
- PM and other fiber types upon request
- Available as components or packaged

[Learn More - Specialty Fiber Components](#)



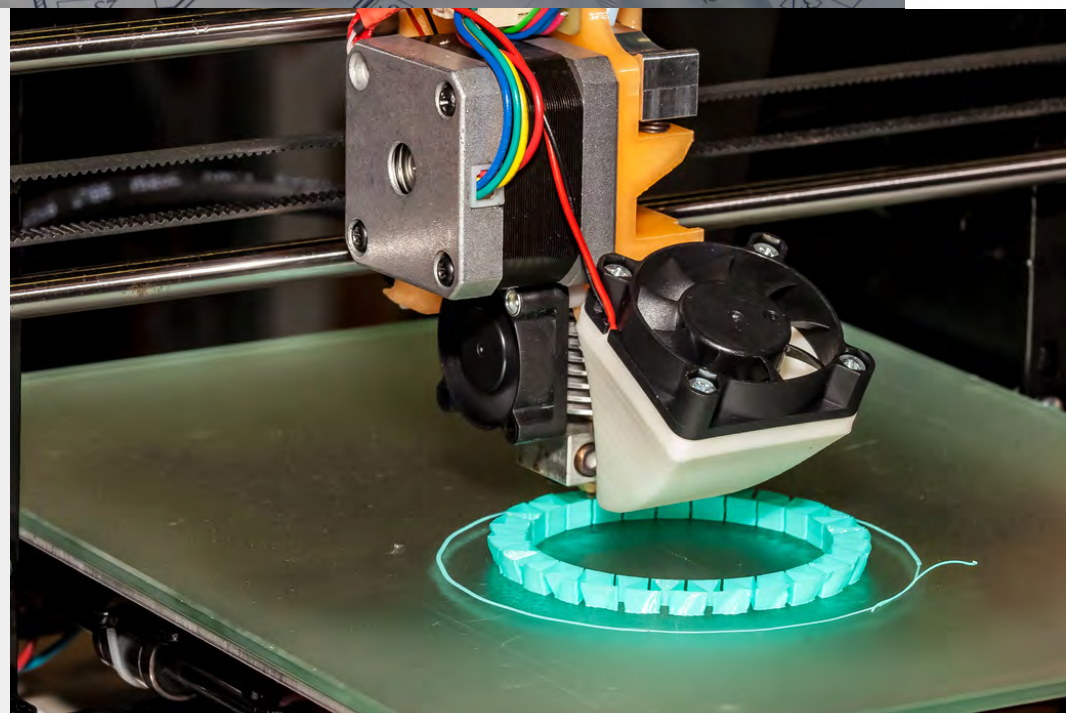
Specialized MFG Services



3D Design & Part Production

- Expert 3D designers and/or design support
- Rapid prototyping and production
- Reduce lead times and materials costs
- Go-to-market faster

[Learn More - 3D Design & Printing Services](#)



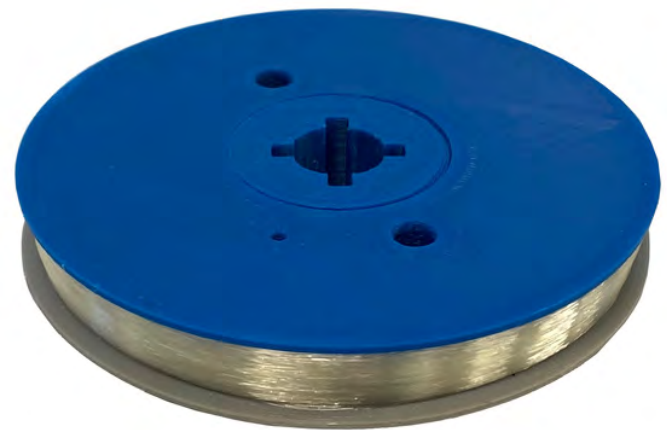
A large industrial machine used for spooling optical fibers. It features several large, black, circular spools mounted on a metal frame. The spools have a blue ring around the edge. The machine is complex, with various gears, rollers, and a central shaft. The text "Optical Fiber Services" is overlaid in white on the image.

Optical Fiber Services

Optical Fiber Spooling

- High-speed spooling of custom fiber lengths
- All fiber types and precision lengths
- Custom-fabricated spool and coil formats

[Learn More - Optical Fiber Spooling](#)



Contact us

M2 Optics' products are
available in the UK
exclusively from Red Helix.



**Red
Helix**

+44 (0)1296 397711
info@redhelix.co.uk
www.redhelix.co.uk

© 2024 M2 Optics Inc



Your Customized Fiber Solutions Partner

- HQ in Raleigh NC USA; founded in 2001
- A highly experienced team of optical fiber experts
- Supports leading global entities across multiple markets
- Dedicated to improving the way people use and manage fiber