

Authorised Distributors for



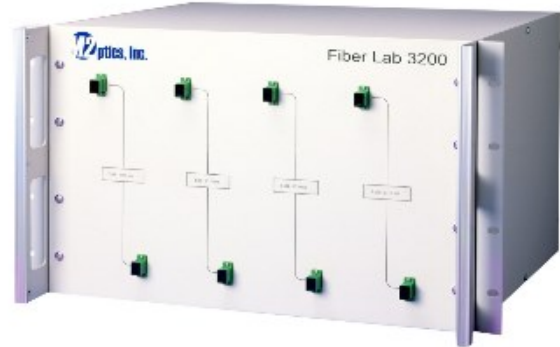
Fiber Lab Series

Benefits

- Protects valuable optical fiber from damage
- Stable & long-lasting testing platform
- Any fiber lengths from 1-100km+
- Any type of SM or MM fiber
- Easy to handle and low maintenance

Applications

- Network simulation
- Product development & certification
- Quality assurance testing
- Delay line testing
- Training & education



The **Fiber Lab Series** from M2 Optics offers a complete line of packaged optical fiber solutions for a variety of testing applications. Utilized by the largest Telecom, CATV, and Networking equipment companies in the world, the Fiber Lab offers a stable testing platform, while eliminating potential damage to both fiber and connectors.

Since every user has unique requirements, each Fiber Lab is built to your exact specifications. Any lengths and fiber types (by ITU-T standard or manufacturer) along with choice of connectors, results in a wide variety of testing options at an excellent value. With both portable and rack-mount solutions available, these are proven to make life easier during testing procedures.

To discuss how the Fiber Lab can benefit your operations, please contact M2 Optics or our partners for more information and pricing - we look forward to working with you.



AVoptics Ltd: Other products and services include:



Termination and Field Repair Kits



Tooling solutions



Polishing Equipment



Optical and Electrical Harnesses



Training and Consultancy

Fiber Lab 250

Benefits:

- Exactly simulates field applications to 8km
- Custom fiber types, lengths, and connectors
- Provides stable and consistent performance
- Eliminates fiber crimping and breakage

Ideal Applications:

- Development/Manufacturing Test Areas
- Training & Education
- Central Offices/Head Ends/Networks
- Shows and Exhibits



Description:

The **Fiber Lab 250** from M2 Optics Inc. provides the optimum test facility for anyone developing or optimizing fiber optic products and systems. Specifically designed as either a rugged tabletop or rack mounted unit, it can be easily utilized in a variety of settings with minimal maintenance.

This state-of-the-art package has tremendous flexibility, holding up to 4 spools of 2km each (total of 8km per unit) of SM or MM fiber. We use only high quality materials which assures long-lasting usage as well as excellent performance. Since every client has unique needs, M2 will build each unit to your exact specifications - custom fiber types, lengths, and connectors are available.

At M2, our goal is 100% customer satisfaction and we will work closely with your team to develop a solution that meets your requirements. If you have a question or a new project, we welcome you to contact your local sales representative to discuss the opportunity.

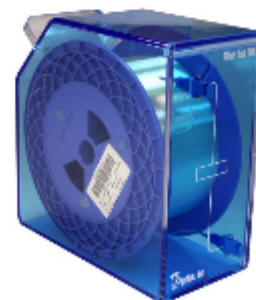
(See reverse side for specifications and ordering information)

Other Products in the Fiber Lab Series:

Fiber Lab 800 *(shown)*

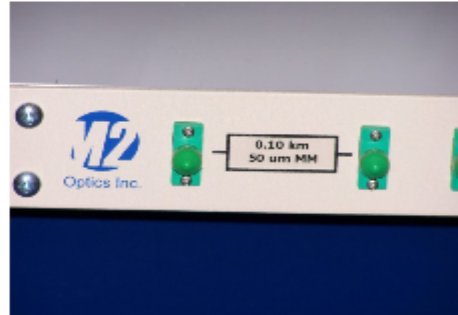
Fiber Lab 1600

Fiber Lab 3200



Performance:

Any of the four (4) installed fiber lengths can be specified between 100 and 1000 meters.



Mechanical:

Size: (A) Bench mount - without rack mounting brackets:
16.94 in. (W) X 1U (10.75 in.) (H) X 13 in. (D).

(B) 19 inch Rack mount - with optional rack mounting brackets:
18.94 in. (W) X 6U (10.75 in.) (H) X 13 in. (D).

Weight: 10 Pounds/(15 Kilograms) - Maximum weight, fully loaded with rack mount brackets and (four) 1 km lengths of fiber.

Environmental:

Operating temp -10 C to +55 C. Storage temp -40 C to +55 C.

Ordering Information:

Example: The **P/N FL25 -102550100-M-50-SCU-R** (100, 250, 500 and 1000 meter lengths) of Multimode fiber with 50 um core diameter and SC/UPC connectors. Includes 19" mounting brackets. (*Maximum length per section is 1000 meters)

Fiber Lab	*Length	Mode	Fiber Type Core Dia.	Connector Type	Polish	Accessories
FL25	A1 = 0.1 to 1 km	S = Single Mode	28 = SMF-28e	SC	A = APC	R = 19" rack
	A2 = 0.1 to 1 km	M = Multimode	50 = 50 um core 62 = 62.5 um core	FC	P = PC	B = bench
	A3 = 0.1 to 1 km			ST	U = UPC	
	A4 = 0.1 to 1 km					

AVoptics Ltd: Other products and services include:



Termination and Field Repair Kits



Tooling solutions



Polishing Equipment



Optical and Electrical Harnesses



Training and Consultancy

Authorised Distributors for



Fiber Lab 800

Benefits:

- Up to 25km of any optical fiber
- Any specific length and connector types
- Provides stable & consistent performance
- Eliminates fiber and connector damage

Ideal Applications:

- Product development & certification
- Network simulation & latency testing
- Training & education
- Shows and exhibits



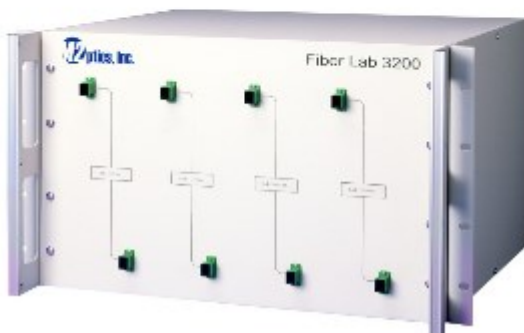
Description:

The **Fiber Lab 800** from M2 Optics Inc. provides a portable solution for anyone testing fiber optic products and systems. Specifically designed as a tabletop unit, it is easily moved around the laboratory without the worry of damaging the fiber or connectors.

The enclosure houses an individual spool with up to 25km of fiber. Since every client has unique needs, M2 will build each unit to your exact specifications - custom fiber types, lengths, and connectors are available.

At M2, our goal is 100% customer satisfaction and we will work closely with your team to develop a solution that meets your requirements. If you have a question or a new project, we welcome you to contact your local sales representative to discuss the opportunity.

Other Products in the Fiber Lab Series:



Performance:

The Fiber Lab 800 canister can be purchased with or without fiber installed. If you already own single-width fiber spools, simply specify the interface front panel adapter and install your spools in the canister. Or you can purchase the product complete with the fiber spool installed and ready to use. Up to 8 dB or 25 km of fiber can be specified and installed in each canister.

Mechanical:

Size:

The Fiber Lab 800 product is single spool canister that measures 10"X10"X 5" in size. It has a flat front panel for mounting fiber interface adapters and is made of clear Lexan. Colors can be provided with sufficient order quantities. A convenient carrying handle is provided with the unit so that it can be easily moved or carried.

Weight:

7 Pounds/(3 Kilograms) - Maximum weight, fully loaded with 25 km of fiber.

Environmental:

Operating temp -10 C to +55 C. Storage temp -10 C to +55 C.

Ordering Information

If ordering the Fiber Lab 800 canister **only**, order part number FL8-xxx-yy (connector) z (polish). Example: FL8-xxx-SCA. Otherwise specify the part number completely. Example: FL8-10k-S-10-28-SCA.

Fiber Lab	Attenuation (dB) or length (km)	Mode	Wavelength	Fiber Type	Connector	Polish
FL8	XXX - empty YYD - dB YYK - km	S = Single Mode	10 = 1310 nm	28 = SMF/G652	SC	A = APC
		Multimode Contact Factory	Other λ Contact Factory	Other Fiber Contact Factory	FC	P = PC
					ST	U = UPC

Authorised Distributors for



Fiber Lab 800HE

Benefits:

- Extremely rugged enclosure
- Holds up to 25km of any optical fiber type
- Protects valuable fiber from damage
- Portable for easy handling
- Stable testing platform

Ideal Applications:

- Manufacturing/Development Labs
- Harsh environment and field testing
- Any optical testing application where maximum durability is required



The **Fiber Lab 800HE** from M2 Optics Inc. offers an extremely rugged testing platform for engineers and technicians working with fiber optic products and networks. Built to endure rough handling and requiring minimal maintenance, it can hold up to 25km of any optical fiber with your choice of custom lengths.

Similar to our other Fiber Lab products, the 800HE is ideal for optical network simulation, product development, and quality assurance, and delay line testing. Due to the efficient and portable packaging, it takes up minimal space while being easily moved from location to location. Lastly, the extra durability makes it a perfect solution for equipment leasing companies, training facilities, and applications where heavy use and potential fiber damage can be expected.

Specifications	
Fiber Types	Single Mode or Multimode - any specific type or ITU-T standard
Fiber Lengths	Any length up to 25km
Connector Types	SC, FC, LC, ST (any angle polish)
Size	16 ^{3/8} x 8 ^{3/4} x 13 ^{1/4} inches (L/W/H)
Weight	13lbs, with maximum 25km fiber

To order the Fiber Lab 800HE, please specify:

Fiber type & name by manufacturer (note: if multimode, please indicate core size)

Fiber length

Connector type(s) & polish

Authorised Distributors for



Fiber Lab 1600

Benefits:

- Up to 50km of any optical fiber type
- Any specific length and connectors
- Provides stable and consistent performance
- Eliminates fiber and connector damage

Ideal Applications:

- Product Development & Certification
- Network Simulation & Latency Testing
- Training & Education
- Shows and Exhibits



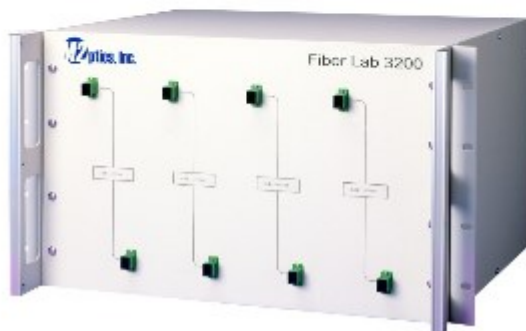
Description:

Fiber Lab 1600 from M2 Optics Inc. provides a portable solution for anyone testing fiber optic products and systems. Specifically designed as a tabletop unit, it is easily moved around the laboratory without the worry of damaging the fiber or connectors.

The enclosure houses an individual, double-width spool holding up to 50km of fiber. Since every client has unique needs, M2 will build each unit to your exact specifications - custom fiber types, lengths, and connectors are available.

At M2, our goal is 100% customer satisfaction and we will work closely with your team to develop a solution that meets your requirements. If you have a question or a new project, we welcome you to contact your local sales representative to discuss the opportunity.

Other Products in the Fiber Lab Series:



Performance:

The Fiber Lab 1600 canister can be purchased with or without fiber installed. If you already own double-width fiber spools, simply specify the interface front panel adapters and install your spools in the canister. Or you can purchase the product complete with the fiber spool installed and ready to use. Up to 16 dB or 50 km of fiber can be specified and installed in each canister.

Mechanical:

Size:

The Fiber Lab 1600 product is single spool canister that measures approximately 10"X10"X 10" in size. It has a flat front panel for mounting fiber interface adapters and is made of clear Lexan. Colors can be provided with sufficient order quantities. A convenient carrying handle is provided with the unit so that it can be easily moved or carried.

Weight:

14 Pounds/(6.5 Kilograms) - Maximum weight, fully loaded with 50 km of fiber.

Environmental:

Operating temp -10 C to +55 C. Storage temp -10 C to +55 C.

Ordering Information

If ordering the Fiber Lab 1600 canister only, order part number FL16-xxx-yy (connector) z (polish). Example: FL16-xxx-SCA. Otherwise specify the part number completely. Example: FL16-10k-S-10-28-SCA.

Fiber Lab	Attenuation (dB) or length (km)	Mode	Wavelength	Fiber Type	Connector	Polish
FL16	XXX - empty YYD - dB YYK - km	S = Single Mode	10 = 1310 nm	28 = SMF/G652	SC	A = APC
		M = Multimode (Contact Factory)	Other λ Contact Factory	Other Fiber Contact Factory	FC	P = PC
					ST	U = UPC
					LC	

AVoptics Ltd: Other products and services include:



Termination and Field Repair Kits



Tooling solutions



Polishing Equipment



Optical and Electrical Harnesses



Training and Consultancy

Authorised Distributors for



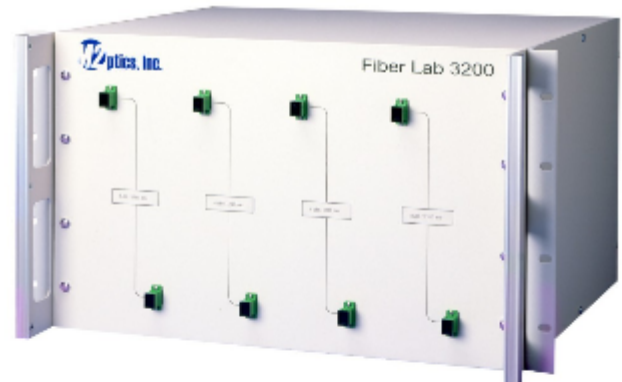
Fiber Lab 3200

Benefits:

- Simulates an optical network to 100km
- Holds up to 4 individual spools
- Any fiber types, lengths, and connectors
- Provides stable and consistent performance
- Eliminates fiber and connector damage

Ideal Applications:

- Product development & certification
- Long distance network simulation
- Latency/delay line testing
- Training & education



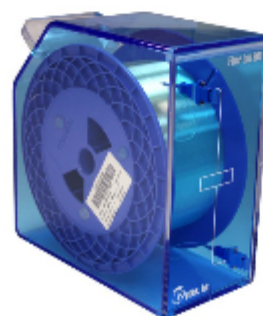
Description:

The **Fiber Lab 3200** from M2 Optics Inc. provides the optimum test facility for anyone developing or optimizing fiber optic products and systems. Specifically designed as a rack mounted unit, it is easily utilized in the laboratory while providing maximum protection against potential fiber and connector damage.

This state-of-the-art package has tremendous testing flexibility, holding up to four spools or a total of 100km of fiber. Users have a variety of testing lengths and high quality materials assure long-lasting and stable performance. Since every client has unique needs, M2 will build each unit to your exact specifications - **fiber types by any ITU-T standard or manufacturer, any lengths, and a variety of connectors are available.**

At M2, our goal is 100% customer satisfaction and we will work closely with your team to develop a solution that meets your requirements. If you have a question or require a custom solution, we welcome you to contact your local sales representative to discuss the opportunity.

Other Products in the Fiber Lab Series:



Performance:

Any of the installed fiber lengths can be specified with the following configurations:

- FL - 100 km max: 4 each up to 25km per length
- FL1 - 100 km max: 1 each up to 50 km and 2 each up to 25 km
- FL2 - 100 km max: 2 each up to 50 km per length
- FL3 - 100 km max: 1 each 50 to 100 km (1 splice)

Technical:

Size:

(A) Bench mount - without rack mounting brackets:
16.94 in. (W) X 6U (10.75 in.) (H) X 15 in. (D).

(B) 19 inch Rack mount - with optional rack mounting brackets:
18.94 in. (W) X 6U (10.75 in.) (H) X 15 in. (D).

The handles extend 2 inches in front of the rack mounting brackets to provide protection for the fiber cable connections. The handles are standard.

Weight:

42 Pounds/(19 Kilograms) - Maximum weight, fully loaded with rack mount brackets and (four) 25 km spools.

Environmental:

Operating temp -10 C to +55 C. Storage temp -40 C to +55C.

Ordering Information

Example: The P/N **FL1-502010-S-28-SCA-R** is a Fiber Lab chassis with the 3 lengths of 50, 20, and 10km, single mode SMF-28e+ fiber, SC/APC connector, and Rack mounted chassis.

Fiber Lab	Length	Mode	Fiber Type	Connector	Polish	Accessories
FL	SS XX YY ZZ	S = Single Mode	28 = SMF-28e	SC	A = APC P = PC U = UPC	R = 19" mount B = bench mount
FL1	SS XX YY		LF = Leaf	FC		
FL2	SS XX		Other	ST		
FL3	SS					

AVoptics Ltd: Other products and services include:



Termination and Field Repair Kits



Tooling solutions



Polishing Equipment



Optical and Electrical Harnesses



Training and Consultancy