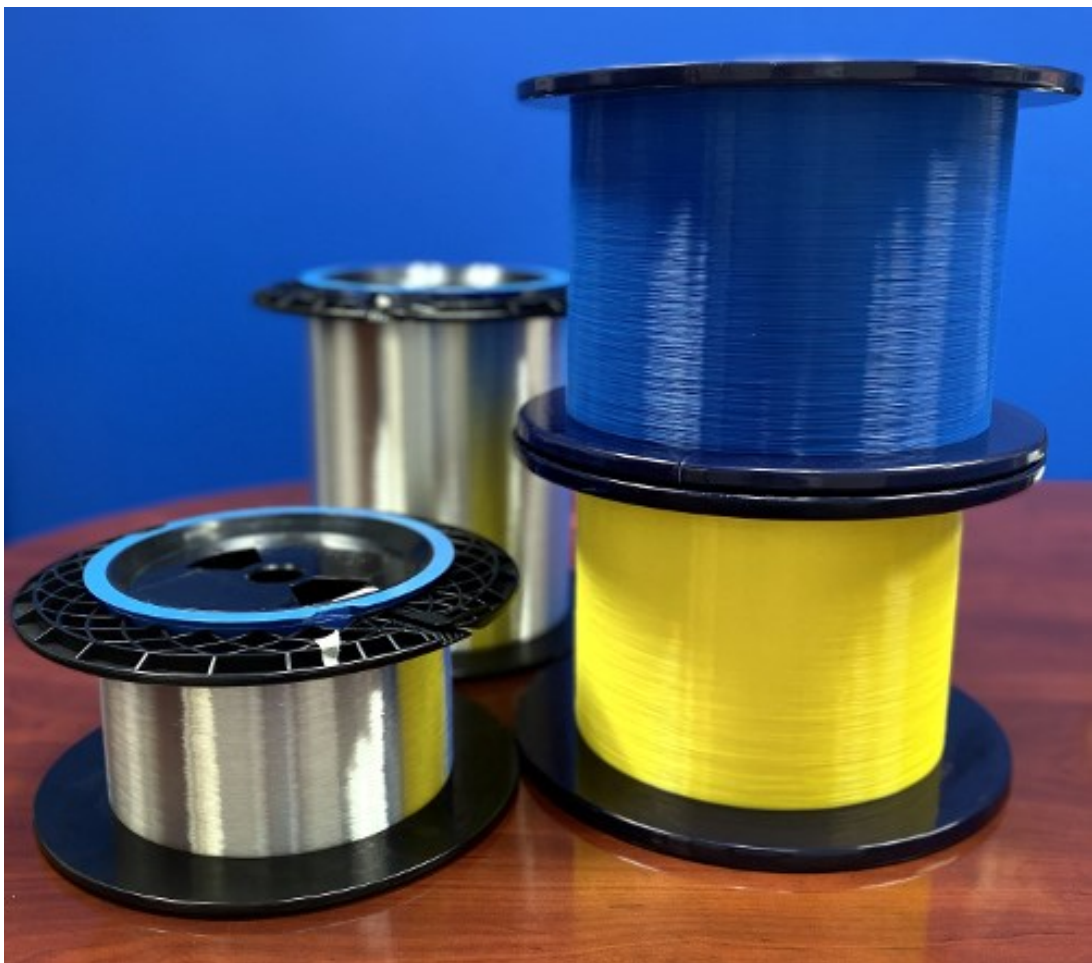




2024 Optical Fiber Reference Guide

**Single Mode and Multimode Optical Fibers
from Corning®, OFS®, Prysmian®, and Sumitomo®**



The Purpose of this Guide

The Optical Fiber Reference Guide is intended to provide a comprehensive list of single mode and multimode optical fibers currently available from several of the world's leading manufacturers for Telecom, Data Center/Cloud, Defense, Financial , Utility, Research, and other high-speed communications networking applications.

As the manufacturers included in this guide (Corning®, OFS®, Prysmian®, and Sumitomo®) offer many types of standard and specialty fibers, this guide includes a portion of the fibers available from each manufacturer's respective fiber portfolio. Also, there are numerous other fiber manufacturers of varying sizes and production capacities in the global marketplace that are not currently included in this guide but may be added in a future version.

Learn More - Technical Information

Each of the optical fibers listed in this guide contains a link directly to a datasheet on the respective manufacturer's website, current as of the time of this publication (Q1 2024).

If you have questions about any of the fibers in this guide or require further technical information, [contact M2 Optics](#) and we will provide answers or obtain further information from the respective manufacturer if necessary. In a similar manner, if you require information about a fiber from a manufacturer not listed in this guide, we recommend you contact us since M2 maintains established relationships with a wide range of manufacturers beyond those included in this guide.

Reference Guide Updates & Your Feedback

It is our goal to update this guide periodically to ensure you have the most current information at your fingertips. When this happens, you will receive the latest copy via email. If you have ideas or suggestions for how we can improve this helpful resource, we encourage you to contact us with your feedback and suggestions.

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Corning® Optical Fibers

Manufacturer	Fiber Brand Name	Fiber Type	ITU Spec	Characteristics
Corning®	SMF-28® Ultra®	Single mode	G.652.D G.657.A1	Standard SMF with bend-insensitive properties
Corning®	SMF-28e+®	Single mode	G.652.D	Standard SMF (predecessor to SMF-28® Ultra®)
Corning®	SMF-28® ULL	Single mode	G.652.D G.654.C	Ultra-low loss SMF for long-haul terrestrial applications.
Corning®	SMF-28® ULL S+	Single Mode	G.654C	Ultra-low loss SMF for submarine applications
Corning®	Vascade EX2000®	Single mode	G.654.D	Ultra-low loss SMF for submarine and transoceanic applications
Corning®	Vascade EX2500®	Single Mode	G.654.B/E	Ultra-low loss SMF for long-haul terrestrial and submarine
Corning®	TXF®	Single mode	G.654.E	Low loss SMF for long-haul terrestrial applications
Corning®	LEAF®	Single mode	G.655	NZDSF with reduced chromatic dispersion characteristics
Corning®	SMF-28® Contour	Single Mode	G.657.A2	Low loss, bend-insensitive fiber with 9.2µm MFD
Corning®	ClearCurve® LBL	Single mode	G.657.A2/B2	Bend-insensitive SMF with enhanced bend performance
Corning®	ClearCurve® ZBL	Single mode	G.657.B3	Bend-insensitive SMF with enhanced bend performance beyond LBL

Corning®	Infinicor® 300	Multimode	OM1	Standard 62.5µm MMF
Corning®	ClearCurve® OM2, OM3, and OM4,	Multimode	OM2 / OM3 / OM4	Laser-optimized 50µm MMF
Corning®	ClearCurve® OM5	Multimode	OM5	Laser-optimized 50µm wide band MMF

For more information about optical fibers available from Corning®, [click here](#) to visit their website

OFS® Optical Fibers

Manufacturer	Fiber Brand Name	Fiber Type	ITU Spec	Characteristics
OFS®	Allwave® ONE	Single mode	G.652.D G.657.A1	Standard SMF with bend-insensitive properties
OFS®	AllWave®	Single mode	G.652.D	Standard SMF, zero water peak
OFS®	AllWave® LL	Single mode	G.652.D	Standard SMF with a reduced loss specification
OFS®	AllWave® ULL	Single Mode	G.652.B G.654.C	Ultra-low loss SM fiber for terrestrial applications
OFS®	TeraWave®	Single Mode	G.654.E	Low loss SMF for long-haul, terrestrial applications
OFS®	TeraWave® ULL	Single mode	G.654.B G.654.E	Ultra-low loss SMF for long-haul, terrestrial applications
OFS®	TeraWave® SCUBA 125 & 150	Single Mode	G.654.B/D	Ultra-low loss SMF for submarine and transoceanic applications
OFS®	TrueWave® RS	Single mode	G.655	NZDSF with reduced chromatic dispersion characteristics
OFS®	Allwave® Flex+	Single mode	G.657.A2	Bend-insensitive SMF with enhanced bend performance
OFS®	Allwave® Flex Max	Single mode	G.657.B3	Bend-insensitive SMF with enhanced bend performance

OFS®	Laser Optimized 62.5	Multimode	OM1	Standard 62.5µm MMF
OFS®	LaserWave® Flex 300/550	Multimode	OM3 / OM4	Laser-optimized 50µm MMF
OFS®	LaserWave® WideBand	Multimode	OM5	Laser-optimized wide band 50µm MMF

For more information about optical fibers available from OFS®, [click here](#) to visit their website

Prysmian® Optical Fibers

Manufacturer	Fiber Brand Name	Fiber Type	ITU Spec	Characteristics
Prysmian®	ESMF	Single mode	G.652.D	Standard SMF
Prysmian®	LongLine™	Single mode	G.654	Low loss SMF for submarine and transoceanic applications
Prysmian®	TeraLight™	Single mode	G.655	NZDSF with reduced chromatic dispersion characteristics
Prysmian®	BendBright™	Single mode	G.657.A1 G.652.D	Bend-insensitive SMF
Prysmian®	BendBright-XS™	Single mode	G.657.A2	Bend-insensitive SMF with enhanced bend performance
Prysmian®	BendBright™ Elite	Single mode	G.657.B3	Bend-insensitive SMF with enhanced bend performance beyond XS

Prysmian®	OM1 Multimode	Multimode	OM1	Standard 62.5µm MMF
Prysmian®	BendBright™ OM2+, OM3, OM4	Multimode	OM2/OM3/OM4	Laser-optimized 50µm MMF
Prysmian®	BendBright™ OM5	Multimode	OM5	Laser-optimized wide band 50um MMF

For more information about optical fibers available from Prysmian®, [click here](#) to visit their website

Sumitomo® Optical Fibers

Manufacturer	Fiber Brand Name	Fiber Type	ITU Spec	Characteristics
Sumitomo®	PureBand™	Single mode	G.652.D	Standard SMF, low water peak
Sumitomo®	PureBand™ [LL]	Single mode	G.652.D	Standard SMF with a reduced loss specification
Sumitomo®	PureBand™ PLUS	Single mode	G.652.D G.657.A1	Standard SMF with bend-insensitive properties; smaller MFD than R
Sumitomo®	PureBand™- R	Single mode	G.652.D G.657.A1	Standard SMF with bend-insensitive properties
Sumitomo®	PureBand™- R [LL]	Single mode	G.652.D G.657.A1	Standard SMF with bend-insensitive properties; reduced loss specification
Sumitomo®	PureAccess™	Single mode	G.652.D G.657.A1	Standard SMF with bend-insensitive properties; enhanced stress level
Sumitomo®	PureAccess™ [A2]	Single mode	G.652.D G.657.A2/B2	Bend-insensitive SMF with enhanced bend and stress performance
Sumitomo®	PureAdvance™-80	Single mode	G.654.C G.652.B	Low loss SMF for terrestrial long-haul and metro applications
Sumitomo®	PureAdvance™-110	Single mode	G.654.E	Ultra-low loss SMF for terrestrial long-haul and 100G+ applications
Sumitomo®	PureAdvance™-125	Single mode	G.654.E	Ultra-low loss SMF for terrestrial long-haul and 100G+, larger MFD
Sumitomo®	PureBand™- Submarine	Single mode	G.652.D	Low loss SMF for submarine applications
Sumitomo®	Z Fiber™- LL	Single mode	G.654.C	Ultra-low loss SMF for regional to middle-reach submarine applications
Sumitomo®	PureAdvance™-110 Submarine	Single mode	G.654.B G.654.D	Ultra-low loss SMF for regional, middle, and long-haul submarine applications
Sumitomo®	Z-PLUS Fiber™- ULL	Single mode	G.654.B G.654.D	Ultra-low loss SMF for middle-reach to transoceanic submarine applications
Sumitomo®	Z-PLUS Fiber™- 130	Single mode	G.654.D	Ultra-low loss SMF for transoceanic submarine applications
Sumitomo®	Z-PLUS Fiber™- 150	Single mode	G.654.D	Ultra-low loss SMF for transoceanic submarine applications; larger MFD

For more information about optical fibers available from Sumitomo®, [click here](#) to visit their website

Improve the Way You Use & Manage Optical Fibers

Trusted by leading entities worldwide, customized [Fiber Lab](#) solutions are built to your specifications and include high-precision lengths of all fiber types and brands available in the market. Delivering immediate benefits, Fiber Labs enable you to acquire, use, and manage your valuable fibers in the most efficient and hassle-free manner. Every unit is designed and manufactured in the USA and available directly from M2 or our global network of re-sale partners. **Contact M2 to specify your custom Fiber Lab today.**



Fiber Network & Latency Simulation

- Exactly replicate span/link performance and latency
- Save maximum physical space while maximizing fiber ROI
- Many rack-mount and portable enclosure styles

Shown: 6RU Fiber Lab Flex with 2x80km, 1x40km, 2x20km



Precision Optical Time Delays

- Sub-nanosecond accuracy for link equalization and timing
- Up to 144 delays in 3RU and other high-density formats
- Rack, portable, modular, and internal system-mount styles

Shown: 3RU Fiber Lab Flex DC with 144 time delays



OTDR Training & Sales Demonstrations

- Portable and include multiple span types (P2P, FTTx, etc)
- Integrated unit eliminates managing multiple components
- In-line “events” - connectors, 1xN splitters, splices, gainers

Shown: Fiber Lab MSP with P2P, FTTx, & Cell site fiber spans

[View All Fiber Lab Solutions / Contact M2](#)