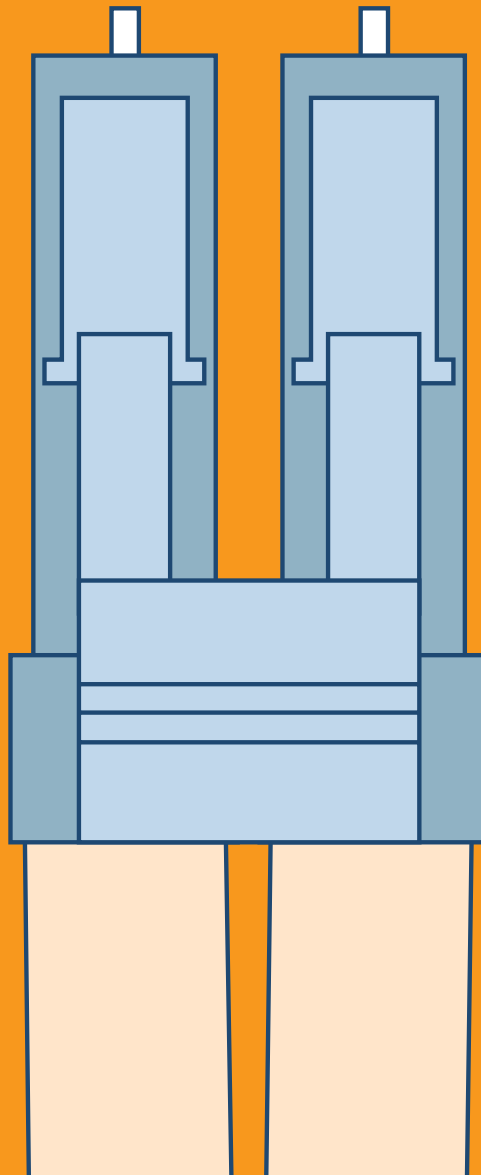


Fiber Optic

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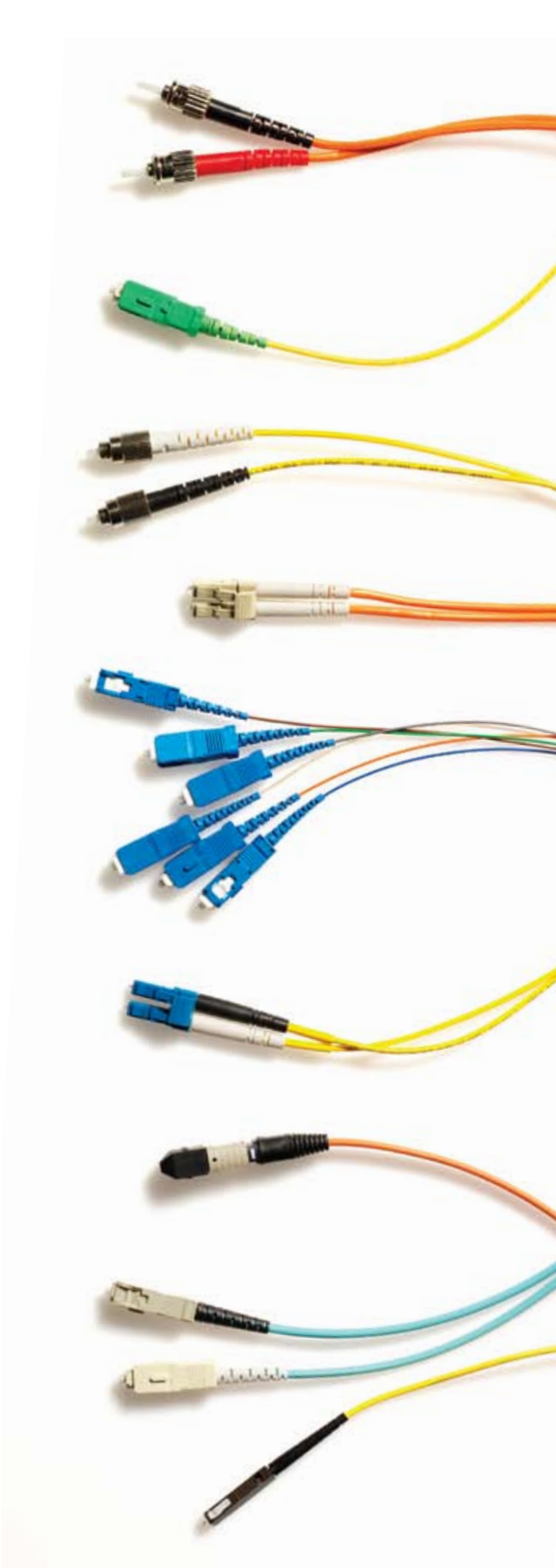
We demonstrate our commitment to quality and precision by adhering to the highest standards in the industry and qualifying for the most demanding certifications.



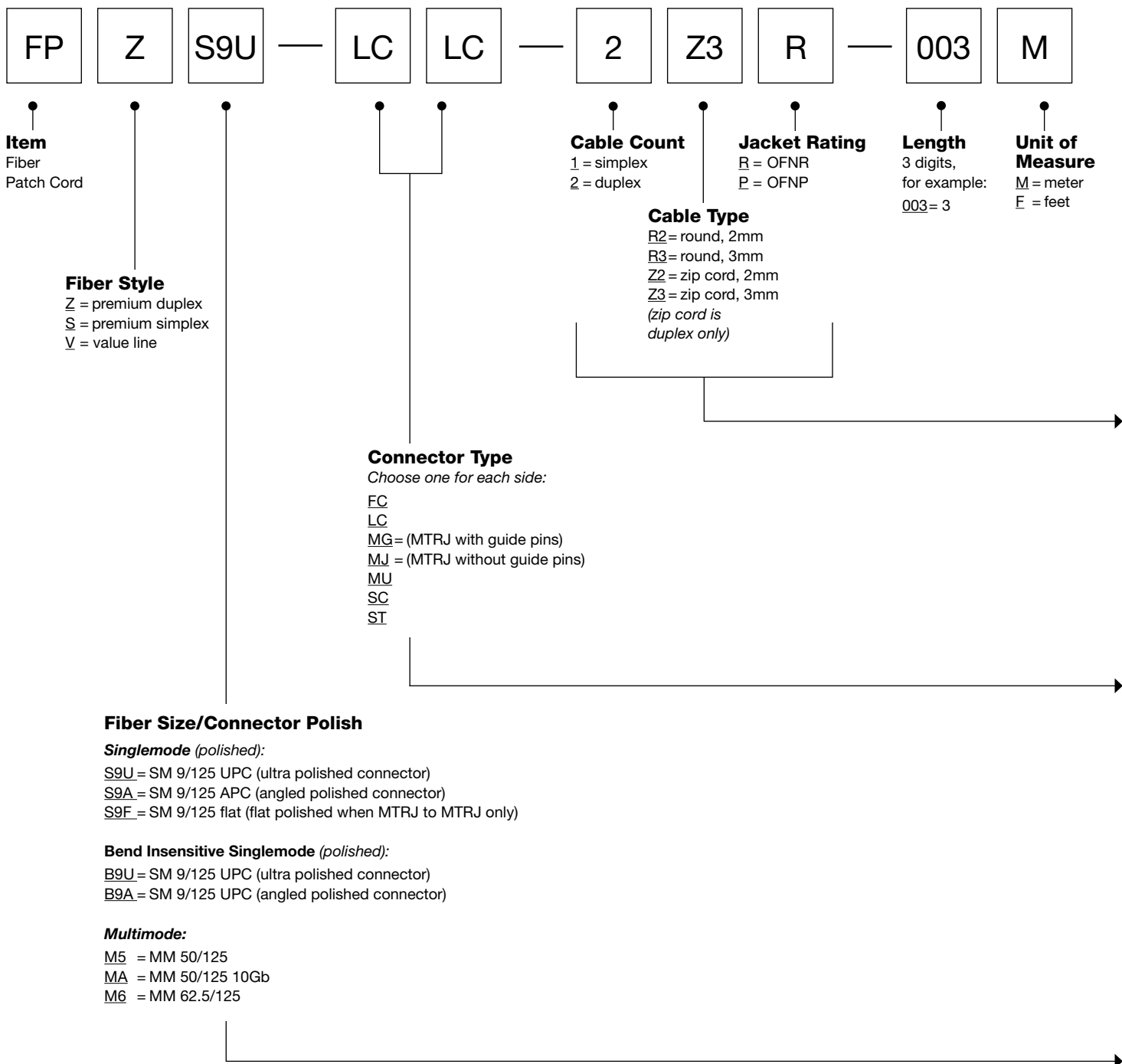
Fiber Optic Catalog

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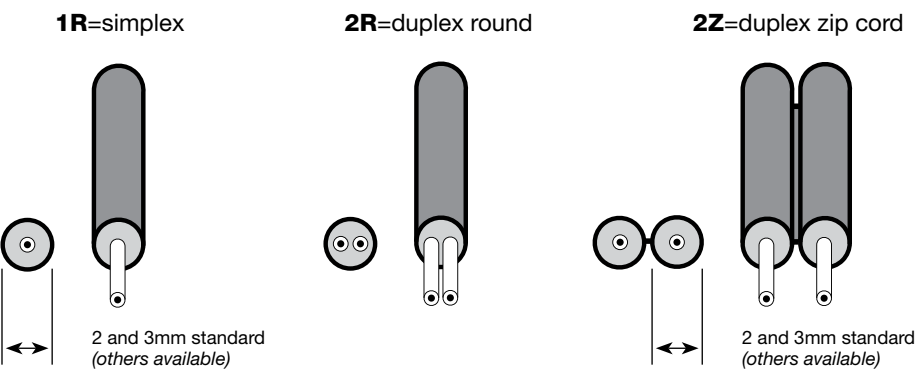
Standard Fiber Optic Patch Cords—part number scheme



Note: See page 14 for simplified Mode Conditioning part number scheme.

Standard Fiber Optic Patch Cords—technical assistance

Cable Count, Type and Jacket Rating



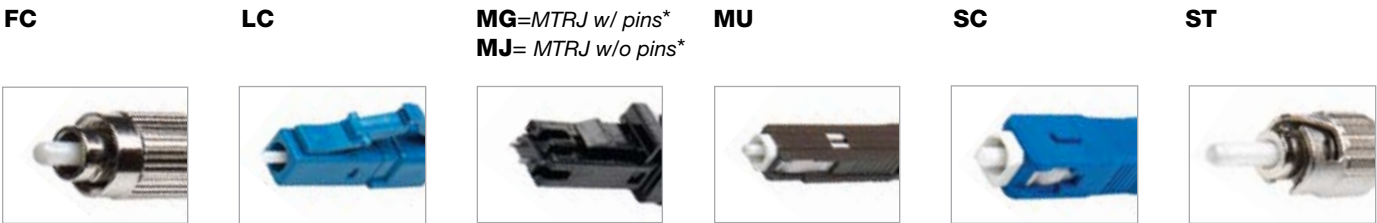
Jacket Rating:

OFNR*—
is typically used in equipment rooms, within walls, riser areas between floors, and in raised floor or ceiling spaces without circulated environmental air.

OFNP*—
is used in Plenum-rated area such as air ducts, return air ceiling space, and raised floor with circulated environmental air.

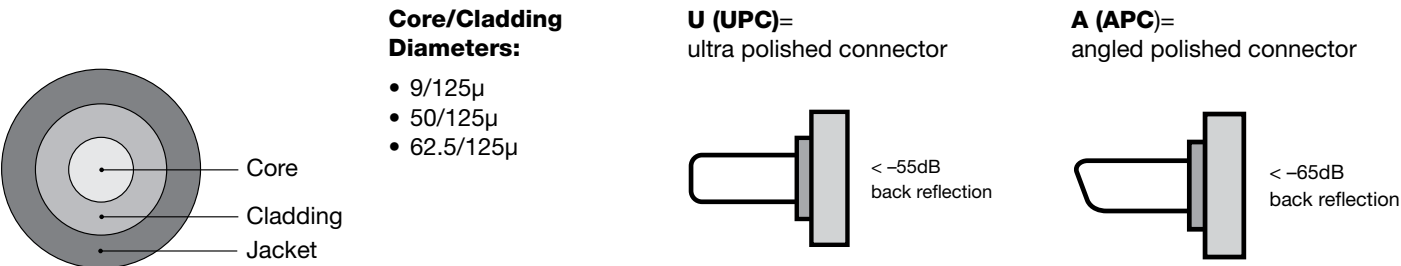
* Check your local, state and federal fire code regulations to verify the proper jacket rating for your application.

Connector Type



* MTRJ connectors can be ordered with or without guide pins

Fiber Size/Connector Polish



Standard Colors—jackets and boots

Jackets:

Singlemode OS1: yellow
Multimode OM1/OM2: orange
Multimode OM3 10Gb: aqua

Boots:

Duplex: black/white (zebra)
Simplex: FC, SC, ST—blue
LC, MU—white
SM APC: green

Boots and jackets are also available in custom colors.

Singlemode Patch Cords—overview

Get enhanced performance and bandwidth with SMF-28e and Bend Insensitive—Custom Cable’s standard singlemode patch cord product lines. Our SMF-28e and Bend Insensitive patch cords meet GR326 Issue 2 for end-face geometry* and have a lifetime warranty.

We also offer short lead-times and competitive pricing on traditional singlemode patch cords designed for conventional transmission bands.

** excludes Biconic, MTRJ and MTP connectors*

Bend Insensitive

Bend Insensitive patch cords offer additional flexibility for tight spaces. When cables are installed, they must bend to follow a path, for example, through cable management. Traditional singlemode fiber loses signal as light leaks out of the fiber core with each bend. Too many bends and the signal strength will drop or be lost completely. Bend Insensitive fiber utilizes breakthrough nanostructure technology in the fiber cladding to guide the light back into the fiber core. This allows the fiber to literally bend light around corners without losing signal.

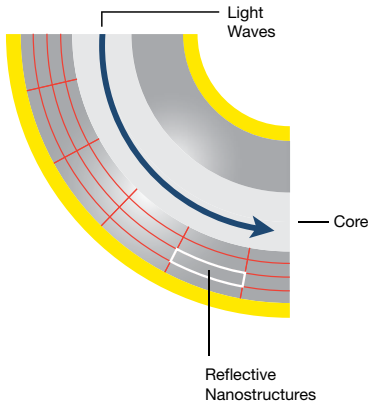
Our standard jacket diameter for Bend Insensitive patch cords is 2mm; 3mm is available upon request. Stock patch cords are ready to ship today. Custom lengths and types are available with a short lead-time.

The most common Bend-Insensitive patch cords are listed on pages 5 and 6. Use the *Part Number Scheme* on page 2 to determine the part number for the patch cord you need. Contact your Customer Experience Team for help with these and additional options.

Fiber Cladding—
Traditional



Fiber Cladding—
Bend Insensitive

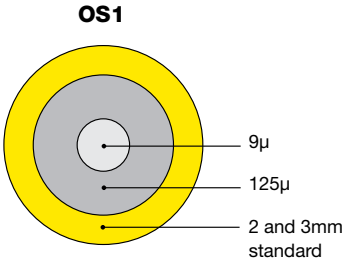


SMF-28e

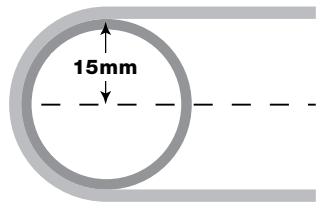
SMF-28e fiber is enhanced to operate throughout the singlemode operating window, where traditional fiber operates only within the original and conventional transmission bands. SMF-28e allows deployment of advanced services and cost-saving technologies and is compatible with existing singlemode infrastructures.

Our standard jacket diameter for SMF-28e is 3mm; 2mm is available upon request. Stock patch cords are ready to ship today. Custom lengths and types are available with a short lead-time.

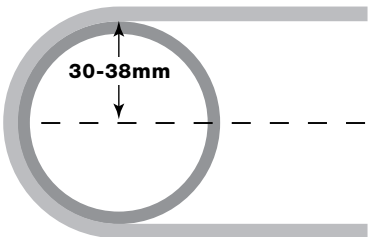
The most common SMF-28e patch cords are listed on pages 7 to 9. Use the *Part Number Scheme* on page 2 to determine the part number for the patch cord you need. Contact your Customer Experience Team for help with these and additional options.



Minimum Bend Radius—
Bend Insensitive



Minimum Bend Radius—
SMF-28e



Singlemode Patch Cords—bend insensitive



Bend Insensitive Duplex OFNR

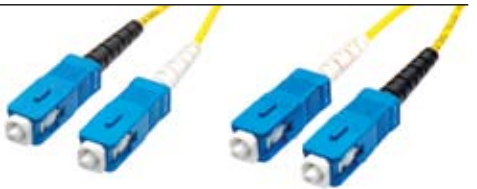
FPZB9U-FCFC-2Z2R-001M	FC to FC UPC polish 9/125 duplex OFNR 1 m
FPZB9U-FCFC-2Z2R-002M	FC to FC UPC polish 9/125 duplex OFNR 2 m
FPZB9U-FCFC-2Z2R-003M	FC to FC UPC polish 9/125 duplex OFNR 3 m
FPZB9U-FCFC-2Z2R-005M	FC to FC UPC polish 9/125 duplex OFNR 5 m
FPZB9U-FCFC-2Z2R-010M	FC to FC UPC polish 9/125 duplex OFNR 10 m
FPZB9U-FCFC-2Z2R-xxxM	Specify length, xxx m



FPZB9U-LCLC-2Z2R-001M	LC to LC UPC polish 9/125 duplex OFNR 1 m
FPZB9U-LCLC-2Z2R-002M	LC to LC UPC polish 9/125 duplex OFNR 2 m
FPZB9U-LCLC-2Z2R-003M	LC to LC UPC polish 9/125 duplex OFNR 3 m
FPZB9U-LCLC-2Z2R-005M	LC to LC UPC polish 9/125 duplex OFNR 5 m
FPZB9U-LCLC-2Z2R-010M	LC to LC UPC polish 9/125 duplex OFNR 10 m
FPZB9U-LCLC-2Z2R-xxxM	Specify length, xxx m



FPZB9U-SCSC-2Z2R-001M	SC to SC UPC polish 9/125 duplex OFNR 1 m
FPZB9U-SCSC-2Z2R-002M	SC to SC UPC polish 9/125 duplex OFNR 2 m
FPZB9U-SCSC-2Z2R-003M	SC to SC UPC polish 9/125 duplex OFNR 3 m
FPZB9U-SCSC-2Z2R-005M	SC to SC UPC polish 9/125 duplex OFNR 5 m
FPZB9U-SCSC-2Z2R-010M	SC to SC UPC polish 9/125 duplex OFNR 10 m
FPZB9U-SCSC-2Z2R-xxxM	Specify length, xxx m



FPZB9U-FCLC-2Z2R-001M	FC to LC UPC polish 9/125 duplex OFNR 1 m
FPZB9U-FCLC-2Z2R-002M	FC to LC UPC polish 9/125 duplex OFNR 2 m
FPZB9U-FCLC-2Z2R-003M	FC to LC UPC polish 9/125 duplex OFNR 3 m
FPZB9U-FCLC-2Z2R-005M	FC to LC UPC polish 9/125 duplex OFNR 5 m
FPZB9U-FCLC-2Z2R-010M	FC to LC UPC polish 9/125 duplex OFNR 10 m
FPZB9U-FCLC-2Z2R-xxxM	Specify length, xxx m



FPZB9U-FCSC-2Z2R-001M	FC to SC UPC polish 9/125 duplex OFNR 1 m
FPZB9U-FCSC-2Z2R-002M	FC to SC UPC polish 9/125 duplex OFNR 2 m
FPZB9U-FCSC-2Z2R-003M	FC to SC UPC polish 9/125 duplex OFNR 3 m
FPZB9U-FCSC-2Z2R-005M	FC to SC UPC polish 9/125 duplex OFNR 5 m
FPZB9U-FCSC-2Z2R-010M	FC to SC UPC polish 9/125 duplex OFNR 10 m
FPZB9U-FCSC-2Z2R-xxxM	Specify length, xxx m



FPZB9U-LCSC-2Z2R-001M	LC to SC UPC polish 9/125 duplex OFNR 1 m
FPZB9U-LCSC-2Z2R-002M	LC to SC UPC polish 9/125 duplex OFNR 2 m
FPZB9U-LCSC-2Z2R-003M	LC to SC UPC polish 9/125 duplex OFNR 3 m
FPZB9U-LCSC-2Z2R-005M	LC to SC UPC polish 9/125 duplex OFNR 5 m
FPZB9U-LCSC-2Z2R-010M	LC to SC UPC polish 9/125 duplex OFNR 10 m
FPZB9U-LCSC-2Z2R-xxxM	Specify length, xxx m



Note: LC patch cords come with duplex clips installed, SC with duplex clip supplied

Singlemode Patch Cords—bend insensitive



Bend Insensitive Simplex OFNR

FPSB9U-FCFC-1R2R-001M	FC to FC UPC polish 9/125 simplex OFNR 1 m
FPSB9U-FCFC-1R2R-002M	FC to FC UPC polish 9/125 simplex OFNR 2 m
FPSB9U-FCFC-1R2R-003M	FC to FC UPC polish 9/125 simplex OFNR 3 m
FPSB9U-FCFC-1R2R-005M	FC to FC UPC polish 9/125 simplex OFNR 5 m
FPSB9U-FCFC-1R2R-010M	FC to FC UPC polish 9/125 simplex OFNR 10 m
FPSB9U-FCFC-1R2R-xxxM	Specify length, xxx m



FPSB9U-LCLC-1R2R-001M	LC to LC UPC polish 9/125 simplex OFNR 1 m
FPSB9U-LCLC-1R2R-002M	LC to LC UPC polish 9/125 simplex OFNR 2 m
FPSB9U-LCLC-1R2R-003M	LC to LC UPC polish 9/125 simplex OFNR 3 m
FPSB9U-LCLC-1R2R-005M	LC to LC UPC polish 9/125 simplex OFNR 5 m
FPSB9U-LCLC-1R2R-010M	LC to LC UPC polish 9/125 simplex OFNR 10 m
FPSB9U-LCLC-1R2R-xxxM	Specify length, xxx m



FPSB9U-SCSC-1R2R-001M	SC to SC UPC polish 9/125 simplex OFNR 1 m
FPSB9U-SCSC-1R2R-002M	SC to SC UPC polish 9/125 simplex OFNR 2 m
FPSB9U-SCSC-1R2R-003M	SC to SC UPC polish 9/125 simplex OFNR 3 m
FPSB9U-SCSC-1R2R-005M	SC to SC UPC polish 9/125 simplex OFNR 5 m
FPSB9U-SCSC-1R2R-010M	SC to SC UPC polish 9/125 simplex OFNR 10 m
FPSB9U-SCSC-1R2R-xxxM	Specify length, xxx m



FPSB9U-FCLC-1R2R-001M	FC to LC UPC polish 9/125 simplex OFNR 1 m
FPSB9U-FCLC-1R2R-002M	FC to LC UPC polish 9/125 simplex OFNR 2 m
FPSB9U-FCLC-1R2R-003M	FC to LC UPC polish 9/125 simplex OFNR 3 m
FPSB9U-FCLC-1R2R-005M	FC to LC UPC polish 9/125 simplex OFNR 5 m
FPSB9U-FCLC-1R2R-010M	FC to LC UPC polish 9/125 simplex OFNR 10 m
FPSB9U-FCLC-1R2R-xxxM	Specify length, xxx m



FPSB9U-FCSC-1R2R-001M	FC to SC UPC polish 9/125 simplex OFNR 1 m
FPSB9U-FCSC-1R2R-002M	FC to SC UPC polish 9/125 simplex OFNR 2 m
FPSB9U-FCSC-1R2R-003M	FC to SC UPC polish 9/125 simplex OFNR 3 m
FPSB9U-FCSC-1R2R-005M	FC to SC UPC polish 9/125 simplex OFNR 5 m
FPSB9U-FCSC-1R2R-010M	FC to SC UPC polish 9/125 simplex OFNR 10 m
FPSB9U-FCSC-1R2R-xxxM	Specify length, xxx m



FPSB9U-LCSC-1R2R-001M	LC to SC UPC polish 9/125 simplex OFNR 1 m
FPSB9U-LCSC-1R2R-002M	LC to SC UPC polish 9/125 simplex OFNR 2 m
FPSB9U-LCSC-1R2R-003M	LC to SC UPC polish 9/125 simplex OFNR 3 m
FPSB9U-LCSC-1R2R-005M	LC to SC UPC polish 9/125 simplex OFNR 5 m
FPSB9U-LCSC-1R2R-010M	LC to SC UPC polish 9/125 simplex OFNR 10 m
FPSB9U-LCSC-1R2R-xxxM	Specify length, xxx m



Singlemode Patch Cords—SMF-28e®



SMF-28e Simplex OFNR

FPSS9U-FCFC-1R3R-001M	FC to FC UPC polish 9/125 simplex OFNR 1 m
FPSS9U-FCFC-1R3R-002M	FC to FC UPC polish 9/125 simplex OFNR 2 m
FPSS9U-FCFC-1R3R-003M	FC to FC UPC polish 9/125 simplex OFNR 3 m
FPSS9U-FCFC-1R3R-005M	FC to FC UPC polish 9/125 simplex OFNR 5 m
FPSS9U-FCFC-1R3R-010M	FC to FC UPC polish 9/125 simplex OFNR 10 m
FPSS9U-FCFC-1R3R-xxxM	Specify length, xxx m



FPSS9U-LCLC-1R3R-001M	LC to LC UPC polish 9/125 simplex OFNR 1 m
FPSS9U-LCLC-1R3R-002M	LC to LC UPC polish 9/125 simplex OFNR 2 m
FPSS9U-LCLC-1R3R-003M	LC to LC UPC polish 9/125 simplex OFNR 3 m
FPSS9U-LCLC-1R3R-005M	LC to LC UPC polish 9/125 simplex OFNR 5 m
FPSS9U-LCLC-1R3R-010M	LC to LC UPC polish 9/125 simplex OFNR 10 m
FPSS9U-LCLC-1R3R-xxxM	Specify length, xxx m



FPSS9U-MUMU-1R3R-001M	MU to MU UPC polish 9/125 simplex OFNR 1 m
FPSS9U-MUMU-1R3R-002M	MU to MU UPC polish 9/125 simplex OFNR 2 m
FPSS9U-MUMU-1R3R-003M	MU to MU UPC polish 9/125 simplex OFNR 3 m
FPSS9U-MUMU-1R3R-005M	MU to MU UPC polish 9/125 simplex OFNR 5 m
FPSS9U-MUMU-1R3R-010M	MU to MU UPC polish 9/125 simplex OFNR 10 m
FPSS9U-MUMU-1R3R-xxxM	Specify length, xxx m



FPSS9U-SCSC-1R3R-001M	SC to SC UPC polish 9/125 simplex OFNR 1 m
FPSS9U-SCSC-1R3R-002M	SC to SC UPC polish 9/125 simplex OFNR 2 m
FPSS9U-SCSC-1R3R-003M	SC to SC UPC polish 9/125 simplex OFNR 3 m
FPSS9U-SCSC-1R3R-005M	SC to SC UPC polish 9/125 simplex OFNR 5 m
FPSS9U-SCSC-1R3R-010M	SC to SC UPC polish 9/125 simplex OFNR 10 m
FPSS9U-SCSC-1R3R-xxxM	Specify length, xxx m



FPSS9U-STST-1R3R-001M	ST to ST UPC polish 9/125 simplex OFNR 1 m
FPSS9U-STST-1R3R-002M	ST to ST UPC polish 9/125 simplex OFNR 2 m
FPSS9U-STST-1R3R-003M	ST to ST UPC polish 9/125 simplex OFNR 3 m
FPSS9U-STST-1R3R-005M	ST to ST UPC polish 9/125 simplex OFNR 5 m
FPSS9U-STST-1R3R-010M	ST to ST UPC polish 9/125 simplex OFNR 10 m
FPSS9U-STST-1R3R-xxxM	Specify length, xxx m



FPSS9U-LCSC-1R3R-001M	LC to SC UPC polish 9/125 simplex OFNR 1 m
FPSS9U-LCSC-1R3R-002M	LC to SC UPC polish 9/125 simplex OFNR 2 m
FPSS9U-LCSC-1R3R-003M	LC to SC UPC polish 9/125 simplex OFNR 3 m
FPSS9U-LCSC-1R3R-005M	LC to SC UPC polish 9/125 simplex OFNR 5 m
FPSS9U-LCSC-1R3R-010M	LC to SC UPC polish 9/125 simplex OFNR 10 m
FPSS9U-LCSC-1R3R-xxxM	Specify length, xxx m



FPSS9U-SCST-1R3R-001M	SC to ST UPC polish 9/125 simplex OFNR 1 m
FPSS9U-SCST-1R3R-002M	SC to ST UPC polish 9/125 simplex OFNR 2 m
FPSS9U-SCST-1R3R-003M	SC to ST UPC polish 9/125 simplex OFNR 3 m
FPSS9U-SCST-1R3R-005M	SC to ST UPC polish 9/125 simplex OFNR 5 m
FPSS9U-SCST-1R3R-010M	SC to ST UPC polish 9/125 simplex OFNR 10 m
FPSS9U-SCST-1R3R-xxxM	Specify length, xxx m



Singlemode Patch Cords—SMF-28e®



SMF-28e Duplex OFNR

FPZS9U-FCFC-2Z3R-001M	FC to FC UPC polish 9/125 duplex zip cord OFNR 1 m
FPZS9U-FCFC-2Z3R-002M	FC to FC UPC polish 9/125 duplex zip cord OFNR 2 m
FPZS9U-FCFC-2Z3R-003M	FC to FC UPC polish 9/125 duplex zip cord OFNR 3 m
FPZS9U-FCFC-2Z3R-005M	FC to FC UPC polish 9/125 duplex zip cord OFNR 5 m
FPZS9U-FCFC-2Z3R-010M	FC to FC UPC polish 9/125 duplex zip cord OFNR 10 m
FPZS9U-FCFC-2Z3R-xxxM	Specify length, xxx m



FPZS9U-LCLC-2Z3R-001M	LC to LC UPC polish 9/125 duplex zip cord OFNR 1 m
FPZS9U-LCLC-2Z3R-002M	LC to LC UPC polish 9/125 duplex zip cord OFNR 2 m
FPZS9U-LCLC-2Z3R-003M	LC to LC UPC polish 9/125 duplex zip cord OFNR 3 m
FPZS9U-LCLC-2Z3R-005M	LC to LC UPC polish 9/125 duplex zip cord OFNR 5 m
FPZS9U-LCLC-2Z3R-010M	LC to LC UPC polish 9/125 duplex zip cord OFNR 10 m
FPZS9U-LCLC-2Z3R-xxxM	Specify length, xxx m



FPZS9F-MGMG-2R3R-001M	MTRJ to MTRJ flat polish 9/125 duplex round OFNR 1 m
FPZS9F-MGMG-2R3R-002M	MTRJ to MTRJ flat polish 9/125 duplex round OFNR 2 m
FPZS9F-MGMG-2R3R-003M	MTRJ to MTRJ flat polish 9/125 duplex round OFNR 3 m
FPZS9F-MGMG-2R3R-005M	MTRJ to MTRJ flat polish 9/125 duplex round OFNR 5 m
FPZS9F-MGMG-2R3R-010M	MTRJ to MTRJ flat polish 9/125 duplex round OFNR 10 m
FPZS9F-MGMG-2R3R-xxxM	Specify length, xxx m



With guide pins

FPAZ9U-MUMU-2Z3R-001M	MU to MU UPC polish 9/125 duplex zip cord OFNR 1 m
FPAZ9U-MUMU-2Z3R-002M	MU to MU UPC polish 9/125 duplex zip cord OFNR 2 m
FPAZ9U-MUMU-2Z3R-003M	MU to MU UPC polish 9/125 duplex zip cord OFNR 3 m
FPAZ9U-MUMU-2Z3R-005M	MU to MU UPC polish 9/125 duplex zip cord OFNR 5 m
FPAZ9U-MUMU-2Z3R-010M	MU to MU UPC polish 9/125 duplex zip cord OFNR 10 m
FPAZ9U-MUMU-2Z3R-xxxM	Specify length, xxx m



FPAZ9U-SCSC-2Z3R-001M	SC to SC UPC polish 9/125 duplex zip cord OFNR 1 m
FPAZ9U-SCSC-2Z3R-002M	SC to SC UPC polish 9/125 duplex zip cord OFNR 2 m
FPAZ9U-SCSC-2Z3R-003M	SC to SC UPC polish 9/125 duplex zip cord OFNR 3 m
FPAZ9U-SCSC-2Z3R-005M	SC to SC UPC polish 9/125 duplex zip cord OFNR 5 m
FPAZ9U-SCSC-2Z3R-010M	SC to SC UPC polish 9/125 duplex zip cord OFNR 10 m
FPAZ9U-SCSC-2Z3R-xxxM	Specify length, xxx m



FPAZ9U-STST-2Z3R-001M	ST to ST UPC polish 9/125 duplex zip cord OFNR 1 m
FPAZ9U-STST-2Z3R-002M	ST to ST UPC polish 9/125 duplex zip cord OFNR 2 m
FPAZ9U-STST-2Z3R-003M	ST to ST UPC polish 9/125 duplex zip cord OFNR 3 m
FPAZ9U-STST-2Z3R-005M	ST to ST UPC polish 9/125 duplex zip cord OFNR 5 m
FPAZ9U-STST-2Z3R-010M	ST to ST UPC polish 9/125 duplex zip cord OFNR 10 m
FPAZ9U-STST-2Z3R-xxxM	Specify length, xxx m



Note: LC patch cords come with duplex clips installed, SC with duplex clip supplied

SMF-28e Duplex OFNR

FPZS9U-FCLC-2Z3R-001M	FC to LC UPC polish 9/125 duplex OFNR 1 m
FPZS9U-FCLC-2Z3R-002M	FC to LC UPC polish 9/125 duplex OFNR 2 m
FPZS9U-FCLC-2Z3R-003M	FC to LC UPC polish 9/125 duplex OFNR 3 m
FPZS9U-FCLC-2Z3R-005M	FC to LC UPC polish 9/125 duplex OFNR 5 m
FPZS9U-FCLC-2Z3R-010M	FC to LC UPC polish 9/125 duplex OFNR 10 m
FPZS9U-FCLC-2Z3R-xxxM	Specify length, xxx m



FPZS9U-FCSC-2Z3R-001M	FC to SC UPC polish 9/125 duplex OFNR 1 m
FPZS9U-FCSC-2Z3R-002M	FC to SC UPC polish 9/125 duplex OFNR 2 m
FPZS9U-FCSC-2Z3R-003M	FC to SC UPC polish 9/125 duplex OFNR 3 m
FPZS9U-FCSC-2Z3R-005M	FC to SC UPC polish 9/125 duplex OFNR 5 m
FPZS9U-FCSC-2Z3R-010M	FC to SC UPC polish 9/125 duplex OFNR 10 m
FPZS9U-FCSC-2Z3R-xxxM	Specify length, xxx m



FPZS9U-FCST-2Z3R-001M	FC to ST UPC polish 9/125 duplex zip cord OFNR 1 m
FPZS9U-FCST-2Z3R-002M	FC to ST UPC polish 9/125 duplex zip cord OFNR 2 m
FPZS9U-FCST-2Z3R-003M	FC to ST UPC polish 9/125 duplex zip cord OFNR 3 m
FPZS9U-FCST-2Z3R-005M	FC to ST UPC polish 9/125 duplex zip cord OFNR 5 m
FPZS9U-FCST-2Z3R-010M	FC to ST UPC polish 9/125 duplex zip cord OFNR 10 m
FPZS9U-FCST-2Z3R-xxxM	Specify length, xxx m



FPZS9U-LCSC-2Z3R-001M	LC to SC UPC polish 9/125 duplex zip cord OFNR 1 m
FPZS9U-LCSC-2Z3R-002M	LC to SC UPC polish 9/125 duplex zip cord OFNR 2 m
FPZS9U-LCSC-2Z3R-003M	LC to SC UPC polish 9/125 duplex zip cord OFNR 3 m
FPZS9U-LCSC-2Z3R-005M	LC to SC UPC polish 9/125 duplex zip cord OFNR 5 m
FPZS9U-LCSC-2Z3R-010M	LC to SC UPC polish 9/125 duplex zip cord OFNR 10 m
FPZS9U-LCSC-2Z3R-xxxM	Specify length, xxx m



FPZS9U-LCST-2Z3R-001M	LC to ST UPC polish 9/125 duplex zip cord OFNR 1 m
FPZS9U-LCST-2Z3R-002M	LC to ST UPC polish 9/125 duplex zip cord OFNR 2 m
FPZS9U-LCST-2Z3R-003M	LC to ST UPC polish 9/125 duplex zip cord OFNR 3 m
FPZS9U-LCST-2Z3R-005M	LC to ST UPC polish 9/125 duplex zip cord OFNR 5 m
FPZS9U-LCST-2Z3R-010M	LC to ST UPC polish 9/125 duplex zip cord OFNR 10 m
FPZS9U-LCST-2Z3R-xxxM	Specify length, xxx m



FPZS9U-SCST-2Z3R-001M	SC to ST UPC polish 9/125 duplex zip cord OFNR 1 m
FPZS9U-SCST-2Z3R-002M	SC to ST UPC polish 9/125 duplex zip cord OFNR 2 m
FPZS9U-SCST-2Z3R-003M	SC to ST UPC polish 9/125 duplex zip cord OFNR 3 m
FPZS9U-SCST-2Z3R-005M	SC to ST UPC polish 9/125 duplex zip cord OFNR 5 m
FPZS9U-SCST-2Z3R-010M	SC to ST UPC polish 9/125 duplex zip cord OFNR 10 m
FPZS9U-SCST-2Z3R-xxxM	Specify length, xxx m



Note: LC patch cords come with duplex clips installed, SC with duplex clip supplied

Multimode Patch Cords—overview

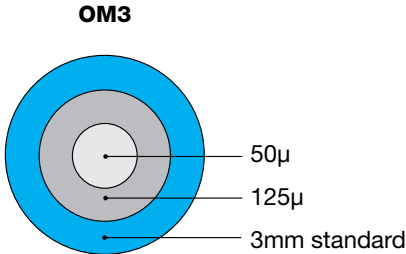
Multimode fiber is widely utilized in Local Area Networks (LAN) due to the lower cost of LED transceivers. Multimode fiber is also used in telephony applications, although singlemode fiber is primarily used for telephony and long distance applications.

We offer short lead-times and competitive pricing on premium build-to-order and traditional multimode patch cords. All fiber optic patch cords have a **lifetime warranty**.

50/125 10Gb Duplex Zip

50/125μ 10Gb OM3 is a laser-optimized multimode technology, which can provide 10 to 20 times the bandwidth of 62.5μ fiber over longer length high speed protocols. The introduction of low cost VCSEL 850 nm lasers has made 50/125μ 10Gb a preferred choice for new multimode installations.

The most common 50/125μ 10Gb patch cords are located on page 11. Use the *Part Number Scheme* on page 2 to determine the part number for the patch cord you need. Contact your Customer Experience Team for help with these and additional options.

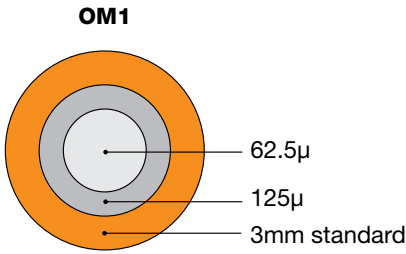
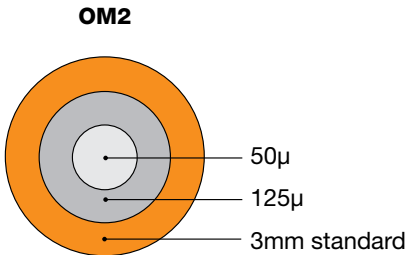


50/125 and 62.5/125 Duplex OFNR

62.5/125μ has been the most commonly used multimode fiber in the U.S. since the first-generation optical LAN application standards were put in place. Due to its larger core size and numeric aperture, more light can be coupled into 62.5μ than into 50μ.

Both 50/125μ and 62.5/125μ fibers are used for new installations, but they are most commonly used in expanding existing 50μ or 62.5μ networks. The newer 50/125 10Gb is becoming the preferred choice for new installations.

The most common 50/125μ patch cords are listed on page 12, with 62.5/125 appearing on page 13. Use the *Part Number Scheme* on page 2 to determine the part number for the patch cord you need. Contact your Customer Experience Team for help with these and additional options.



Multimode Patch Cords—50/125 10Gb



50/125 10Gb Duplex Zip OFNR

FPZMA-LCLC-2Z3R-001M	LC to LC 50/125 10Gb duplex zip cord OFNR 1 m
FPZMA-LCLC-2Z3R-002M	LC to LC 50/125 10Gb duplex zip cord OFNR 2 m
FPZMA-LCLC-2Z3R-003M	LC to LC 50/125 10Gb duplex zip cord OFNR 3 m
FPZMA-LCLC-2Z3R-005M	LC to LC 50/125 10Gb duplex zip cord OFNR 5 m
FPZMA-LCLC-2Z3R-010M	LC to LC 50/125 10Gb duplex zip cord OFNR 10 m
FPZMA-LCLC-2Z3R-xxxM	Specify length, xxx m



FPZMA-SCSC-2Z3R-001M	SC to SC 50/125 10Gb duplex zip cord OFNR 1 m
FPZMA-SCSC-2Z3R-002M	SC to SC 50/125 10Gb duplex zip cord OFNR 2 m
FPZMA-SCSC-2Z3R-003M	SC to SC 50/125 10Gb duplex zip cord OFNR 3 m
FPZMA-SCSC-2Z3R-005M	SC to SC 50/125 10Gb duplex zip cord OFNR 5 m
FPZMA-SCSC-2Z3R-010M	SC to SC 50/125 10Gb duplex zip cord OFNR 10 m
FPZMA-SCSC-2Z3R-xxxM	Specify length, xxx m



FPZMA-STST-2Z3R-001M	ST to ST 50/125 10Gb duplex zip cord OFNR 1 m
FPZMA-STST-2Z3R-002M	ST to ST 50/125 10Gb duplex zip cord OFNR 2 m
FPZMA-STST-2Z3R-003M	ST to ST 50/125 10Gb duplex zip cord OFNR 3 m
FPZMA-STST-2Z3R-005M	ST to ST 50/125 10Gb duplex zip cord OFNR 5 m
FPZMA-STST-2Z3R-010M	ST to ST 50/125 10Gb duplex zip cord OFNR 10 m
FPZMA-STST-2Z3R-xxxM	Specify length, xxx m



FPZMA-LCSC-2Z3R-001M	LC to SC 50/125 10Gb duplex zip cord OFNR 1 m
FPZMA-LCSC-2Z3R-002M	LC to SC 50/125 10Gb duplex zip cord OFNR 2 m
FPZMA-LCSC-2Z3R-003M	LC to SC 50/125 10Gb duplex zip cord OFNR 3 m
FPZMA-LCSC-2Z3R-005M	LC to SC 50/125 10Gb duplex zip cord OFNR 5 m
FPZMA-LCSC-2Z3R-010M	LC to SC 50/125 10Gb duplex zip cord OFNR 10 m
FPZMA-LCSC-2Z3R-xxxM	Specify length, xxx m



FPZMA-LCST-2Z3R-001M	LC to ST 50/125 10Gb duplex zip cord OFNR 1 m
FPZMA-LCST-2Z3R-002M	LC to ST 50/125 10Gb duplex zip cord OFNR 2 m
FPZMA-LCST-2Z3R-003M	LC to ST 50/125 10Gb duplex zip cord OFNR 3 m
FPZMA-LCST-2Z3R-005M	LC to ST 50/125 10Gb duplex zip cord OFNR 5 m
FPZMA-LCST-2Z3R-010M	LC to ST 50/125 10Gb duplex zip cord OFNR 10 m
FPZMA-LCST-2Z3R-xxxM	Specify length, xxx m



FPZMA-SCST-2Z3R-001M	SC to ST 50/125 10Gb duplex zip cord OFNR 1 m
FPZMA-SCST-2Z3R-002M	SC to ST 50/125 10Gb duplex zip cord OFNR 2 m
FPZMA-SCST-2Z3R-003M	SC to ST 50/125 10Gb duplex zip cord OFNR 3 m
FPZMA-SCST-2Z3R-005M	SC to ST 50/125 10Gb duplex zip cord OFNR 5 m
FPZMA-SCST-2Z3R-010M	SC to ST 50/125 10Gb duplex zip cord OFNR 10 m
FPZMA-SCST-2Z3R-xxxM	Specify length, xxx m



Note: LC patch cords come with duplex clips installed, SC with duplex clip supplied

Multimode Patch Cords—50/125



50/125 Duplex OFNR

FPZM5-LCLC-2Z3R-001M	LC to LC 50/125 duplex zip cord OFNR 1 m
FPZM5-LCLC-2Z3R-002M	LC to LC 50/125 duplex zip cord OFNR 2 m
FPZM5-LCLC-2Z3R-003M	LC to LC 50/125 duplex zip cord OFNR 3 m
FPZM5-LCLC-2Z3R-005M	LC to LC 50/125 duplex zip cord OFNR 5 m
FPZM5-LCLC-2Z3R-010M	LC to LC 50/125 duplex zip cord OFNR 10 m
FPZM5-LCLC-2Z3R-xxxM	Specify length, xxx m



FPZM5-MGMG-2R3R-001M	MTRJ to MTRJ 50/125 duplex round OFNR 1 m
FPZM5-MGMG-2R3R-002M	MTRJ to MTRJ 50/125 duplex round OFNR 2 m
FPZM5-MGMG-2R3R-003M	MTRJ to MTRJ 50/125 duplex round OFNR 3 m
FPZM5-MGMG-2R3R-005M	MTRJ to MTRJ 50/125 duplex round OFNR 5 m
FPZM5-MGMG-2R3R-010M	MTRJ to MTRJ 50/125 duplex round OFNR 10 m
FPZM5-MGMG-2R3R-xxxM	Specify length, xxx m



With guide pins

FPZM5-SCSC-2Z3R-001M	SC to SC 50/125 duplex zip cord OFNR 1 m
FPZM5-SCSC-2Z3R-002M	SC to SC 50/125 duplex zip cord OFNR 2 m
FPZM5-SCSC-2Z3R-003M	SC to SC 50/125 duplex zip cord OFNR 3 m
FPZM5-SCSC-2Z3R-005M	SC to SC 50/125 duplex zip cord OFNR 5 m
FPZM5-SCSC-2Z3R-010M	SC to SC 50/125 duplex zip cord OFNR 10 m
FPZM5-SCSC-2Z3R-xxxM	Specify length, xxx m



FPZM5-STST-2Z3R-001M	ST to ST 50/125 duplex zip cord OFNR 1 m
FPZM5-STST-2Z3R-002M	ST to ST 50/125 duplex zip cord OFNR 2 m
FPZM5-STST-2Z3R-003M	ST to ST 50/125 duplex zip cord OFNR 3 m
FPZM5-STST-2Z3R-005M	ST to ST 50/125 duplex zip cord OFNR 5 m
FPZM5-STST-2Z3R-010M	ST to ST 50/125 duplex zip cord OFNR 10 m
FPZM5-STST-2Z3R-xxxM	Specify length, xxx m



FPZM5-LCSC-2Z3R-001M	LC to SC 50/125 duplex zip cord OFNR 1 m
FPZM5-LCSC-2Z3R-002M	LC to SC 50/125 duplex zip cord OFNR 2 m
FPZM5-LCSC-2Z3R-003M	LC to SC 50/125 duplex zip cord OFNR 3 m
FPZM5-LCSC-2Z3R-005M	LC to SC 50/125 duplex zip cord OFNR 5 m
FPZM5-LCSC-2Z3R-010M	LC to SC 50/125 duplex zip cord OFNR 10 m
FPZM5-LCSC-2Z3R-xxxM	Specify length, xxx m



FPZM5-LCST-2Z3R-001M	LC to ST 50/125 duplex zip cord OFNR 1 m
FPZM5-LCST-2Z3R-002M	LC to ST 50/125 duplex zip cord OFNR 2 m
FPZM5-LCST-2Z3R-003M	LC to ST 50/125 duplex zip cord OFNR 3 m
FPZM5-LCST-2Z3R-005M	LC to ST 50/125 duplex zip cord OFNR 5 m
FPZM5-LCST-2Z3R-010M	LC to ST 50/125 duplex zip cord OFNR 10 m
FPZM5-LCST-2Z3R-xxxM	Specify length, xxx m



FPZM5-SCST-2Z3R-001M	SC to ST 50/125 duplex zip cord OFNR 1 m
FPZM5-SCST-2Z3R-002M	SC to ST 50/125 duplex zip cord OFNR 2 m
FPZM5-SCST-2Z3R-003M	SC to ST 50/125 duplex zip cord OFNR 3 m
FPZM5-SCST-2Z3R-005M	SC to ST 50/125 duplex zip cord OFNR 5 m
FPZM5-SCST-2Z3R-010M	SC to ST 50/125 duplex zip cord OFNR 10 m
FPZM5-SCST-2Z3R-xxxM	Specify length, xxx m



Note: LC patch cords come with duplex clips installed, SC with duplex clip supplied

Multimode Patch Cords—62.5/125



62.5/125 Duplex OFNR

FPZM6-LCLC-2Z3R-001M	LC to LC 62.5/125 duplex zip cord OFNR 1 m
FPZM6-LCLC-2Z3R-002M	LC to LC 62.5/125 duplex zip cord OFNR 2 m
FPZM6-LCLC-2Z3R-003M	LC to LC 62.5/125 duplex zip cord OFNR 3 m
FPZM6-LCLC-2Z3R-005M	LC to LC 62.5/125 duplex zip cord OFNR 5 m
FPZM6-LCLC-2Z3R-010M	LC to LC 62.5/125 duplex zip cord OFNR 10 m
FPZM6-LCLC-2Z3R-xxxM	Specify length, xxx m



FPZM6-MGMG-2R3R-001M	MTRJ to MTRJ 62.5/125 duplex round OFNR 1 m
FPZM6-MGMG-2R3R-002M	MTRJ to MTRJ 62.5/125 duplex round OFNR 2 m
FPZM6-MGMG-2R3R-003M	MTRJ to MTRJ 62.5/125 duplex round OFNR 3 m
FPZM6-MGMG-2R3R-005M	MTRJ to MTRJ 62.5/125 duplex round OFNR 5 m
FPZM6-MGMG-2R3R-010M	MTRJ to MTRJ 62.5/125 duplex round OFNR 10 m
FPZM6-MGMG-2R3R-xxxM	Specify length, xxx m



With guide pins

FPZM6-SCSC-2Z3R-001M	SC to SC 62.5/125 duplex zip cord OFNR 1 m
FPZM6-SCSC-2Z3R-002M	SC to SC 62.5/125 duplex zip cord OFNR 2 m
FPZM6-SCSC-2Z3R-003M	SC to SC 62.5/125 duplex zip cord OFNR 3 m
FPZM6-SCSC-2Z3R-005M	SC to SC 62.5/125 duplex zip cord OFNR 5 m
FPZM6-SCSC-2Z3R-010M	SC to SC 62.5/125 duplex zip cord OFNR 10 m
FPZM6-SCSC-2Z3R-xxxM	Specify length, xxx m



FPZM6-STST-2Z3R-001M	ST to ST 62.5/125 duplex zip cord OFNR 1 m
FPZM6-STST-2Z3R-002M	ST to ST 62.5/125 duplex zip cord OFNR 2 m
FPZM6-STST-2Z3R-003M	ST to ST 62.5/125 duplex zip cord OFNR 3 m
FPZM6-STST-2Z3R-005M	ST to ST 62.5/125 duplex zip cord OFNR 5 m
FPZM6-STST-2Z3R-010M	ST to ST 62.5/125 duplex zip cord OFNR 10 m
FPZM6-STST-2Z3R-xxxM	Specify length, xxx m



FPZM6-LCSC-2Z3R-001M	LC to SC 62.5/125 duplex zip cord OFNR 1 m
FPZM6-LCSC-2Z3R-002M	LC to SC 62.5/125 duplex zip cord OFNR 2 m
FPZM6-LCSC-2Z3R-003M	LC to SC 62.5/125 duplex zip cord OFNR 3 m
FPZM6-LCSC-2Z3R-005M	LC to SC 62.5/125 duplex zip cord OFNR 5 m
FPZM6-LCSC-2Z3R-010M	LC to SC 62.5/125 duplex zip cord OFNR 10 m
FPZM6-LCSC-2Z3R-xxxM	Specify length, xxx m



FPZM6-LCST-2Z3R-001M	LC to ST 62.5/125 duplex zip cord OFNR 1 m
FPZM6-LCST-2Z3R-002M	LC to ST 62.5/125 duplex zip cord OFNR 2 m
FPZM6-LCST-2Z3R-003M	LC to ST 62.5/125 duplex zip cord OFNR 3 m
FPZM6-LCST-2Z3R-005M	LC to ST 62.5/125 duplex zip cord OFNR 5 m
FPZM6-LCST-2Z3R-010M	LC to ST 62.5/125 duplex zip cord OFNR 10 m
FPZM6-LCST-2Z3R-xxxM	Specify length, xxx m



FPZM6-SCST-2Z3R-001M	SC to ST 62.5/125 duplex zip cord OFNR 1 m
FPZM6-SCST-2Z3R-002M	SC to ST 62.5/125 duplex zip cord OFNR 2 m
FPZM6-SCST-2Z3R-003M	SC to ST 62.5/125 duplex zip cord OFNR 3 m
FPZM6-SCST-2Z3R-005M	SC to ST 62.5/125 duplex zip cord OFNR 5 m
FPZM6-SCST-2Z3R-010M	SC to ST 62.5/125 duplex zip cord OFNR 10 m
FPZM6-SCST-2Z3R-xxxM	Specify length, xxx m



Note: LC patch cords come with duplex clips installed, SC with duplex clip supplied

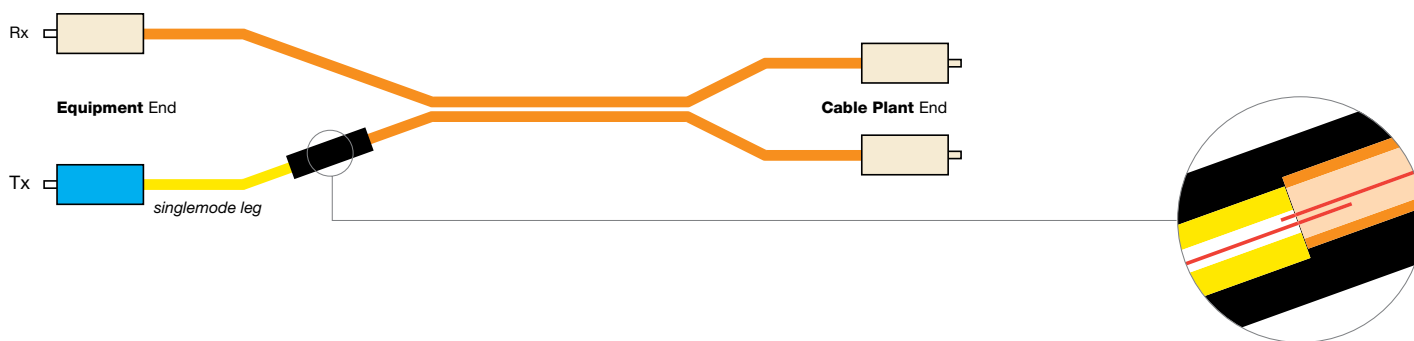
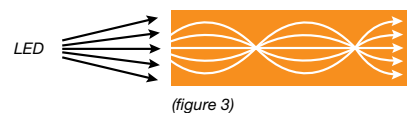
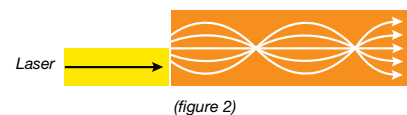
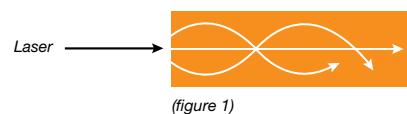
Mode Conditioning Patch Cords

Mode conditioning fiber patch cords are required to correct the Differential Mode Delay (DMD) effect in Gigabit Ethernet applications when 1000base-LX transceivers are connected to existing multimode cable plants.

When a 1000base-LX transceiver's **laser** injects a signal into a **multimode fiber** (figure 1), the signal may replicate as multiple independent signals that take different paths through the fiber and arrive at the receiver at different times—corrupting the data or confusing the receiver.

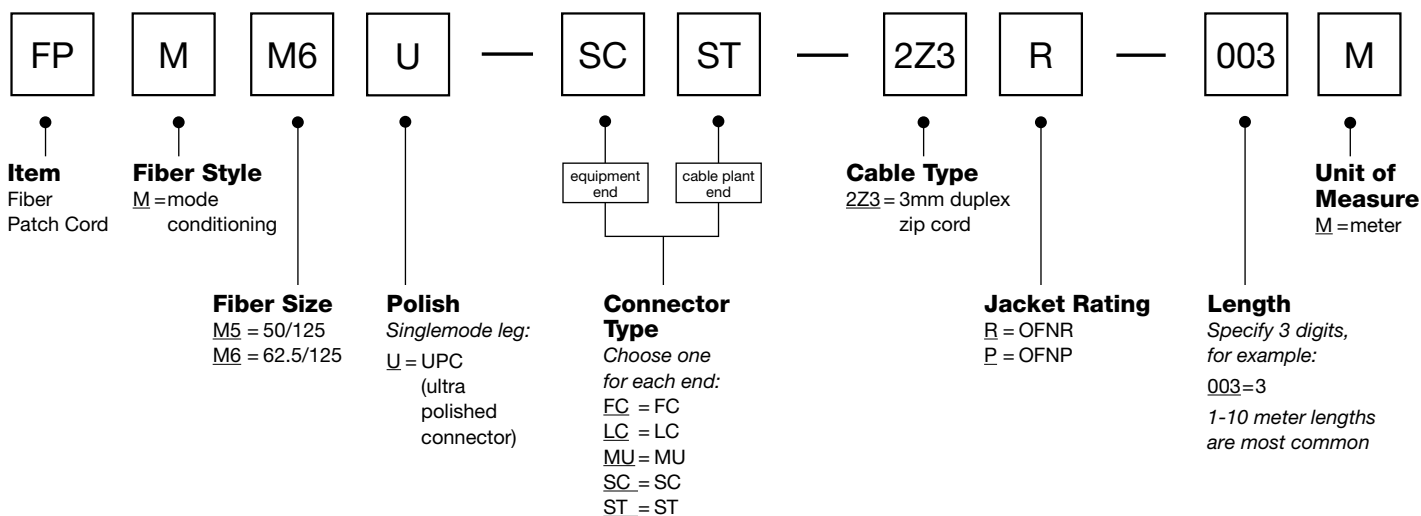
A mode conditioning patch cord uses a **singlemode fiber fused, off-center at a precise angle, to a multimode fiber** (figure 2). This precision core alignment spreads light to fill the multimode fiber similar to an **LED source** (figure 3). This effect corrects the DMD effect.

The singlemode leg must be connected directly to the transmit port of the 1000base-LX transceiver.



Part Number Scheme—mode conditioning patch cords

Use this part number scheme to select the mode conditioning patch cord you need. Contact your Customer Experience Team for assistance with these or other options.



Note: See page 2 for standard fiber optic patch cord part number scheme

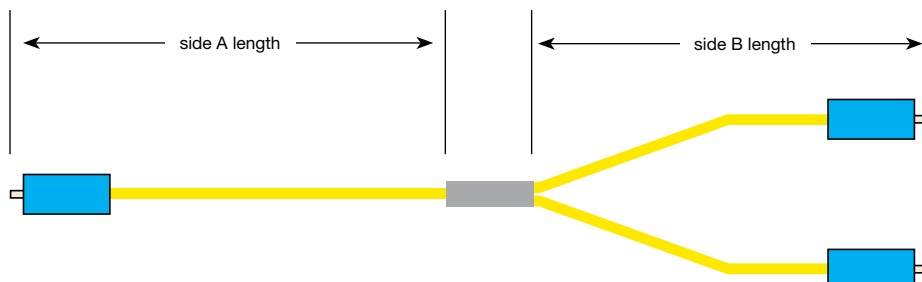
Fiber Optic Splitters

Fiber optic splitters are typically used to split off a portion of the signal for testing or monitoring purposes. The most common splitter cable used is the one- to two-leg version illustrated on this page.

Custom Cable offers a wide range of splitter cables and options—from “Y” splitter cables to patch panel modules or WDM. Contact your Customer Experience Team for the solution you need.

Splitter Types Available:

- Two-leg Y splitter cables
- Multiple-legged splitter cables
- Patch panel splitter modules
- Single or dual window
- Wave division multiplexing (WDM)



Fiber Optic Splitters—ordering worksheet

Contact your Customer Experience Team to order your customized solution, using the choices below—or ask about other options.

General	Fiber Size	Fiber Type	Jacket Rating	Wavelength
	Singlemode: <input checked="" type="checkbox"/> 9/125 SM	<input type="checkbox"/> 250μ <input type="checkbox"/> 900μ <input type="checkbox"/> 2mm	<input type="checkbox"/> OFNR <input type="checkbox"/> OFNP	<input type="checkbox"/> 1310 <input type="checkbox"/> 1550 <input type="checkbox"/> dual 1310/1550

Side A	Connector Type	Connector Polish	Length	Unit of Measure
	<input type="checkbox"/> FC <input type="checkbox"/> LC <input type="checkbox"/> MU <input type="checkbox"/> SC <input type="checkbox"/> ST	<input type="checkbox"/> UPC <input type="checkbox"/> APC	<input type="checkbox"/> specify: _____ <i>Typical length is less than 36 inches—special order longer lengths are available</i>	<input type="checkbox"/> inches (typical) <input type="checkbox"/> meters <input type="checkbox"/> feet

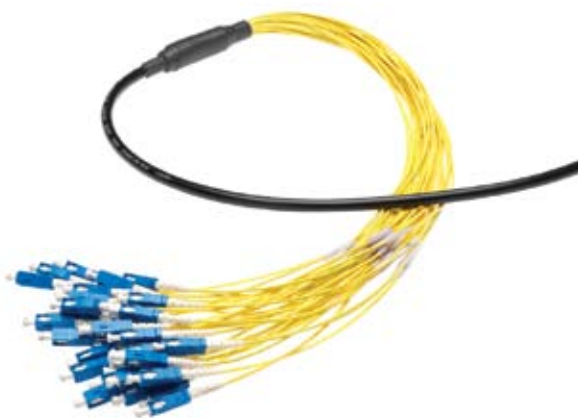
Side B	Connector Type	Connector Polish	Length	Unit of Measure	Number of splits (legs)
	<input type="checkbox"/> FC <input type="checkbox"/> LC <input type="checkbox"/> MU <input type="checkbox"/> SC <input type="checkbox"/> ST	<input type="checkbox"/> UPC <input type="checkbox"/> APC	<input type="checkbox"/> specify: _____ <i>Typical length is less than 36 inches—special order longer lengths are available</i>	<input type="checkbox"/> inches (typical) <input type="checkbox"/> meters <input type="checkbox"/> feet	<input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> Other, specify: _____

Percentage of Signal Split per Leg
<input type="checkbox"/> leg 1: _____
<input type="checkbox"/> leg 2: _____
<input type="checkbox"/> leg 3: _____
<input type="checkbox"/> leg 4: _____
<input type="checkbox"/> Other, specify: _____

Fiber Trunk Cables

Fiber trunk cables come in various fiber counts capable of carrying massive amounts of data. The quality and reliability of these cables are crucial to the performance and life of the networks built on them. The many trunk cable options we offer are designed for ease and speed of installation—and for reliability over a long lifespan.

Use the ordering worksheet below to make your indoor trunk cable selections. Many of these options are also available for outdoor applications—along with additional options for the fiber cable itself. For example, you could choose from aerial, figure 8, UV, direct burial, and armor shielded.



Fiber Trunk Cables—ordering worksheet

Contact your Customer Experience Team to order your customized solution, using the choices below—or ask about other options.

General	Fiber Size	Fiber Count	Jacket Rating	Length
	Singlemode: <input type="checkbox"/> 9/125 SM	<input type="checkbox"/> 4 <input type="checkbox"/> 36 <input type="checkbox"/> 6 <input type="checkbox"/> 48 <input type="checkbox"/> 8 <input type="checkbox"/> 72 <input type="checkbox"/> 12 <input type="checkbox"/> 96 <input type="checkbox"/> 24 <input type="checkbox"/> 144 <input type="checkbox"/> specify: _____	<input type="checkbox"/> OFNR <input type="checkbox"/> OFNP	<input type="checkbox"/> specify: _____ Unit of measure: <input type="checkbox"/> meters (default) <input type="checkbox"/> feet
	Multimode: <input type="checkbox"/> 50/125 10Gb MM <input type="checkbox"/> 50/125 <input type="checkbox"/> 62.5/125 MM			

Side A	Number of Connectors Terminated	Connector Type	Connector Polish	Fan-out Length
	<input type="checkbox"/> 4 <input type="checkbox"/> 36 <input type="checkbox"/> 6 <input type="checkbox"/> 48 <input type="checkbox"/> 8 <input type="checkbox"/> 72 <input type="checkbox"/> 12 <input type="checkbox"/> 96 <input type="checkbox"/> 24 <input type="checkbox"/> 144 <input type="checkbox"/> specify: _____	<input type="checkbox"/> FC <input type="checkbox"/> LC <input type="checkbox"/> MU <input type="checkbox"/> SC <input type="checkbox"/> ST	<input type="checkbox"/> UPC <input type="checkbox"/> APC	<input type="checkbox"/> 24 inches <input type="checkbox"/> 36 inches <input type="checkbox"/> Other: _____
	Fan-out Type <input type="checkbox"/> 250μ <input type="checkbox"/> 900μ <input type="checkbox"/> 2mm furcation tubing	Pulling Eye <input type="checkbox"/> yes	End Location <input type="checkbox"/> inside of spool/coil <input type="checkbox"/> outside of spool/coil	

Side B	Number of Connectors Terminated	Connector Type	Connector Polish	Fan-out Length
	<input type="checkbox"/> 4 <input type="checkbox"/> 36 <input type="checkbox"/> 6 <input type="checkbox"/> 48 <input type="checkbox"/> 8 <input type="checkbox"/> 72 <input type="checkbox"/> 12 <input type="checkbox"/> 96 <input type="checkbox"/> 24 <input type="checkbox"/> 144 <input type="checkbox"/> specify: _____	<input type="checkbox"/> FC <input type="checkbox"/> LC <input type="checkbox"/> MU <input type="checkbox"/> SC <input type="checkbox"/> ST <input type="checkbox"/> stub	<input type="checkbox"/> UPC <input type="checkbox"/> APC	<input type="checkbox"/> 24 inches <input type="checkbox"/> 36 inches <input type="checkbox"/> Other: _____
	Fan-out Type <input type="checkbox"/> 250μ <input type="checkbox"/> 900μ <input type="checkbox"/> 2mm furcation tubing	Pulling Eye <input type="checkbox"/> yes		

Fiber Ribbon Cables

Fiber ribbon cables offer a clean, simple plug and play installation. Ribbon patch cords provide multiple fiber connections with one cable. Pre-loaded patch panel, ribbon fan-out cables, MPO modules, and ribbon patch cords work together to create a network that can be installed in a short period of time. Each ribbon component is tested for performance before it ships to insure reliability.

Use the ordering worksheet below to make your MPO patch cord or fan-out cable selections. MPO modules and pre-loaded patch panels are also available. See module examples on page 24.



Fiber Ribbon Cables and Fan-out Patch Cords—ordering worksheet

Contact your Customer Experience Team to order your customized solution, using the choices below—or ask about other options.

General

Fiber Size

Singlemode:
☐ 9/125 SM

Multimode:

☐ 50/125 10Gb MM
☐ 50/125
☐ 62.5/125 MM

Fiber Count

☐ 4
☐ 8
☐ 12

Jacket Rating

☐ OFNR
☐ OFNP

Length

☐ specify: _____

Unit of measure:

☐ meters (default)
☐ feet

Side A



Ribbon Connector: (fiber count and connectors—12 is standard but 4 and 8 are also available):

Connector Type

☒ MTP/MPO

Guide Pins

☐ yes
☐ no

End Location

☐ inside of spool/coil
☐ outside of spool/coil

Pulling Eye

☐ yes

Side B

Option 1—Ribbon Patch Cord (fiber count and connectors—12 is standard but 4 and 8 are also available):



Connector Type

☐ MTP/MPO

Guide Pins

☐ yes
☐ no

Configuration

☐ crossover (default)
☐ straight

Pulling Eye

☐ yes

Option 2—Ribbon Fan-out Cable (fiber count chosen will specify the number of connectors terminated):



Connector Type

☐ FC
☐ LC
☐ MU
☐ SC
☐ ST

Connector Polish

☐ UPC
☐ APC

Fan-out Length

☐ 24 inches
☐ 36 inches
☐ Other: _____

Fan-out Type

☐ 250µ
☐ 900µ
☐ 2mm
furcation tubing

Pulling Eye

☐ yes

Attenuators

When an optical light source is too strong, the signal may overload the receiver, preventing it from distinguishing light pulses. An attenuator works by restricting light to an intensity that the receiver can handle. Adaptor style in-line attenuators

are most common. Adaptor attenuators are easily connected to the end of a cable and then plugged into the receiver. Variable and in-line patch cord attenuators are also available. Contact your Customer Experience Team to discuss these and other options.

Options:

- Singlemode or multimode
- Fit for UPC/PC or APC
- Multiple connector types
- Fixed value or variable
- Adaptor or patch cord styles

Adaptor style—singlemode

FAS9U-FC-MF-05-ATT	FC UPC polish 9/125 5db attenuator
FAS9U-FC-MF-10-ATT	FC UPC polish 9/125 10db attenuator
FAS9U-FC-MF-15-ATT	FC UPC polish 9/125 15db attenuator
FAS9U-FC-MF-20-ATT	FC UPC polish 9/125 20db attenuator
FAS9U-FC-MF-25-ATT	FC UPC polish 9/125 25db attenuator



FAS9U-LC-MF-05-ATT	LC UPC polish 9/125 5db attenuator
FAS9U-LC-MF-10-ATT	LC UPC polish 9/125 10db attenuator
FAS9U-LC-MF-15-ATT	LC UPC polish 9/125 15db attenuator
FAS9U-LC-MF-20-ATT	LC UPC polish 9/125 20db attenuator
FAS9U-LC-MF-25-ATT	LC UPC polish 9/125 25db attenuator



FAS9U-SC-MF-05-ATT	SC UPC polish 9/125 5db attenuator
FAS9U-SC-MF-10-ATT	SC UPC polish 9/125 10db attenuator
FAS9U-SC-MF-15-ATT	SC UPC polish 9/125 15db attenuator
FAS9U-SC-MF-20-ATT	SC UPC polish 9/125 20db attenuator
FAS9U-SC-MF-25-ATT	SC UPC polish 9/125 25db attenuator



FAS9U-ST-MF-05-ATT	ST UPC polish 9/125 5db attenuator
FAS9U-ST-MF-10-ATT	ST UPC polish 9/125 10db attenuator
FAS9U-ST-MF-15-ATT	ST UPC polish 9/125 15db attenuator
FAS9U-ST-MF-20-ATT	ST UPC polish 9/125 20db attenuator
FAS9U-ST-MF-25-ATT	ST UPC polish 9/125 25db attenuator



Loop Backs

Loop backs are commonly used for fiber optic test applications. Compared to patch cords, loop backs are conveniently small so they fit into technicians' toolkits.

The most popular loop backs are singlemode, but multimode versions are also available. Contact your Customer Experience Team to discuss these and other options.

Options:

- Singlemode or multimode
- Fit for UPC/PC or APC
- Multiple connector types

UPC

FAS9U-FC-LB	FC UPC polish 9/125 loop back
FAM5-FC-LB	FC UPC polish 50/125 loop back
FAM6-FC-LB	FC UPC polish 62.5/125 loop back



FAS9U-LC-LB	LC UPC polish 9/125 loop back
FAM5-LC-LB	LC UPC polish 50/125 loop back
FAM6-LC-LB	LC UPC polish 62.5/125 loop back



FAS9U-SC-LB	SC UPC polish 9/125 loop back
FAM5-SC-LB	SC UPC polish 50/125 loop back
FAM6-SC-LB	SC UPC polish 62.5/125 loop back



Couplers and Adaptors

Fiber couplers and adaptors are both frequently referred to as “fiber adaptors.” Coupler styles are used to link connectors of the same type, for example, in patch panels, wall boxes and in line to connect two cables. Adaptor styles are used to link different types of connectors, for example, adapting an existing cable to a new piece of equipment or adapting a new cable to an existing connection.

Custom Cable supplies a wide range of fiber couplers and adaptors. Standard singlemode versions are most common because they can be used to connect multimode, singlemode, PC and UPC polish. The singlemode APC version is required for APC polished cables. Multimode versions are also available. Contact your Customer Experience Team to discuss these and other options.

Options:

- Singlemode or multimode
- Simplex, duplex or quad
- Fit for UPC/PC or APC
- Multiple connector types

Singlemode—UPC/PC

FAS9U-E2E2-1PM-FF-CUP
E2000 simplex coupler—
female/female panel mount



FAS9U-FCFC-1PM-FF-CUP
FC simplex coupler—
female/female panel mount



FAS9U-FCSC-1CC-FF-ADP
FC to SC simplex adaptor—
female/female cable coupler



FAS9U-FCST-1CC-FF-ADP
FC to ST simplex adaptor—
female/female cable coupler



FAS9U-LCLC-2PM-FF-CUP
LC duplex coupler—
female/female panel mount



FAS9U-LCLC-4PM-FF-CUP
LC duplex coupler—
female/female panel mount



FAS9U-LCSC-1CC-FF-ADP
LC to SC simplex adaptor—
female/female cable coupler



FAS9F-MPMP-12PM-FF-CUP
MPO 12-position coupler
(w/o guide pins)—
female/female panel mount



FAS9F-MJMJ-2PM-FF-CUP
MTRJ coupler (w/o guide pins)—
female/female panel mount



FAS9U-SCSC-1PM-FF-CUP
SC simplex coupler—
female/female panel mount



FAS9U-SCSC-2PM-FF-CUP
SC duplex coupler—
female/female panel mount



FAS9U-SCST-1CC-FF-ADP
SC to ST simplex adaptor—
female/female cable coupler



FAS9U-SCST-2CC-FF-ADP
SC to ST duplex adaptor—
female/female cable coupler



FAS9U-STST-1PM-FF-CUP
ST simplex coupler—
female/female panel mount



FAS9U-STST-2CC-FF-CUP
ST duplex coupler—
female/female cable coupler



Singlemode—APC

FAS9A-E2E2-1PM-FF-CUP
E2000 simplex coupler—
female/female panel mount



FAS9A-FCFC-1PM-FF-CUP
FC simplex coupler—
female/female panel mount



FAS9A-LCLC-2PM-FF-CUP
LC duplex coupler—
female/female panel mount



FAS9A-LCLC-4PM-FF-CUP
LC quad coupler—
female/female panel mount



FAS9A-SCSC-1PM-FF-CUP
SC simplex coupler—
female/female panel mount



FAS9A-SCSC-2PM-FF-CUP
SC duplex coupler—
female/female panel mount



Fiber Wall Boxes—lockable

Fiber wall boxes are perfect for small installation areas where equipment racks are either not needed or cannot be accommodated with available space. The lockable fiber wall box can be left unlocked for easy access—or locked so that a key is required for entry.

The dual door versions listed on this page provide added security by requiring separate keys to enter the cable plant side and the patching side. Part numbers for unloaded wall boxes are listed below. Pre-loaded and pre-terminated options are also available. Contact your Customer Experience Team to discuss these and other options.

Features:

- Multiple connector types
- Unloaded or pre-loaded
- Security and protection

Also available:

- Single door wall boxes
- Separate lockable doors for cable entry and exit for added security
- Duplex LC/simplex SC wall boxes

Lockable—LC and SC

FEWL-RD-DD-36-GY-1

The RD series dual-door lockable fiber wall box accepts quad LC and duplex SC adaptors. This **36-port** box provides up to 144 LC or 72 SC connections.



Measurements:

- 13.9" wide
- 3.5" deep
- 14.3" high

Color:

- gray

Includes:

- box
- two different locks—each has two keys
- adaptors **not** included

Options:

- pre-loaded versions available

FAS9U-LCLC-4PM-FF-CUP

LC duplex coupler, PC or UPC—female/female panel mount



FAS9A-LCLC-4PM-FF-CUP

LC quad coupler, APC—female/female panel mount



FAS9U-SCSC-2PM-FF-CUP

SC duplex coupler, PC or UPC—female/female panel mount



FAS9A-SCSC-2PM-FF-CUP

SC duplex coupler, APC—female/female panel mount



FA-SC-2PM-BLANK

Blank insert (duplex SC size)



Lockable—FC and ST

FEWL-CS-DD-36-GY-1

The CS series dual-door lockable fiber wall box accepts simplex FC and ST adaptors. This **48-port** box provides up to 48 FC or SC connections.



Measurements:

- 13.9" wide
- 3.5" deep
- 14.3" high

Color:

- gray

Includes:

- box
- two different locks—each has two keys
- adaptors **not** included

Options:

- pre-loaded versions available

FAS9U-FCFC-1PM-FF-CUP

FC simplex coupler, PC or UPC—female/female panel mount



FAS9A-FCFC-1PM-FF-CUP

FC simplex coupler, APC—female/female panel mount



FAS9U-STST-1PM-FF-CUP

ST simplex coupler, PC or UPC—female/female panel mount



FA-ST-1PM-BLANK

Blank insert (FC/ST size)



Fiber Wall Boxes—tamper proof

Tamper-proof wall boxes provide lower cost connectivity protection than the lockable version. They are used in private or semi-public areas where lockable security is not required, such as schools and small businesses.

Tamper-proof wall boxes are opened and closed with a screwdriver and a single screw. Part numbers for unloaded wall boxes are listed below.

Pre-loaded and pre-terminated options are also available. Contact your Customer Experience Team to discuss these and other options.

Features:

- Multiple connector types
- Unloaded or pre-loaded
- Security and added protection

Tamper proof—LC and SC

FEWT-RD-08-WH-1

The RD series tamper proof fiber wall box accepts quad LC and duplex SC adaptors. This **8-port** version provides up to 32 LC or 16 SC connections.

2-port version is also available, providing up to 8 LC or 4 SC connections.



Measurements:

- 6.8" wide
- 1.57" deep
- 6.3" high

Color:

- white

Includes:

- box
- adaptors **not** included

Options:

- pre-loaded versions available

FAS9U-LCLC-4PM-FF-CUP

LC duplex coupler, PC or UPC—female/female panel mount



FAS9A-LCLC-4PM-FF-CUP

LC quad coupler, APC—female/female panel mount



FAS9U-SCSC-2PM-FF-CUP

SC duplex coupler, PC or UPC—female/female panel mount



FAS9A-SCSC-2PM-FF-CUP

SC duplex coupler, APC—female/female panel mount



FA-SC-2PM-BLANK

Blank insert (duplex SC size)



Tamper proof—FC and ST

FEWT-CS-08-WH-1

The CS series tamper proof fiber wall box accepts simplex FC and ST adaptors. This **8-port** version provides up to 8 FC or ST connections.

16-port version is also available, providing up to 16 FC or ST connections.



Measurements:

- 3.9" wide
- 1.57" deep
- 6.3" high

Color:

- white

Includes:

- box
- adaptors **not** included

Options:

- pre-loaded versions available

FAS9U-FCFC-1PM-FF-CUP

FC simplex coupler, PC or UPC—female/female panel mount



FAS9A-FCFC-1PM-FF-CUP

FC simplex coupler, APC—female/female panel mount



FAS9U-STST-1PM-FF-CUP

ST simplex coupler, PC or UPC—female/female panel mount



FA-ST-1PM-BLANK

Blank insert (FC/ST size)



Fiber Patch Panels—adaptor style

Sliding tray fiber patch panels simplify the installation process and provide a reliable, easy-to-change configuration. Adjustable mounting gear allows the panel to be mounted flush, extended or even recessed to meet your needs.

Listed below and on page 23 are part numbers for unloaded patch panels. Pre-loaded panels and pre-terminated options are also available. Contact your Customer Experience Team to discuss these and other options.

- Features:**
- Multiple connector types
 - Unloaded or pre-loaded
 - Adjustable depth mounts
 - 19" rack mount
 - Black or gray

Sliding Tray—simplex/duplex

FEPS-RS-1U19-24-BK-1

The RS series sliding tray fiber patch panel accepts simplex E2000, duplex LC, single MTRJ, and simplex SC adaptors. This **24-port** panel provides up to 24 E2000, 48 LC, 24 MTRJ or 24 SC connections.



- Measurements:*
- 1U (1.75") high
 - 8" deep
 - mounts to 19" equipment rack footprint
- Colors:*
- black is standard
 - gray is available
- Includes:*
- panel
 - adjustable mounting ears
 - Internal Cable Management Kit
 - adaptors **not** included
- Options:*
- pre-loaded versions available
- See page 26 for panel accessories.*

FAS9U-E2E2-1PM-FF-CUP
E2000 simplex coupler, PC or UPC—
female/female panel mount



FAS9A-E2E2-1PM-FF-CUP
E2000 simplex coupler, APC—
female/female panel mount



FAS9U-LCLC-2PM-FF-CUP
LC duplex coupler, PC or UPC—
female/female panel mount



FAS9A-LCLC-2PM-FF-CUP
LC duplex coupler, APC—
female/female panel mount



FAS9F-MJMJ-2PM-FF-CUP
MTRJ (w/o guide pins) coupler—
female/female panel mount



FAS9U-SCSC-1PM-FF-CUP
SC simplex coupler, PC or UPC—
female/female panel mount



FAS9A-SCSC-1PM-FF-CUP
SC simplex coupler, APC—
female/female panel mount



FA-SC-1PM-BLANK
Blank insert (simplex SC size)



Sliding Tray—duplex/quad

FEPS-RD-1U19-12-BK-1

The RD series sliding tray fiber patch panel accepts quad LC and duplex SC adaptors. This **12-port** version provides up to 48 LC or 24 SC connections—or a combination of these connector types.

8-port versions (providing up to 32 LC or 16 SC connections) and **24-port** versions (providing up to 96 LC or 48 SC connections) are also available.



Measurements:

- 1U (1.75") high
- 8" deep
- mounts to 19" equipment rack footprint

Colors:

- black is standard
- gray is available

Includes:

- panel
- adjustable mounting ears
- Internal Cable Management Kit
- adaptors **not** included

Options:

- pre-loaded versions available

See page 26 for panel accessories.

FAS9U-LCLC-4PM-FF-CUP

LC duplex coupler, PC or UPC—female/female panel mount



FAS9A-LCLC-4PM-FF-CUP

LC quad coupler, APC—female/female panel mount



FAS9U-SCSC-2PM-FF-CUP

SC duplex coupler, PC or UPC—female/female panel mount



FAS9A-SCSC-2PM-FF-CUP

SC duplex coupler, APC—female/female panel mount



FA-SC-2PM-BLANK

Blank insert (duplex SC size)



Sliding Tray—circular

FEPS-CS-1U19-24-BK-1

The CS series sliding tray fiber patch panel accepts simplex FC or ST adaptors. This **24-port** version provides up to 24 FC or ST connections—or a combination of these connector types.

16-port versions are also available, providing up to 16 FC or ST connections.



Measurements:

- 1U (1.75") high
- 8" deep
- mounts to 19" equipment rack footprint

Colors:

- black is standard
- gray is available

Includes:

- panel
- adjustable mounting ears
- Internal Cable Management Kit
- adaptors **not** included

Options:

- pre-loaded versions available

See page 26 for panel accessories.

FAS9U-FCFC-1PM-FF-CUP

FC simplex coupler, PC or UPC—female/female panel mount



FAS9A-FCFC-1PM-FF-CUP

FC simplex coupler, APC—female/female panel mount



FAS9U-STST-1PM-FF-CUP

ST simplex coupler, PC or UPC—female/female panel mount



FA-SC-1PM-BLANK

Blank insert (FC/ST size)



Fiber Patch Panels—module style

With all of the benefits of the sliding tray patch panels on pages 22 and 23, the module sliding tray patch panel's pre-loaded plate shortens setup time, and its modules offer a wide range of fiber solutions not available in an adaptor-style panel.

Listed below is the panel number for an unloaded patch panel. Pre-loaded and pre-terminated options are also available. Contact your Customer Experience Team to discuss these and other options.

Features:

- Multiple connector types
- Pre-loaded plates
- Custom module options
- Adjustable depth mounts
- 19" rack mount

Module Sliding Tray

FEPS-LM-1U19-03-BK-1

This LC series 3 module sliding tray fiber patch panel accepts up to three pre-loaded plates or modules. It provides up to 24 E2000, 24 FC, 72 LC, 36 SC, or 24 ST connections.



Measurements:

- 1U (1.75") high
- 8" deep
- mounts to 19" and 23" equipment rack footprint

Color:

- black

Includes:

- panel
- adjustable mounting ears
- Internal Cable Management Kit
- adaptors **not** included

See page 25 for pre-loaded plates.

See page 26 for panel accessories.

Custom Modules

Custom fiber modules can be pre-loaded with virtually any fiber connector combination and configuration. They make available a wide range of solutions: MPO breakout, splitters, WDM, mode conditioning, and attenuator cassettes are just a few.

Fiber modules can provide any connection solution as a fiber cable or panel—making it easy to connect, quick to install, and clean to manage.

Features:

- Virtually any fiber solution
- Multiple connector types
- Pre-loaded
- Custom configurations
- Easy to install
- Clean to manage

We can create **any fiber cassette solution**. The examples shown here represent only a few available options. Contact your Customer Experience Team to place an order.



Fiber Patch Panels—loaded plates

Pre-loaded plates save you labor costs by reducing the time required to load or change connectors in a fiber patch panel. Simply choose from the plates listed below based on the connector style and quantity you need, slide the plate into the module panel, and push in the two locking tabs to load 8 to 24 fiber connections into a single slot.

All plates represented below fit the module sliding tray panel FEPS-LM-1U19-03-BK-1 shown on page 24. Contact your Customer Experience Team to discuss these and other available plates.

Options:

- Singlemode or multimode
- Fit for UPC/PC or APC
- Multiple connector type

Features:

- Multiple connector count
- Pre-loaded connectors
- Fast and easy to load

Singlemode/non-APC

FELS9U-E2E2-08-FF-BK-1

E2000 singlemode for UPC or PC polish—
8 female/female connections



FELS9U-FCFC-08-FF-BK-1

FC singlemode for UPC or PC polish—
8 female/female connections



FELS9U-LCLC-16-FF-BK-1

LC singlemode for UPC or PC polish—
16 female/female connections



FELS9U-LCLC-24-FF-BK-1

LC singlemode for UPC or PC polish—
24 female/female connections



FELS9U-SCSC-08-FF-BK-1

SC singlemode for UPC or PC polish—
8 female/female connections



FELS9U-SCSC-12-FF-BK-1

SC singlemode for UPC or PC polish—
12 female/female connections



FELS9U-STST-08-FF-BK-1

ST singlemode for UPC or PC polish—
8 female/female connections



Singlemode/APC

FELS9A-E2E2-08-FF-BK-1

E2000 singlemode for APC polish—
8 female/female connections



FELS9A-FCFC-08-FF-BK-1

FC singlemode for APC polish—
8 female/female connections



FELS9A-LCLC-16-FF-BK-1

LC singlemode for APC polish—
16 female/female connections



FELS9A-LCLC-24-FF-BK-1

LC singlemode for APC polish—
24 female/female connections



FELS9A-SCSC-08-FF-BK-1

SC singlemode for APC polish—
8 female/female connections



FELS9A-SCSC-12-FF-BK-1

SC singlemode for APC polish—
12 female/female connections



Other Plates

FEL-BLANK-BK-1

Blank plate



Fiber Patch Panel Accessories

The right accessories can make installation easier, simplify changes and improve the all-around reliability of your network.

Our accessories are designed to fit the products we supply, so that there are no compatibility issues. Please contact your Customer Experience Team for assistance or to order any accessories not listed.

Cable Management

FEA-CBLMGMKIT-1

Cable management kit—
1 splice bridge/1 cable gland/
8 cable management clips /1 fiber label



FEA-GLAND-1

Cable strain relief gland
(1 piece each)



FEA-8-CBLCLIP-1

Cable management clips
(8-piece pack)



FEA-HKLP-33-BK-015F

Hook and loop
(.33 inch width black/15 foot roll)



Fiber Splicing

FEA-SPLTRAY-BE-1

Universal splice tray



FEA-SPLTRAYLID-BE-1

Splice tray lid—
fits splice tray FEA-SPLTRAY-BE-1



FEA-SPLBASUNIT-BK-1

2 inch x 6 inch stackable
splice cassette—
base unit with clear cover



FEA-SPLSTKUNIT-BK-1

2 inch x 6 inch stackable
splice cassette—
fits on top of FEA-SPLBASUNIT-BK-1



FEA-SPLHLD-H-BE-1

Heat shrink style splice holder



FEA-SPLHLD-C-BE-1

Crimp style splice holder



FEA-SPLBRI-BK-1

Splice bridge



FEA-SPLBRILID-BK-1

Splice bridge lid—
fits splice bridge FEA-SPLBRI-BK-1



FEA-SPLPRO-C-1

Splice protector—
metal crimp (1 piece each)



FEA-SPLPRO-45-H-1

Splice protector—
45mm heat shrink (1 piece each)



FEA-SPLPRO-60-H-1

Splice protector—
60mm heat shrink (1 piece each)



Related Products

Each client and installation has unique needs—from custom cabling and patch panels to organizing for expansion or small areas.

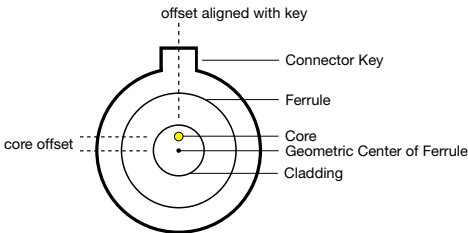
Custom Cable provides custom cable assembly and patch panel solutions along with the hardware to organize your equipment area. Contact your Customer Experience Team for assistance with a solution to meet your needs.

Connectivity—custom solutions

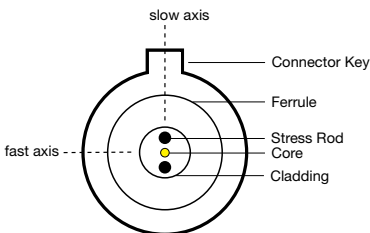
WDM
Wave division multiplexing—cables and modules



Tuned fiber—
precision terminations that minimize mating signal loss



Polarization-maintaining fiber—
precision terminations that apply controlled stress to achieve desired polarity



In-line patch cord attenuators



Pre-loaded patch panels—
splice type



Pre-loaded patch panels—
ribbon type



Organize—hardware and cable management

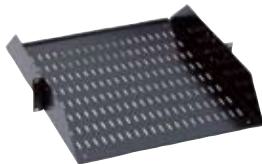
Free-standing racks



Wall mount brackets



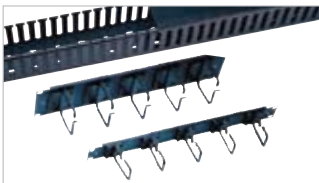
Rack shelves



Ladder racking



Cable management



Cable fasteners



Reference

Bandwidth

In networking and fiber optics, bandwidth refers to a data rate or throughput. For example, the higher the bandwidth, the more data that can be transferred per second.

Bend Radius

A measure for assessing the bend of a cable. An easy way to understand bend radius is to think of a cable bent around a circle or pipe, with the cable bending around the circle 180 degrees so the cable heads back in the direction it came. The radius of that circle is the bend radius for the cable.

Breakout Style Fiber Cable

Multi-count fiber made up of primarily multiple jacket simplex cables. Provides more protection and strength than tight-buffered or loose-tube style fiber cable, but at a higher cost. Typically used indoors for riser, plenum or conduit applications.

Cable Plant

Wiring installed under raised floors, within walls, ceiling space or risers between floors. Also called horizontal cable plant.

Critical Angle

The maximum angle at which light can strike the end of a fiber and be coupled into the fiber's core.

DMD

Differential Mode Delay may be created when a singlemode laser injects light directly into a multimode fiber and excites a few modes. The light travels through these different modes as separate signals and arrives at the receiver at different times. The light is no longer one distinct pulse and the data is corrupted. DMD is corrected with a mode conditioning fiber patch cord.

Fan-out or Breakout

The separation at the end of a multi-count cable. The outer jacket is removed, which allows the individual legs to be routed separately. The distance from the mating tip of the connectors to the jacket is the fan-out length. This length is usually the same for each leg, but legs can be specified at different lengths. Most commonly, the term *fan-out* is used when referring to fiber optic cable, and the term *breakout* is used when referring to copper cable.

Fiber Adaptor or Coupler

The term *adaptor* is often used to describe either a fiber adaptor or coupler. Technically, however, a fiber coupler connects two of the same type of connectors, and an adaptor connects two different types of connectors.

Fiber Optic Cable Layers

The *core* is the center of a glass fiber where the light travels. *Cladding* is the layer of glass surrounding the core. The *buffer (or coating)* is one or more layers that surround the cladding. The *strength member* is a layer of aramid yarn surrounding the buffer. The *jacket* is the layer visible on the exterior of the fiber optic cable.

Figure-8 Cable

An outdoor aerial cable with a messenger pre-bonded to the cable. The end of this cable resembles the number 8.

FOCIS

TIA/EIA abbreviation for Fiber Optic Connector Intermateability Standard.

FTTH

Fiber To The Home.

Furcation Tubing

Tubing installed over fiber strands in the fan-out area of a fiber cable to provide additional protection.

Gb

Gigabit.

Loose-tube Style Fiber Cable

Multi-count fiber having multiple fibers within a tube. Each fiber has a 250µ coating over its cladding. Typically used for outdoor applications.

Minimum Bend Radius

The smallest bend radius allowed for a cable before the bend will create loss of signal or damage and shorten the life of the cable.

MM

Multimode.

Mode

A pathway that light travels within the core of an optical fiber.

MPO or MTP®

MPO stands for Multifiber Push On and is often used as a generic term referring to a family of connectors. FOCIS-compliant MPO and MTP connectors will interconnect.

Multimode vs. Singlemode

Light propagates through the core in multiple paths of multimode fiber and in a single path of singlemode fiber. Benefits of each: *singlemode* fiber can carry more data and operate at longer distances; *multimode* equipment and terminations often provide solutions at a lower overall cost for a local network.

Numerical Aperture

The range of angles at which light can strike the end of a fiber and be coupled into the fiber's core.

OFNP

Optical Fiber Nonconductive Plenum is the designation for Plenum-rated fiber. This fiber is used in Plenum-rated areas such as air ducts, return air ceiling spaces and raised floors with circulated environmental air. Check applicable fire code regulations.

OFNR

Optical Fiber Nonconductive Riser is the designation for riser-rated fiber. This fiber is typically used in equipment rooms, within walls, riser areas between floors and in raised floors or ceiling spaces without circulated environmental air. Check applicable fire code regulations.

OM1, OM2, OM3 and OS1

The introduction of newer high speed applications led to a need for new sets of standards and performance criteria for optical fiber. These newer standards are designated as OM1 for 62.5/125µ, OM2 for 50/125µ, OM3 for 50/125µ 10Gb, and OS1 for 9/125µ. OM refers to optical multimode and OS refers to optical singlemode.

Overfilled Launch

The way LED transmitters couple light into a fiber optic cable. Light shines in multiple directions, filling all of the cable modes.

Polarization-maintaining Fiber

All optical fiber is subject to a certain amount of mechanical stress (from bending, for example), which compromises the fiber's symmetry and changes the polarization of light propagating through the fiber. Polarization-maintaining fiber has two rods in the cladding that are aligned with an axis of the terminated connector. This arrangement applies controlled stress to the fiber core to produce the desired polarization state. These fibers are often used in precision sensors and between source lasers and modulators.

RoHS

Restrictions of Hazardous Substances is a directive aimed at protecting the environment by limiting the amounts of lead, mercury, cadmium and other hazardous materials a product may contain. Custom Cable is dedicated to protecting the environment through programs such as RoHS.

SM

Singlemode.

Tight-buffered Distribution Fiber Cable

Multi-count fiber where each fiber has a 900µ coating over its cladding. Provides more protection and strength than tight-buffered fiber cable. Typically used indoors for riser, plenum or conduit applications. Also used for underwater applications.

Total Internal Reflection

When light is confined to the core of a fiber. The refractive index is higher for the core than the cladding of a fiber, so light strikes the cladding at an angle, bounces back into the core, and becomes trapped traveling through the core.

Trademarked Listings (in this catalog)

Custom Cable's logo is a registered trademark of Custom Cable Industries. MTP is a trademark or registered trademark of US Conec Ltd. SMF-28e is a trademark or registered trademark of Corning, Inc.

Tuned Fiber

The core of a fiber can be slightly offset from the center of the connector ferrule. When tuning a fiber termination, the ferrule of the connector is rotated to align the core offset in the direction of the connector key. When a tuned fiber is connected to another tuned fiber, this precision alignment greatly reduces connector mating loss.

VCSEL

Vertical Cavity Surface Emitting Laser is a type of semiconductor laser diode that emits a beam perpendicular from its surface. Unlike edge-emitting lasers, VCSEL can be tested at several stages throughout the manufacturing process. Thousands of VCSELs can be produced simultaneously on a small wafer with a predictable yield.

Wavelength

A measure used to specify the distance between two corresponding points of a lightwave.

WDM

Wave division multiplexing is transmitting multiple signals through the same fiber at different wavelengths.

Complete Solutions

Custom Cable's wide range of capabilities enables us to deliver complete connectivity solutions.

Cable Assemblies

Custom Cable offers stock and custom cables and harnesses. Assembled or molded connector ends are available in industry standard, custom or build-to-print configurations. We also offer kitting and staging for your logistical needs.

We service the telecommunication, original equipment manufacturer, medical, government, automotive, education, entertainment, hospitality and financial industries.

Standard and Custom Assemblies



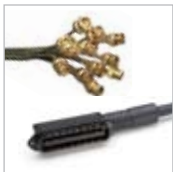
Cat5e and Cat6 Patch Cords



Fiber Cables, Adaptors, Attenuators



Central Office Twisted Pair and Coax



Innovative Patch Panels



OEM Harnesses



Logistic Kitting and Staging



Professional Services

Custom Cable has the network and telephone expertise to help you create a new network or add to an existing one.

We supply and install VoIP phones, VoIP phone switches, network wireless access points, switches, routers, and firewall protection to provide you a high performance network that is reliable and secure.

VoIP Phone Switch



VoIP Phone



Network Switch



Wireless Access Point



Network Router



Network Firewall



Six product photos (above) courtesy of Cisco Systems, Inc.
Unauthorized use not permitted.

Cabling Installations

Custom Cable provides indoor/outdoor cable installations and wireless solutions. We install cabling within ceilings, raised floors, modular furniture, riser channels and outdoor aerial or buried environments.

Our products include, but are not limited to, patch panels, punch down blocks, network outlets, racks and wireless access points.

Professional Installs



Patch Panels and Wire Management



Racks and Ladder Racking



Complete Data/Phone Closets



DS3 Coax Installs



Pre-terminated Zone Cabling



