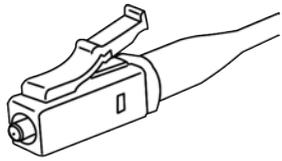
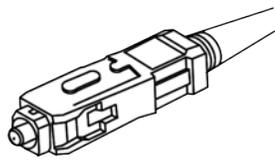


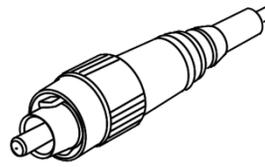
FIBER OPTIC CONNECTOR CONSTRUCTION



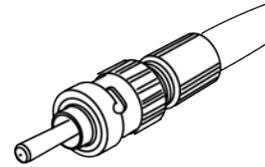
LC Style Connector



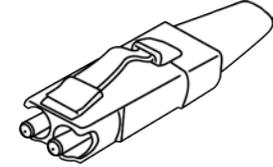
SC Style Connector



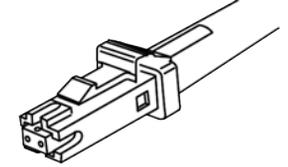
FC Style Connector



ST Style Connector



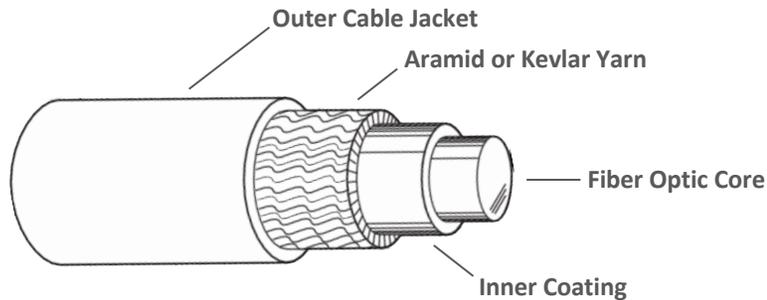
FJ Style Connector



MTRJ Style Connector

FIBER TYPE	FIBER GRADE	STANDARD CONNECTOR COLOR	CONNECTOR STYLE	FIBER CORE SIZE
SINGLE MODE	OS1, OS2	Blue	flat (standard)	8 – 10.5µm (9µm common)
SINGLE MODE	OS1, OS2	Green	angled (APC)	8 – 10.5µm (9µm common)
MULTIMODE	OM1	Beige	flat	62.5µm
MULTIMODE	OM2	Black	flat	50µm
MULTIMODE	OM3, OM4	Aqua	flat	50µm
MULTIMODE	OM5	Lime Green	flat	50µm

FIBER OPTIC CABLE CONSTRUCTION



FIBER TYPE	SINGLE MODE	SINGLE MODE	MULTIMODE	MULTIMODE	MULTIMODE	MULTIMODE	MULTIMODE
FIBER GRADE	OS1	OS2	OM1	OM2	OM3	OM4	OM5
FIBER CORE SIZE	8 – 10.5µm (9µm common)	8 – 10.5µm (9µm common)	62.5µm	50µm	50µm	50µm	50µm
STANDARD JACKET COLOR	Yellow	Yellow	Orange	Orange	Aqua	Aqua	Lime Green

ACTIVE OPTICAL CABLES

Liberty offers a variety of active optical cables for extending the distance of HDMI and DisplayPort cable runs. Explore the full line on www.libav.com.

PART NUMBER	SIGNAL FORMAT	LENGTH	MAX RESOLUTION	BANDWIDTH	ETHERNET	JACKET / COLOR
DL-PHDM-M-008M	HDMI 2.0	8m / 26.2ft.	4K60 4:4:4 HDR	18G	NO	PLENUM / BLACK
DL-PHDM-M-010M	HDMI 2.0	10m / 32.8ft.	4K60 4:4:4 HDR	18G	NO	PLENUM / BLACK
DL-PHDM-M-015M	HDMI 2.0	15m / 49.2ft.	4K60 4:4:4 HDR	18G	NO	PLENUM / BLACK
DL-PHDM-M-023M	HDMI 2.0	23m / 75.4ft.	4K60 4:4:4 HDR	18G	NO	PLENUM / BLACK
DL-PHDM-M-030M	HDMI 2.0	30m / 98.4ft.	4K60 4:4:4 HDR	18G	NO	PLENUM / BLACK
DL-PHDM-M-050M	HDMI 2.0	50m / 164.0ft.	4K60 4:4:4 HDR	18G	NO	PLENUM / BLACK
DL-PHDM-M-060M	HDMI 2.0	60m / 196.8ft.	4K60 4:4:4 HDR	18G	NO	PLENUM / BLACK
DL-PHDM-M-070M	HDMI 2.0	70m / 229.6ft.	4K60 4:4:4 HDR	18G	NO	PLENUM / BLACK
DL-PHDM-M-100M	HDMI 2.0	100m / 328.0ft.	4K60 4:4:4 HDR	18G	NO	PLENUM / BLACK



TECHNOLOGY FOCUS: CELERITY TECHNOLOGIES

Celerity Technologies develops high performance, easy-to-use fiber optic products for residential and commercial AV systems. Celerity's first breakthrough innovation— Detachable Fiber Optic HDMI— has become successful with professional AV installers for single and multi-room video systems. Sleek, thin fiber optic cables with detachable connectors and high bandwidth makes it easy for installation and provides the ultimate video performance. Celerity's revolutionary detachable fiber optic connector technology has transformed fiber optic cabling from a time-consuming installation to a simple 2-step system that does not require termination tools. Celerity Universal Fiber Optic (CT-UFO) cables, connectors, and controllers provide top performance high bandwidth audio, video, and control connectivity solutions.

CELERITY UNIVERSAL FIBER OPTIC (UFO)

Celerity UFO offers a simple plug-and-play fiber solution that is fully calibrated and ready for installation in just two steps! Celerity UFO is a complete fiber optic cable solution for HDMI, DisplayPort, and DVI, which is extremely easy to install and works up to 1,000 ft providing uncompressed signal transmission. Celerity Fiber Optic cables are slim, easy to install, support HDMI 2.0, and DisplayPort 1.4. Celerity UFO is installed with a simple two-step process – “pre-wire and connect”. Celerity's innovation with fiber optics makes this possible with no fiber terminations, testing, or tools required.



CELERITY UFO FEATURES:

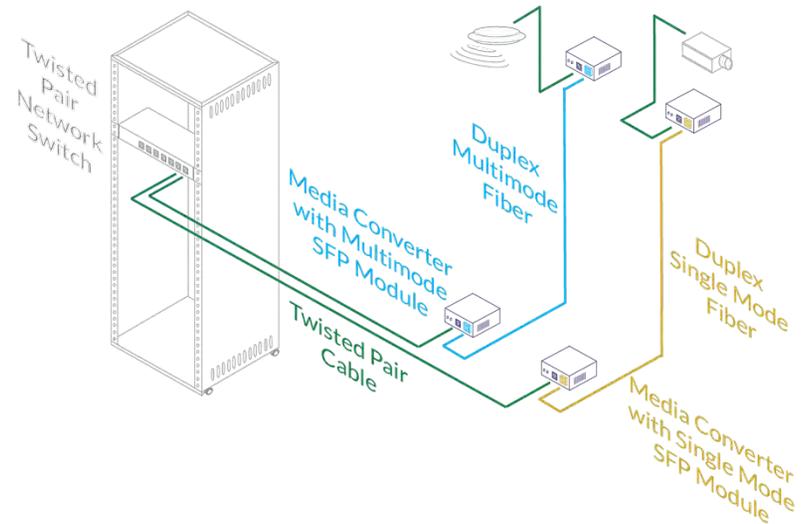
- Pre-designed, pre-bundled and ready to be installed
- No need to worry about fiber termination, and no experience required
- No tools, no termination required, fast to deploy!
- Time saving & money saving



FIBER-BASED MEDIA CONVERTERS

RunFiber media converters adapt fiber signals to a variety of different formats and/or cable types. The most common application is converting a fiber connection to an RJ45 connection, effectively adapting twisted pair-based devices to fiber for longer, interference-free transmission distances.

Two media converters can be used on each end of the fiber run, or one media converter can be used with a compatible fiber-ready network switch. Matching SFP modules should be used in the media converters and/or switches.



PART NUMBER	SIGNAL CONVERSION	PORT A	PORT B	DATA RATE	COMPATIBLE SFP MODULES (SOLD SEPARATELY)
RF-FMCTRX-11	Fiber to RJ45	1 SFP (fiber)	1 RJ45	10/100/1000M	RF-SFP01GMM multimode fiber RF-SFP01GSM single mode fiber
RF-FMCTRX-12	Fiber to RJ45	1 SFP (fiber)	2 RJ45	10/100/1000M	
RF-FMCTRX-20	Fiber to Fiber	1 SFP (fiber)	1 SFP (fiber)	10/100/1000/1250M	

SFP MODULES & DIRECT ATTACH CABLES

RunFiber SFP modules and direct attach (pre-terminated SFP+) cables feature industry-standard firmware and are compatible with most major brands of networking hardware, fiber optic extenders and AV over IP systems.



PART NUMBER	PRODUCT TYPE	FIBER TYPE	BANDWIDTH	TRANSMISSION DISTANCE	CONNECTORS
RF-SFP01GMM	SFP Fiber Module	Multimode	1G	550m / 1,805ft.	Duplex LC
RF-SFP01GSM	SFP Fiber Module	Single Mode	1G	20km / 12.4 miles	Duplex LC
RF-SFP10GMM	SFP+ Fiber Module	Multimode	10G	300m / 1,000ft.	Duplex LC
RF-SFP10GSM	SFP+ Fiber Module	Single Mode	10G	10km / 6.2 miles	Duplex LC
RF-SFP10GCU-01M	Pre-terminated SFP+ Cable	NA	10G	1m / 3ft.	SFP+
RF-SFP10GCU-03M	Pre-terminated SFP+ Cable	NA	10G	3m / 10ft.	SFP+
RF-SFP10GCU-07M	Pre-terminated SFP+ Cable	NA	10G	7m / 23ft.	SFP+

NIVEO PROFESSIONAL

Niveo Professional is a range of high-quality computer AV networking products, designed in Europe. Backed by over 15 years of industry experience, all products are conceived, designed and perfected by a dedicated team of industry professionals in Europe.

PART #	RACK SPACES / SIZE	SFP PORTS	RJ45 PORTS	PORT FACING	TYPE
N10GSM1T24	1RU	24	1	Front	Layer 3
N10GSM2TC12	1RU	2	12	Front	Layer 3
N10GSM2TC8	1RU	2	8	Front	Layer 3
N10GSM4QT48	1RU	28	4	Front	Layer 3
N10GSM8T12	1RU	12	8	Front	Layer 3
N10GSM8T8	1RU	8	8	Front	Layer 3
NGS18T16	1RU	16	16	Front	Enterprise
NGSM24G4S	1RU	4	24	Front	Enterprise
NGSM24T2	1RU	2	24	Front	Enterprise
NGSM24T2-AV	1RU	2	24	Rear	Enterprise
NGSM48T2	1RU	2	48	Front	Enterprise
NGSME16T2H	1RU	2	16	Front	Enterprise
NGSME16T2H-AV	1RU	2	16	Rear	Enterprise
NGSME24G4S	1RU	4	24	Front	Enterprise
NGSME24T2H	1RU	2	24	Front	Enterprise
NGSME24T2H-AV	1RU	2	24	Rear	Enterprise
NGSME48T2H	1RU	2	48	Front	Enterprise
NGSME8H	1RU	2	8	Front	Enterprise



RELIABLE – EASY – AFFORDABLE

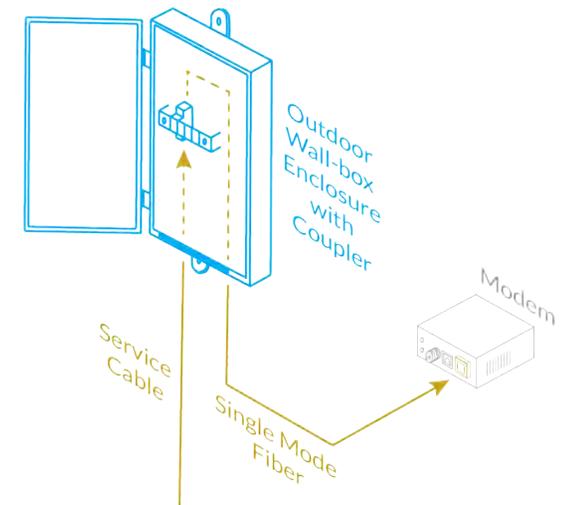
The all new NGS-IPV switches are designed to make any Video-over-IP project as simple as can be. Simply unpack, plug in and go! Power most standard PoE+ encoders and decoders. The built-in remote management software allows for easy access and monitoring of the switches and the encoders and decoders. Supports most 1G-based Video-over-IP systems.

niveo
PROFESSIONAL

INDOOR/OUTDOOR WALL-BOXES

RunFiber indoor/outdoor wall-boxes are simple, cost-effective enclosures designed for terminating, adapting and coupling fiber optic cables. Their durable plastic construction is rated for weather and UV exposure making them ideal for demarcation wiring.

PART NUMBER	DIMENSIONS	MATERIAL	SUPPORTED COUPLER PORTS	SUPPORTED COUPLER SIZE	SUPPORTED FIBER STRANDS
RF-WM04PIO	8.25 x 5.5 x 1.6 in. (21 x 14 x 4 cm)	UV-rated white plastic	4	13mm panel mount	8
RF-WM06PIO	8.25 x 5.5 x 1.6 in. (21 x 14 x 4 cm)	UV-rated white plastic	6	13mm panel mount	6
RF-WM08PIO	8.5 x 8.0 x 2.2 in. (22 x 21 x 6 cm)	UV-rated white plastic	8	13mm panel mount	16
RF-WM12PIO	9.0 x 8.25 x 2.8 in. (23 x 22 x 7 cm)	UV-rated white plastic	12	13mm panel mount	24
RF-WM16PIO	12.5 x 10.2 x 3.5 in. (26 x 32 x 9 cm)	UV-rated white plastic	16	13mm panel mount	32



INDOOR WALL-BOXES

PART NUMBER	DIMENSIONS	MATERIAL	SUPPORTED COUPLER PORTS	SUPPORTED COUPLER SIZE	SUPPORTED FIBER STRANDS
RF-WM02PI	1.5 x 8.0 x 4.5 in. (4 x 21 x 12 cm)	White plastic	2	13mm panel mount	4
RF-WM08PI	1.5 x 8.5 x 4.0 in. (4 x 22 x 11 cm)	Black metal	8	13mm panel mount	16



19" RACK-TRAY

PART NUMBER	DIMENSIONS	MATERIAL	SUPPORTED COUPLER PORTS	SUPPORTED COUPLER SIZE	SUPPORTED FIBER STRANDS
RF-RM1RU24FT	1RU	Black metal	24	13mm panel mount	48



COMPATIBLE 13MM PANEL MOUNT COUPLERS

PART NUMBER	SIDE A	SIDE B	FIBER TYPE
RF-OM4DLC-PL	Female LC	Female LC	Duplex Multimode
RF-OM4SSC-PL	Female SC	Female SC	Simplex Multimode
RF-DSMLC-PL	Female LC	Female LC	Duplex Single Mode
RF-SSMSC-PL	Female SC	Female SC	Simplex Single Mode

PART NUMBER	SIDE A	SIDE B	FIBER TYPE
RF-SSMSCAFFCAF-PL	Female FC/A	Female SC/A	Simplex Single Mode
RF-SSMLCFSCF-PL	Female LC	Female SC	Simplex Single Mode
RF-SSMSCA-PL	Female SC/A	Female SC/A	Simplex Single Mode
RF-DSMLCA-PL	Female LC/A	Female LC/A	Duplex Single Mode



ENTERPRISE ENCLOSURES

RunFiber rack-mount distribution panels and wall-mount enclosures provide a professional solution for fiber optic cable management. Enclosures are customizable based on the quantity of fiber optic strands and connector types:

1. Choose your enclosure style – either rack tray or wall-box
2. Choose your enclosure size – from one panel slot up to 12 panel slots
3. Choose your enclosure panels – options include both single mode and multimode LC, LC/APC, SC, SC/APC and ST

All products are manufactured with durable powder-coated steel and feature quick-connect push pin mounting tabs.



ENTERPRISE WALL-BOXES

PART NUMBER	DIMENSIONS	SUPPORTED PANEL STRIPS	PANEL STRIP SIZE	MATERIAL
RF-WM01PS	7.0 x 7.0 x 1.5 in. (178 x 178 x 40 cm)	1	LGX-118	Black metal
RF-WM02PS	13.0 x 9.25 x 3.5 in. (330 x 235 x 89 cm)	2	LGX-118	Black metal
RF-WM04PS	14.0 x 11.8 x 3.5 in. (355 x 300 x 89 cm)	4	LGX-118	Black metal

ENTERPRISE RACK-TRAYS

PART NUMBER	DIMENSIONS	SUPPORTED PANEL STRIPS	PANEL STRIP SIZE	MATERIAL
RF-RM1RU03P	1RU (19" / 23")	3	LGX-118	Black metal
RF-RM2RU06P	2RU (19" / 23")	6	LGX-118	Black metal
RF-RM4RU12P	4RU (19" / 23")	12	LGX-118	Black metal

ENTERPRISE PANEL STRIP INSERTS

PART NUMBER	CONNECTOR STYLE	QUANTITY	FIBER TYPE	MOUNTING STYLE	MATERIAL
RF-12PLOM3/4-6DLC	Duplex LC	6	Multimode	Push-pin style	Black metal
RF-24PLOM3/4-6DLC	Duplex LC	12	Multimode	Push-pin style	Black metal
RF-12PLOM3/4-6DSC	Duplex SC	6	Multimode	Push-pin style	Black metal
RF-06PLOM3/4-6SSC	Simplex SC	6	Multimode	Push-pin style	Black metal
RF-12PLSM-6DLC	Duplex LC	6	Single Mode	Push-pin style	Black metal
RF-24PLSM-12DLC	Duplex LC	12	Single Mode	Push-pin style	Black metal
RF-12PLSM-6DLCA	Duplex LC / APC	6	Single Mode	Push-pin style	Black metal
RF-12PLSM-6DSC	Duplex SC	6	Single Mode	Push-pin style	Black metal
RF-06PLSM-6SC	Simplex SC	6	Single Mode	Push-pin style	Black metal
RF-06PLSM-6SCA	Simplex SC / APC	6	Single Mode	Push-pin style	Black metal
RF-12PLSM-6DSCA	Duplex SC / APC	6	Single Mode	Push-pin style	Black metal
RF-06PLSM-6ST	Simplex ST	6	Single Mode	Push-pin style	Black metal
RF-12PLSM-12ST	Simplex ST	12	Single Mode	Push-pin style	Black metal
RF-PLBLK	NA	NA	NA	Push-pin style	Black metal

KEYSTONE WALLPLATES

RunFiber fiber optic keystones provide a secure and finished connection point in wallplates and rack panels. They are available in a variety of formats and are compatible with standard industry keystone trim sizes.



PART NUMBER	KEYSTONE SIZE	COLOR	CONNECTOR	FIBER TYPE
ISKM-OM3/4DLC-WH	14.5 x 16mm	White / Aqua	Duplex LC	Multimode
ISKM-OM3/4SC-WH	14.5 x 16mm	White / Aqua	Simplex SC	Multimode
ISKM-SMDLC-WH	14.5 x 16mm	White / Blue	Duplex LC	Single Mode
ISKM-SMSSC-WH	14.5 x 16mm	White / Blue	Simplex SC	Single Mode
S2S-KS-SCSCAPC*	14.5 x 16mm	White / Green	Simplex SC/APC	Single Mode

*TechLogix branded

19" KEYSTONE RACK PANEL

PART NUMBER	DIMENSIONS	MATERIAL	SUPPORTED KEYSTONE PORTS
ECO-RP-19U-24KS*	1RU	Black metal	24



*TechLogix branded

COUPLERS & ADAPTERS

RunFiber fiber optic couplers and adapters connect two terminated fiber optic cables. Couplers feature the same connections on sides A and B, whereas adapters convert between two different connector types.



PART NUMBER	TYPE	FIBER TYPE	STRAND COUNT	SIDE A	SIDE B	DIMENSIONS	FORMAT
RF-OM4DLC-PL	Coupler	Multimode	Duplex	Female LC	Female LC	13mm	Panel Mount
RF-DSMLC-PL	Coupler	Single Mode	Duplex	Female LC	Female LC	29mm	Panel Mount
RF-OM4DSC-PL	Coupler	Multimode	Duplex	Female SC	Female SC	13mm	Panel Mount
RF-DSMSC-PL	Coupler	Single Mode	Duplex	Female SC	Female SC	29mm	Panel Mount
RF-OM4SSC-PL	Coupler	Multimode	Simplex	Female SC	Female SC	13mm	Panel Mount
RF-SSMSC-PL	Coupler	Single Mode	Simplex	Female SC	Female SC	13mm	Panel Mount
RF-SSMLCFSCF-PL	Adapter	Single Mode	Simplex	Female LC	Female SC	13mm	Panel Mount
RF-SSMLC-PL	Coupler	Single Mode	Simplex	Female LC	Female LC	7mm	In-line
RF-SSMLCFSCM-IL	Adapter	Single Mode	Duplex	Female LC	Male SC	29mm	In-line
RF-SSMSCFSCM-IL	Adapter	Single Mode	Simplex	Female ST	Male SC	7mm	In-line
RF-SSMLCFSTM-IL	Adapter	Single Mode	Simplex	Female LC	Male ST	7mm	In-line
RF-SSMFCMLCF-IL	Adapter	Single Mode	Simplex	Female LC	Male FC	7mm	In-line
RF-DSMLCFSCF-PL	Adapter	Single Mode	Simplex	Female LC	Male SC	7mm	In-line
RF-SSMLCMSCF-PL	Adapter	Single Mode	Simplex	Female SC	Male LC	13mm	Panel Mount
RF-DSMLCA-PL	Coupler	Single Mode	Duplex	Female LC/APC	Female LC/APC	13mm	Panel Mount
RF-SSMSCA-PL	Coupler	Single Mode	Simplex	Female SC/APC	Female SC/APC	13mm	Panel Mount
RF-SSMLCA-IL	Coupler	Single Mode	Simplex	Female LC/APC	Female LC/APC	7mm	In-line
RF-SSMSCAFFCAF-PL	Adapter	Single Mode	Simplex	Female FC/APC	Female SC/APC	13mm	Panel Mount

STANDARD PATCH CORDS & PRE-TERMINATED CABLES

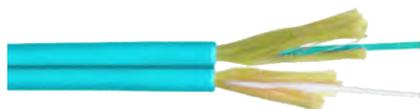
Fibertron standard patch cords feature a flexible riser-rated jacket and internal aramid yarn for strength. Top selling patch cords are listed below.

Please contact us or visit www.libav.com for other configurations.



PART NUMBER	CONSTRUCTION	LENGTH	FIBER TYPE	STRAND COUNT	SIDE A	SIDE B	JACKET RATING	COLOR
DMM10LCLC-001M	Standard	1m / 3ft.	Multimode OM3	Duplex	LC	LC	Riser	Aqua
DMM10LCLC-002M	Standard	2m / 6.5ft.	Multimode OM3	Duplex	LC	LC	Riser	Aqua
DMM10LCLC-003M	Standard	3m / 10ft.	Multimode OM3	Duplex	LC	LC	Riser	Aqua
DMM10LCLC-005M	Standard	5m / 16.5ft.	Multimode OM3	Duplex	LC	LC	Riser	Aqua
DMM10LCLC-010M	Standard	10m / 33ft.	Multimode OM3	Duplex	LC	LC	Riser	Aqua
DMM10LCSC-001M	Standard	1m / 3ft.	Multimode OM3	Duplex	LC	SC	Riser	Aqua
DMM10LCSC-002M	Standard	2m / 6.5ft.	Multimode OM3	Duplex	LC	SC	Riser	Aqua
DMM10LCSC-003M	Standard	3m / 10ft.	Multimode OM3	Duplex	LC	SC	Riser	Aqua
DMM10LCSC-005M	Standard	5m / 16.5ft.	Multimode OM3	Duplex	LC	SC	Riser	Aqua
DMM10LCSC-007M	Standard	7m / 23ft.	Multimode OM3	Duplex	LC	SC	Riser	Aqua
DMM10SCSC-001M	Standard	1m / 3ft.	Multimode OM3	Duplex	SC	SC	Riser	Aqua
DMM10SCSC-002M	Standard	2m / 6.5ft.	Multimode OM3	Duplex	SC	SC	Riser	Aqua
DMM10SCSC-003M	Standard	3m / 10ft.	Multimode OM3	Duplex	SC	SC	Riser	Aqua
DMM10SCSC-010M	Standard	10m / 33ft.	Multimode OM3	Duplex	SC	SC	Riser	Aqua

PART NUMBER	CONSTRUCTION	LENGTH	FIBER TYPE	STRAND COUNT	SIDE A	SIDE B	JACKET RATING	COLOR
FDS52YLCLC001M	Standard	1m / 3ft.	Single Mode OS2	Duplex	LC	LC	Riser	Yellow
FDS52YLCLC002M	Standard	2m / 6.5ft.	Single Mode OS2	Duplex	LC	LC	Riser	Yellow
FDS52YLCLC003M	Standard	3m / 10ft.	Single Mode OS2	Duplex	LC	LC	Riser	Yellow
FDS52YLCLC005M	Standard	5m / 16.5ft.	Single Mode OS2	Duplex	LC	LC	Riser	Yellow
FDS52YLCLC007M	Standard	7m / 23ft.	Single Mode OS2	Duplex	LC	LC	Riser	Yellow
FDS52YLCLC010M	Standard	10m / 33ft.	Single Mode OS2	Duplex	LC	LC	Riser	Yellow
DSMLCSC-002M	Standard	2m / 6.5ft.	Single Mode OS2	Duplex	LC	SC	Riser	Yellow
DSMLCSC-003M	Standard	3m / 10ft.	Single Mode OS2	Duplex	LC	SC	Riser	Yellow
DSMLCSC-010M	Standard	10m / 33ft.	Single Mode OS2	Duplex	LC	SC	Riser	Yellow
DSMSCSC-001M	Standard	1m / 3ft.	Single Mode OS2	Duplex	SC	SC	Riser	Yellow
DSMSCSC-003M	Standard	3m / 10ft.	Single Mode OS2	Duplex	SC	SC	Riser	Yellow
DSMSCSC-005M	Standard	5m / 16.5ft.	Single Mode OS2	Duplex	SC	SC	Riser	Yellow
DSMSCSC-010M	Standard	10m / 33ft.	Single Mode OS2	Duplex	SC	SC	Riser	Yellow



Duplex Zip-Cord Construction

Two individually jacketed fiber strands with a 2.0mm outer cable diameter. Typically used for patch cords.



Distribution Construction

Multiple 900µm fiber strands within a single cable jacket. Typically used for building pre-wiring because it is stronger, more durable, and easier to pull than zip-cord constructions. Indoor/outdoor configurations can be fully submerged in water.



Armored Construction

Distribution cable with an armored jacket. Designed for harsh indoor environments where durability is required.

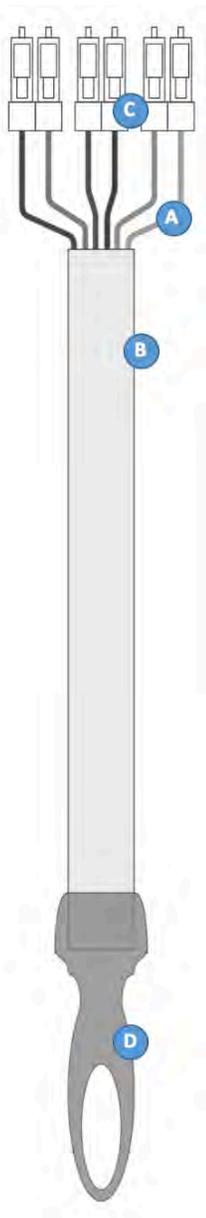


Direct Burial Construction

Distribution cable with an armored jacket. Designed for outdoor environments and can be directly buried in soil.

CUSTOM PREMADE CABLES

Simplify your project with Fibertron premade custom fiber optic cables built specifically for your installation. We offer a variety of constructions, all pre-terminated and shipped directly to your job site.



Project Name: _____ **Cable Qty Required:** _____

Cable Length: _____ meters feet

Fiber Type: OM3 (multimode) OM4 (multimode)
 OS2 (single mode) other: _____

Design Note: Multimode is typically used for cable runs less than 1,000 ft (300m) and single mode is typically used on cable runs greater than 1,000 ft (300m).

A Strand Count: one strand (simplex) two strands (duplex) four strands six strands
 eight strands twelve strands 24 strands other: _____

B Construction: riser (standard) SSF™
 plenum LSZH
 standard armored direct burial
 micro armored outdoor / wet rated
 tactical other: _____

C Connectors (end A): LC (standard) SC (standard)
 LC/APC SC/APC
 FC ST

Connectors (end B): LC (standard) SC (standard)
 LC/APC SC/APC
 FC ST

Contact Name: _____
 Company: _____
 Phone: _____
 Email: _____

D Pulling Mesh: End A End B None

Special Requests: _____



RECOMMENDED FIBER BY APPLICATION



A APPLICATION: **HOME THEATER VIDEO DISTRIBUTION**
 Typical equipment: source to display/projector
 Recommended cable: duplex multimode OM3
 Recommended connectors: LC or SC (equipment dependent)

B APPLICATION: **BUILDING TO BUILDING NETWORK DISTRIBUTION**
 Typical equipment: network switch to network switch
 Recommended cable for runs under 1,000 ft.: duplex multimode OM3
 Recommended cable for runs over 1,000 ft.: duplex single mode OS2
 Recommended connectors: LC

C APPLICATION: **EQUIPMENT RACK TO EQUIPMENT RACK**
 Typical equipment: network switch to network switch
 Recommended cable for runs under 1,000 ft.: six strand multimode OM3
 Recommended cable for runs over 1,000 ft.: six strand single mode OS2
 Recommended connectors: LC

D APPLICATION: **GENERAL RESIDENTIAL PREWIRE**
 Typical equipment: future-proofing for AV and networking
 Recommended cable: duplex single mode OS2
 Recommended connectors: LC or SC (equipment dependent)

E APPLICATION: **SECURITY & ACCESS CONTROL**
 Typical equipment: cameras and media converters
 Recommended cable for runs under 1,000 ft.: duplex multimode OM3
 Recommended cable for runs over 1,000 ft.: duplex single mode OS2
 Recommended connectors: LC or SC (equipment dependent)

F APPLICATION: **SERVICE DEMARC TO MAIN DISTRIBUTION POINT**
 Typical equipment: incoming demarc to modem or distribution panel
 Recommended cable: duplex single mode OS2
 Recommended connectors: coupler

G APPLICATION: **NETWORK SWITCHES TO ACCESS POINTS**
 Typical equipment: network switch to wireless access point
 Recommended cable: duplex multimode OM3
 Recommended connectors: LC

CABLING CONSIDERATIONS

When integrating fiber optic cable, it's imperative to consider the intended *and* future use. **At a minimum, each audio/video run requires duplex fiber (two strands).** Multimode fiber handles signal distribution up to 300m (1,000ft.). Single mode fiber handles both short and long-distance runs, including runs over 300m. **At a minimum, each additional networking run requires a separate pull of duplex fiber.**

CLEERLINE SSF™ BULK FIBER

Cleerline constantly strives to improve all forms of fiber optic technology, from the glass itself to the tools and accessories that are utilized in the process of termination. Their technology is **STRONGER** (up to 10,000 times the bend longevity and up to 200 times the pull force of traditional fibers), **SAFER** (SSF™ glass will not puncture soft tissues), and **FASTER** (fewer preparations and precautions are required for termination).

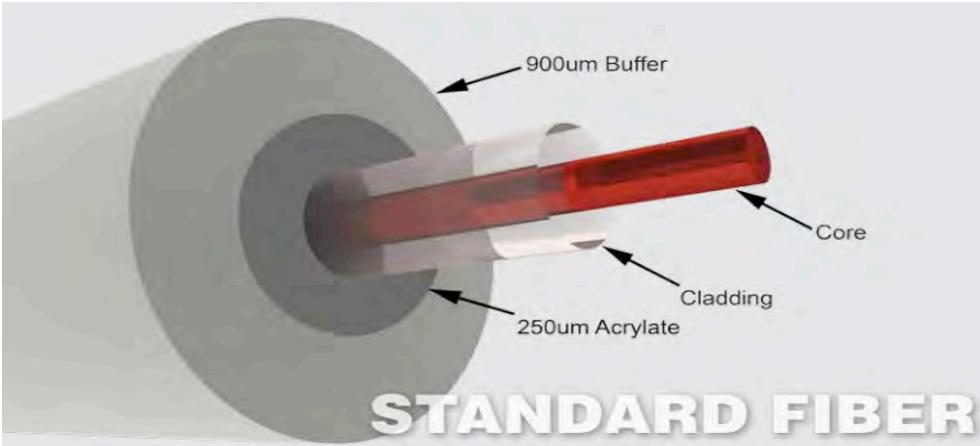
MULTIMODE BULK CABLE

PART NUMBER	FIBER TYPE	STRAND COUNT & CONSTRUCTION	JACKET RATING	ENVIRONMENT	ARMOR	SPOOL LENGTH	BEND RADIUS
S50125MOM3R	Multimode OM3	Simplex	Riser	Indoor	No	300m / 1000ft.	3.0mm
S50125MOM3P	Multimode OM3	Simplex	Plenum	Indoor / Outdoor	No	300m / 1000ft.	3.0mm
S50125MOM4P	Multimode OM4	Simplex	Plenum	Indoor / Outdoor	No	300m / 1000ft.	3.0mm
D50125MOM3R	Multimode OM3	Duplex Zip-Cord	Riser	Indoor	No	300m / 1000ft.	3.0mm
D50125MOM3P	Multimode OM3	Duplex Zip-Cord	Plenum	Indoor / Outdoor	No	300m / 1000ft.	3.0mm
D50125MOM4P	Multimode OM4	Duplex Zip-Cord	Plenum	Indoor / Outdoor	No	300m / 1000ft.	3.0mm
4B50125OM3R	Multimode OM3	4 Strand Breakout	Riser	Indoor	No	300m / 1000ft.	3.0mm
4B50125OM3P	Multimode OM3	4 Strand Breakout	Plenum	Indoor / Outdoor	No	300m / 1000ft.	3.0mm
2D50125MOM3P	Multimode OM3	2 Strand Micro Dist	Plenum	Indoor / Outdoor	No	300m / 1000ft.	3.0mm
4D50125MOM3P	Multimode OM3	4 Strand Micro Dist	Plenum	Indoor / Outdoor	No	300m / 1000ft.	3.0mm
6D50125MOM3P	Multimode OM3	6 Strand Micro Dist	Plenum	Indoor / Outdoor	No	300m / 1000ft.	3.0mm
6D50125MOM4P	Multimode OM4	6 Strand Micro Dist	Plenum	Indoor / Outdoor	No	300m / 1000ft.	3.0mm
12D50125MOM3P	Multimode OM3	12 Strand Micro Dist	Plenum	Indoor / Outdoor	No	300m / 1000ft.	3.0mm
12D50125MOM4P	Multimode OM4	12 Strand Micro Dist	Plenum	Indoor / Outdoor	No	300m / 1000ft.	3.0mm
2ACS50125OM3PE	Multimode OM3	2 Strand Micro Dist	Direct Burial	Outdoor	Yes	300m / 1000ft.	180mm
6ACS50125OM3PE	Multimode OM3	6 Strand Micro Dist	Direct Burial	Outdoor	Yes	300m / 1000ft.	180mm
12ACS50125OM3PE	Multimode OM3	12 Strand Micro Dist	Direct Burial	Outdoor	Yes	300m / 1000ft.	180mm
6IAD50125MOM3P	Multimode OM3	6 Strand Micro Dist	Plenum	Indoor	Yes	300m / 1000ft.	232mm
12IAD50125MOM3P	Multimode OM3	12 Strand Micro Dist	Plenum	Indoor	Yes	300m / 1000ft.	232mm

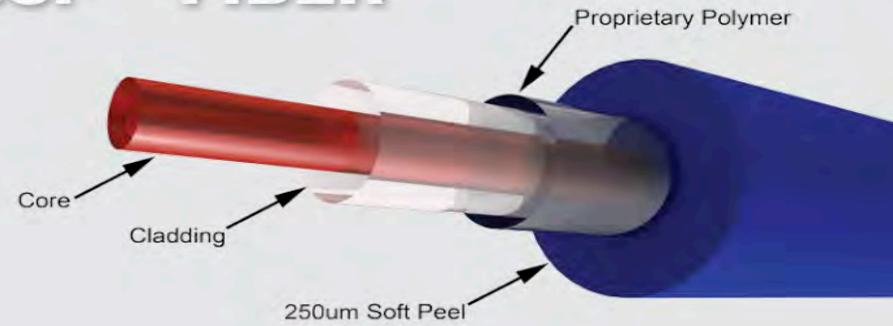
SINGLE MODE BULK CABLE

PART NUMBER	FIBER TYPE	STRAND COUNT & CONSTRUCTION	JACKET RATING	ENVIRONMENT	ARMOR	SPOOL LENGTH	BEND RADIUS
S19125SMOSP	Single Mode OS2	Simplex	Plenum	Indoor / Outdoor	No	300m / 1000ft.	3.0mm
D29125SMOSP	Single Mode OS2	Duplex Zip-Cord	Plenum	Indoor / Outdoor	No	300m / 1000ft.	3.0mm
2D9125SMOS2P	Single Mode OS2	2 Strand Micro Dist	Plenum	Indoor / Outdoor	No	300m / 1000ft.	3.0mm
4D9125SMOS2P	Single Mode OS2	4 Strand Micro Dist	Plenum	Indoor / Outdoor	No	300m / 1000ft.	3.0mm
6D9125SMOS2P	Single Mode OS2	6 Strand Micro Dist	Plenum	Indoor / Outdoor	No	300m / 1000ft.	3.0mm
12D9125SMOS2P	Single Mode OS2	12 Strand Micro Dist	Plenum	Indoor / Outdoor	No	300m / 1000ft.	3.0mm
2ACS9125OS2PE	Single Mode OS2	2 Strand Micro Dist	Direct Burial	Outdoor	Yes	300m / 1000ft.	180mm
6ACS9125OS2PE	Single Mode OS2	6 Strand Micro Dist	Direct Burial	Outdoor	Yes	300m / 1000ft.	180mm
12ACS9125OS2PE	Single Mode OS2	12 Strand Micro Dist	Direct Burial	Outdoor	Yes	300m / 1000ft.	180mm
6IAD9125SMOS2P	Single Mode OS2	6 Strand Micro Dist	Plenum	Indoor	Yes	300m / 1000ft.	232mm
12IAD9125SMOS2P	Single Mode OS2	12 Strand Micro Dist	Plenum	Indoor	Yes	300m / 1000ft.	232mm





SSF™ FIBER



CLEERLINE FIBER OPTIC CONNECTORS

Cleerline SSF™ field-installable LC & SC type connectors completely eliminate the need to hand polish, epoxy or crimp in the field.

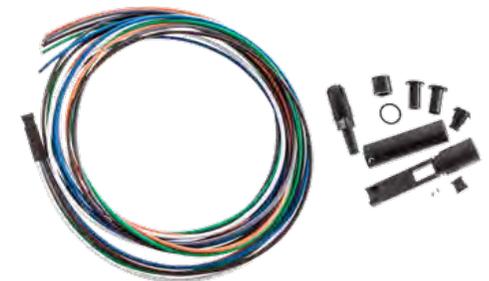
PART NUMBER	CONNECTOR TYPE	FIBER TYPE	QNTY PER PACK
SSF-LC-MMFPC-10	LC	Multimode	10
SSF-SC-MMFPC-10	SC	Multimode	10
SSF-LC-SMUPC-10	LC	Single Mode	10
SSF-LC-SMAPC-10	LC/APC	Single Mode	10
SSF-SC-SMUPC-10	SC	Single Mode	10
SSF-SC-SMAPC-10	SC/APC	Single Mode	10



FAN OUT & BREAKOUT INSTALLATION KITS

Cleerline fan out and breakout kits provide additional strength and protection for the small diameter fiber optic strands found inside distribution cables. Fan out and breakout kits don't require special tools or epoxy and install in minutes.

PART NUMBER	DESCRIPTION	SUPPORTED FIBERS	TUBE LENGTH	RECOMMENDED INTERNAL FIBER SIZE	BUILD-UP TUBE SIZE
SBOK0640M250	Loose tube breakout build-up kit	6	40in. / 102cm	250µm	3.0mm
SBOK1240M250	Loose tube breakout build-up kit	12	40in. / 102cm	250µm	3.0mm
FAN0425M250	Loose tube fan out build-up kit	4	25in. / 64cm	250µm	900µm
FAN0436M250	Loose tube fan out build-up kit	4	36in. / 92cm	250µm	900µm
FAN0625M250	Loose tube fan out build-up kit	6	25in. / 64cm	250µm	900µm
FAN0636M250	Loose tube fan out build-up kit	6	36in. / 92cm	250µm	900µm
FAN1225M250	Loose tube fan out build-up kit	12	25in. / 64cm	250µm	900µm
FAN1236M250	Loose tube fan out build-up kit	12	36in. / 92cm	250µm	900µm



FIBER OPTIC TOOLS

RunFiber tools are universally compatible with multimode and single mode fiber from TechLogix, Cleerline and most other fiber optic cable and connector systems.

	PART NUMBER	DESCRIPTION	USE
	RF-1.25CLP	Pen-style cleaner for 1.25mm LC connectors	Cleans optical lenses on LC connectors and ports
	RF-2.50CLP	Pen-style cleaner for 2.5mm SC, FC & ST connectors	Cleans optical lenses on SC, FC & ST connectors and ports
	RF-3HFS	Three-hole jacket and coating stripper	Strips the outer and inner coatings/jackets from cable
	RF-KSC	Kevlar and aramid yarn sheers	Cuts the aramid or Kevlar strength member in cable
	RF-VFL	1mW fiber optic visual fault locator – built-in 2.5mm connector	Visually shows the integrity of fiber cable and connectors
	RF-VFLADT	Visual fault locator 2.5mm to 1.25mm adapter	Adapts the visual fault locator for use with smaller LC connectors
	TechLogix ECO-TERMK-01	Universal fiber termination kit – includes cleaver, sheers, three-hole stripper, VFL, ruler, marker, alcohol container, wipes and carry case	Complete tool kit for terminating bulk fiber, cleaning fiber connections and testing for continuity on fiber runs
	TechLogix ECO-TESTK-01	Universal fiber test kit – includes single mode generator, multimode generator, optical meter, VFL, batteries, adapters, reference cables and carry case	Complete test kit for metering loss and testing for continuity on fiber runs
	TechLogix ECO-CLEAVER-1	Universal precision fiber cleaver	Cleaves bulk multimode and single mode fiber cable for insertion into a connector; adjustable blade
	Cleerline SSF-FKIT02E	Fiber termination kit – includes factory-adjusted cleaver for Cleerline SSF™ fiber, sheers, three-hole stripper, VFL and carry case	Complete tool kit for terminating Cleerline SSF™ bulk fiber and testing for continuity on fiber runs
	Cleerline SSF-TKITE-100	Fiber test kit – includes single mode generator, multimode generator, optical meter, adapters, reference cables and carry case	Complete test kit for metering loss and testing for continuity on fiber runs
	Cleerline SSF-CKIT01E	Fiber cleaning kit – includes pen-style cleaners, wipes, swabs, spray and carry case	Complete cleaning kit for connectors, cables and installation accessories

HDMI & DVI OVER FIBER EXTENDERS

RunFiber HDMI and DVI over fiber extenders transmit audio, video and control signals over single mode and multimode fiber.

PART NUMBER	COMPLIANCY	MULTIMODE MAX DISTANCE	SINGLE MODE MAX DISTANCE	MAX RESOLUTION	STRANDS REQUIRED	IR CONTROL	RS232 CONTROL	ETHERNET	HDR
Digitalinx DL-ILFO-H2	HDMI 2.0 / HDCP 2.2	200m / 656ft.		18G 4K60 4:4:4	Duplex				Yes
Digitalinx DL-FHD2	HDMI 2.0 / HDCP 2.2	300m / 1000ft.	300m / 1000ft.	18G 4K60 4:4:4	Duplex	Yes	Yes		Yes
Inneos BIK-0	HDMI 2.0 / HDCP 2.2	300m / 1000ft.		18G 4K60 4:4:4	Simplex				Yes
Inneos BPK-XT-0	HDMI 2.0 / HDCP 2.2	300m / 1000ft.		18G 4K60 4:4:4	Simplex	Yes			Yes
TechLogix TL-FO2-VLC-MM	HDMI 2.0 / HDCP 2.2	300m / 1000ft.		18G 4K60 4:4:4	Duplex	Yes	Yes		Yes
TechLogix TL-FO2-VLC-SM	HDMI 2.0 / HDCP 2.2		10km / 6.2 miles	18G 4K60 4:4:4	Duplex	Yes	Yes		Yes
TechLogix TL-IPFO-KIT	HDMI 2.0 / HDCP 2.2	300m / 1000ft.	10km / 6.2 miles*	18G 4K60 4:4:4	Duplex	Yes	Yes	Yes	Yes
TechLogix TL-FO-HD	HDMI 1.4 / HDCP 1.4	300m / 1000ft.	300m / 1000ft.	10G 4K30	Simplex				
TechLogix TL-FO-DVI	DVI 1.0	300m / 1000ft.	300m / 1000ft.	1920x1200	Simplex				

*Requires SFP module swap





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