

LC Connectors

LC Connector, original designed by Lucent, is a small form factor (SFF) connector and an ideal for high density applications, it has become the most popular and best performing SFF connector. It looks similar to SC, but just half its size, and uses the RJ-45 telephone jack-like latch mechanism.

The OPTKO LC Connector, includes singlemode and multimode, has a zirconia ceramic 1.25mm O.D. ferrule with either a PC or APC endface, and provides optimum insertion and return loss. The OPTKO LC Connector is available with pre-assembled 1pc and LC Connector Kit versions (upon request), in together of LC Uniboot, LC Angled boot, LC-HD Connector and LC-Mini Connector. They are Telcordia, ANSI/EIA/TIA and IEC compliant, OPTKO is providing Standard and Premium level for choices, to better meet your different application and requirements.

⊙ Features

- Compliance with Telcordia, EIA/TIA/ANSI and IEC specification
- Compact, pull-proof design
- RJ-45 style interface
- Low insertion loss and back reflection loss
- High precision alignment
- Various housing color and boots color with UL-rated for choices
- Available with pre-assembled 1pc and connector kits design

⊙ Specification

Item	Singlemode		Multimode	
Insertion Loss	Standard	0.12dB Typical	Standard	0.20dB Typical
	Premium	0.08dB Typical	Premium	0.15dB Typical
Return Loss	≤55dB Typical (PC)		≥30dB (PC)	
	≥65dB Typical (APC)			
Durability	≤0.2dB typical change, 1000 matings		≤0.2dB typical change, 1000 matings	
Ferrule Hole Sizes (Custom sizes available)	125µm +1/-0, Concentricity: ≤1µm		127µm, Concentricity: ≤4µm	
	125.5µm +1/-0, Concentricity: ≤1µm			
Operating Temperature	-40°C to +75°C		-40°C to +75°C	

*The above Specifications were obtained by using OPTKO recommended products and procedures.

LC/UPC Connectors



900µm Standard, Simplex



2.0mm Standard, Simplex



2.0mm Standard, Duplex, Aqua

Connector		Ferrule Type		Housing Color		Boot Size		Boot Color		Boot Type	
261	LC/UPC 1pc, SX	120	SM Standard 125µm	L	Blue	1	0.9mm	W	White	T	Standard
262	LC/UPC 1pc, DX	130	SM Premium 125µm	B	Beige	2	2.0mm	L	Blue	2	Short 12mm(2.0/3.0)
		305	MM Standard 127µm	A	Aqua	3	3.0mm	A	Aqua	5	Short 15mm(2.0/3.0)
V	Violet	V	Violet	9	Short 19.5mm(2.0/3.0)						
Y	Yellow	Y	Yellow	8	Mini 18mm(2.0/3.0)						
K	Black	K	Black	F	Flex Angled(2.0/3.0)						
R	Red	R	Red								

Ordering Example: 261-120-L1WT

LC/APC Connectors



900µm Standard, Simplex



2.0mm Standard, Simplex



2.0mm Standard, Duplex

Connector		Ferrule Type		Boot Size		Boot Type	
261	LC/APC 1pc, SX	120	SM Standard 125µm	1	0.9mm	T	Standard
262	LC/APC 1pc, DX	130	SM Premium 125µm	2	2.0mm	2	Short 12mm(2.0/3.0)
				3	3.0mm	5	Short 15mm(2.0/3.0)
						9	Short 19.5mm(2.0/3.0)
						8	Mini 18mm(2.0/3.0)
						F	Flex Angled(2.0/3.0)

Ordering Example: 262-130-22

Boots for LC



Standard 0.9mm, White



Standard 2.0/3.0mm, White



Standard 2.0/3.0mm, Red



Standard 2.0/3.0mm, Black



Short L. =20mm, White



Angle 45° 2.0/3.0mm, White



Angle 90° 2.0/3.0mm, White



Flex-Angle 3.0mm, White

SC Connectors

The full name of SC Connector is Subscription Channel connector, which is originally developed by NTT. It's a push-pull connector with a square body of injection molded thermo-plastic. It has an easy-to-use push to insert and pull to remove locking mechanism, which prevents rotational misalignment. And an audible click lets you know that the connector is fully engaged. It has become known as a popular industry standard connector, and can be duplex with a clip.

OPTKO SC connectors are available with high quality ferrules of singlemode as physical contact(PC), angled physical contact(APC), and Multi-mode physical contact(PC) ferrules, in together of different colors housing, types of boots. OPTKO is providing Standard and Premium two levels for choices, which are better to meet your different applications and requirements.

⊙ Features

- Easy-to-use, push and pull locking mechanism
- Low insertion and back reflection loss
- One-piece construction & pull-proof design
- Different colors housing and types of boots with UL-Rated
- Available with angled boot and SC 4.8mm connector
- Compliance with Telcordia, TIA/IEA, IEC and JIS

⊙ Specification

Item	Singlemode		Multimode	
Insertion Loss	Standard	0.12dB Typical	Standard	0.20dB Typical (127μm)
	Premium	0.08dB Typical	Premium	0.15dB Typical (127μm)
Return Loss	≥55dB Typical (PC)		≥30dB (PC)	
	≥65dB Typical (APC)			
Durability	≤0.1dB typical change, 500 matings		≤0.1dB typical change, 500 matings	
Ferrule Hole Sizes (Custom sizes available)	125μm +1/-0, Concentricity: ≤1μm		127μm, Concentricity: ≤4μm	
	125.5μm +1/-0, Concentricity: ≤1μm			
Operating Temperature	-40°C to +75°C		-40°C to +75°C	

*The above Specifications were obtained by using OPTKO recommended products and procedures.

SC/UPC Connectors



900μm Standard



2.0mm Standard



3.0mm Standard

Connector		Ferrule Type		Boot Size		Housing Color		Boot Color		Boot Type	
311	SC/UPC 1pc	201	SM Standard 125μm	1	0.9mm	L	Blue	W	White	T	Standard
		203	SM Premium 125μm	2	2.0mm	B	Beige	L	Blue	S	Short
		405	MM Premium 127μm	3	3.0mm	A	Aqua	R	Red	D	Telcordia(2.0/3.0)
						V	Violet	Y	Yellow	A	Angled(2.0/3.0)
						R	Red	K	Black		
						K	Black	G	Green		
						Y	Yellow				

Ordering Example: 311-201-3LLT

SC/APC Connectors



900µm Standard



2.0mm Standard



3.0mm Standard

Connector		Ferrule Endface		Ferrule Type		Boot Size		Boot Type	
391	SC/APC 1pc	C	Conical, No Angle	201	SM Standard 125µm	1	0.9mm	T	Standard
		D	Conical, 8° Degree	203	SM Premium 125µm	2	2.0mm	S	Short
		S	Step, No Angle			3	3.0mm	D	Telcordia(2.0/3.0)
		A	Step, 8° Degree					A	Angled(2.0/3.0)

Ordering Example: 391-201-3T-T

SC Boots

SC Boots



Standard 0.9mm, Blue



Standard 2.0mm, Blue



Standard 3.0mm, Blue



Square 3.0mm, Blue



Standard 0.9mm, Green



Standard 2.0mm, Green



Standard 3.0mm, Green



Flex-Angle 3.0mm, White

FC Connectors

The FC Connector named as Fixed Connection Connector, which is originally developed by Seiko Instruments. It is one of the most popular connectors, because of its rugged metal housing, designed for use in unstable environments which provides a secure connection. The FC is a screw-in (thread) connector and has to be turned to make or break connection.

The OPTKO FC connector is available in both singlemode and multimode versions, and fully intermateable with NTT-FC products. Both singlemode and multimode have zirconia ferrules with pre-radiused PC profile and convex spherical end, or the 8o angle (SM) in a step or conical endface for the APC version. All our FC connectors are able to achieve low optical loss and back reflection while ensuring maximum repeatability. FC 1pc Connector and FC Connector kits are available for choices from us.

⊙ Features

- Metal screw-in(thread) housing makes a secure connection
- Precision anti-rotation key and corrosion resistant body
- Low insertion and back reflection loss
- Free-floating ceramic ferrule
- Available with a full range of UL-rated FC boots
- Compliance with Telcordia, TIA/IEA, IEC and JIS

⊙ Specification

Item	Singlemode		Multimode	
	Insertion Loss	Standard	0.12dB Typical	Standard
Premium		0.08dB Typical	Premium	0.15dB Typical (127µm)
Return Loss	≥55dB Typical (PC)		≥30dB (PC)	
	≥65dB Typical (APC)			
Durability	≤0.1dB typical change, 500 matings		≤0.1dB typical change, 500 matings	
Ferrule Hole Sizes (Custom sizes available)	125µm +1/-0, Concentricity: ≤1µm		127µm, Concentricity: ≤4µm	
	125.5µm +1/-0, Concentricity: ≤µm			
Operating Temperature	-40°C to +75°C		-40°C to +75°C	

*The above Specifications were obtained by using OPTKO recommended products and procedures.

FC/UPC/APC Connectors



2.0mm Standard

2.0mm Standard

3.0mm Standard

3.0mm Standard

Connector		Ferrule Type		Boot Size		Boot Color		Boot Type	
521	FC/UPC 1pc	201	SM Standard 125µm	1	0.9mm	L	Blue	T	Standard
		205	SM Premium 125µm	2	2.0mm	B	Beige	R	Rubber(2.0/3.0)
		405	MM Premium 127µm	3	3.0mm	K	Black		
						R	Red		
						Y	Yellow		

Ordering Example: 521-202-2KR

Connector		Ferrule Type		Boot Size		Boot Color		Boot Type	
521	FC/UPC 1pc	201	SM Standard 125µm	1	0.9mm	L	Blue	T	Standard
		205	SM Premium 125µm	2	2.0mm	B	Beige	R	Rubber(2.0/3.0)
		405	MM Premium 127µm	3	3.0mm	K	Black		
						R	Red		
						Y	Yellow		

Ordering Example: 521-C201-1T

ST Connectors

The full name of ST Connector is Straight Tip Connector, it belongs to the older generation of connectors, but is still widely used for multimode networks (LAN) like most buildings and campuses, and data processing networks. It has bayonet type housing and a long spring-loaded ferrule to hold the fiber. ST connector remains the less expensive among the connector types.

OPTKO ST connectors are available in both multimode and singlemode versions with type of boots, in the meantime, there are standard ST Connector and "Opening Edge" shape for choices with Standard and Premium quality levels.

⊙ Features

- High precision alignment
- Bayonet style housing for easy termination
- Low insertion and back reflection loss
- Available with a full range of UL-rated ST boots
- Compliance with Telcordia, TIA/IEA, IEC and JIS

⊙ Specification

Item	Singlemode		Multimode	
	Insertion Loss	Standard	0.20dB Typical	Standard
Premium		0.15dB Typical	Premium	0.15dB Typical
Return Loss	≥55dB Typical (PC)		≥30dB (PC)	
Durability	≤0.20dB typical change, 500 matings		≤0.20dB typical change, 500 matings	
Ferrule Hole Sizes (Custom sizes available)	125μm +1/-0, Concentricity: ≤1μm		127μm, Concentricity: ≤4μm	
	125.5μm +1/-0, Concentricity: ≤1μm			
Operating Temperature	-40°C to +75°C		-40°C to +75°C	

*The above Specifications were obtained by using OPTKO recommended products and procedures.



900μm Standard



2.0mm Standard



900μm "Open Edge"



3.0mm "Open Edge"

Connector		Ferrule Type		Boot Size		Boot Color		Boot Type	
921	ST Standard 1pc	271	SM Standard 125μm	1	0.9mm	L	Blue	T	Standard
920	ST "Open Edge" 1pc	291	SM Premium 125μm	2	2.0mm	B	Beige		
		473	MM Premium 127μm	3	3.0mm	K	Black		
						R	Red		
						Y	Yellow		

Ordering Example: 921-271-3KT

LC Adapters

OPTKO provides a full range of LC Adapters with our high performance sleeves and plastic body, it performs well under high temperature and withdrawal force. Our LC Adapters are available in Simplex, Duplex and Quad configurations, its singlemode and multimode are come with a choice of zirconia sleeves or phosphor bronze sleeves.

The OPTKO LC Adapters are available with the standard ones, in together of Shutter and Metal Housing LC adapters are all available. OPTKO provides LC Adapters with Standard and Premium two quality levels for choices, to better meet the different applications and requirements.

Ⓞ Features

- High precision alignment
- Compact design
- Low insertion loss
- High quality sleeves be used
- A full range of simplex, duplex and quad available
- Shutter option for eye protection of laser
- Telcordia, TIA/EIA and IEC compliance

Ⓞ Specification

Item	Value
Insertion Loss	Zirconia Sleeve: 0.10dB typical, ≤0.20dB Max Phosphor Bronze Sleeve: 0.15dB typical, ≤0.30dB Max
Durability	≤0.1dB typical change, 500 matings
Sleeve/Ferrule Withdrawal Force	2.0N ~ 5.9N (200gf ~ 600gf)
Operating Temperature	-40°C to +75°C

*The above Specifications were obtained by using OPTKO recommended products and procedures.

*Measured using JDSU meter and Master Jumper.



LC Simplex, Blue



LC Simplex, Green



LC Duplex RJ-45, Blue



LC Duplex RJ-45, Aqua

Adapter		Fiber Channel		Sleeve		Housing Color	
222	Standard	1	Simplex	1	Zirconia	L	Blue
227	Premium			2	Phosphor Bronze	G	Green
						B	Beige
						A	Aqua

Ordering Example: 227-11L

Adapter		Fiber Channel		Sleeve		Housing Color	
222	Standard	R	Duplex, RJ-45	1	Zirconia	L	Blue
227	Premium			2	Phosphor Bronze	G	Green
						B	Beige
						A	Aqua

Ordering Example: 227-R1L



One Piece, Duplex, Symmetrical, Blue



One Piece, Duplex, Symmetrical, Aqua



One Piece, Quad, Symmetrical, Green



One Piece, Quad, Symmetrical, Aqua

Adapter		Fiber Channel		Sleeve		Flange		Housing Color	
220	Premium One Piece	2S	Duplex, Symmetrical	1	Zirconia	1	With Flange	L	Blue
221	Standard 2pcs	4S	Quad, Symmetrical	2	Phosphor Bronze	2	No Flange	G	Green
222	Premium One Piece							B	Beige
227	Premium 2pcs							A	Aqua
								V	Violet

Ordering Example: 220-4S11-A



LC Inner Shutter, Duplex, Blue



LC Duplex Metal Adapter



LC Quad Metal Adapter

Adapter		Fiber Channel		Sleeve		Flange		Housing Color		Shutter	
225	Shutter	2S	Duplex, (With chip)	1	Zirconia	1	With Flange	L	Blue	I	Inner
		4S	Quad, Symmetrical	2	Phosphor Bronze	2	No Flange	G	Green		
								B	Beige		
								A	Aqua		
								V	Violet		

Ordering Example: 225-2S11-LI

SC Adapters

OPTKO provides a complete line of SC Adapters, with our high performance sleeves and plastic body, it performs well under high temperature and withdrawal force.

OPTKO SC Adapters are available both of singlemode and multimode with a zirconia sleeves or phosphor bronze sleeves, come as simplex, duplex with its plastic body with or without flange, at different housing colors. Along with the standard SC adapters, the One Piece, Shutter and Metal Housing SC adapters are all available. OPTKO is providing SC Adapters with Standard and Premium two quality levels for choices, to better suit different applications and requirements.

⊙ Features

- High precision alignment
- Low insertion loss
- High quality sleeves be used in solid plastic adapter body
- Choice of metal or plastic housing, mount styles & flange options
- Shutter option for eye protection of laser
- Telcordia, TIA/IEA, IEC and JIS compliance

⊙ Specification

Item	Value
Insertion Loss	Zirconia Sleeve: 0.10dB typical, ≤0.20dB Max Phosphor Bronze Sleeve: 0.15dB typical, ≤0.30dB Max
Durability	≤0.1dB typical change, 500 matings
Sleeve/Ferrule Withdrawal Force	2.0N ~ 5.9N (200gf ~ 600gf)
Operating Temperature	-40°C to +75°C

*The above Specifications were obtained by using OPTKO recommended products and procedures.

*Measured using JDSU meter and Master Jumper.



Simplex, With Flange, Green



Simplex, With Flange, Aqua



Duplex, With Flange, Blue



Duplex, With Flange, Black

Adapter		Fiber Channel		Sleeve		Flange		Color	
335	Standard	1	Simplex	1	Zirconia	1	With Flange	L	Blue
		2	Duplex	2	Phosphor Bronze	2	No Flange	G	Green
								B	Beige
								A	Aqua
								K	Black

Ordering Example: 335-111G



One Piece, Simplex, Blue



One Piece, Simplex, Green

Adapter		Fiber Channel		Sleeve		Flange		Color	
330	One Piece	1	Simplex	1	Zirconia	1	With Flange	L	Blue
		2	Duplex	2	Phosphor Bronze	2	No Flange	G	Green
								B	Beige
								A	Aqua
								K	Black

Ordering Example: 330-112G



Simplex Shutter, Type A



Simplex Shutter, Type B



Simplex Shutter, Type C



Simplex Shutter, Type D

Adapter		1. Fiber Channel		2.Sleeve		3. Flange		4. Color		5. Shutter	
336	Shutter	1	Simplex	1	Zirconia	1	With Flange	L	Blue	A	Type A
				2	Phosphor Bronze	2	No Flange	G	Green	B	Type B
								B	Beige	C	Type C
								A	Aqua	D	Type D
								K	Black		

Ordering Example 336-111GD



SC Metal, Simplex



SC Metal, Duplex Horizontal

Adapter		Fiber Channel		Sleeve	
333	Metal	1	Simplex	1	Zirconia
		2	Duplex Horizontal	2	Phosphor Bronze

Ordering Example: 333-21

FC Adapters

OPTKO provides a variety of FC Adapters in Round, Solid, Split and Oval mount configurations with a choice of zirconia or phosphor bronze sleeves. They perform well withdrawal force.

The FC Round and Square Adapters are available in the standard body styles with nickel plated brass or nickel plated zinc housing, they are available both of singlemode and multimode with different shape of flanges. OPTKO is providing FC Adapters with Standard and Premium two quality levels for choices, to better suit different applications and requirements. The plastic FC Adapters are available upon request.

⊙ Features

- High precision alignment
- Low insertion and back reflection loss
- NTT-FC compatibility
- Both of nickel plated brass or zinc housing are available
- Telcordia, TIA/IEA, IEC and JIS compliance

⊙ Specification

Item	Value
Insertion Loss	Zirconia Sleeve: 0.10dB typical, ≤0.20dB Max Phosphor Bronze Sleeve: 0.15dB typical, ≤0.30dB Max
Durability	≤0.1dB typical change, 500 matings
Sleeve/Ferrule Withdrawal Force	2.0N ~ 5.9N (200gf ~ 600gf)
Operating Temperature	-40°C to +75°C

*The above Specifications were obtained by using OPTKO recommended products and procedures.

Premium FC Adapters



FC'DD'Adapter



FC'D' Adapter



FC Solid Adapter



FC Split Adapter



FC Oval Adapter

Adapter		Flange		Sleeve		Key Width	
557	FC(Nickel Brass Plated)	1	'DD' , ø11mm	1	Zirconia	P	For PC Connector, 2.15mm
		2	'D' , ø14mm	2	Phosphor Bronze	A	For APC Connector, 2.05mm
		3	Solid				
		4	Split				
		5	Oval				
		6	Rectangular				

Ordering Example: 557-11P

ST Adapters

OPTKO provides a variety of ST Adapters in simplex and duplex configurations with choices of zirconia or phosphor bronze sleeves, in metal or plastic adapter housing.

The OPTKO ST Adapters are available both in singlemode and multimode versions.

Ⓞ Features

- Bayonet style housing for easy termination
- Epoxy and epoxy free versions
- High precision alignment
- Low insertion and back reflection

Ⓞ Specification

Item	Value
Insertion Loss	Zirconia Sleeve: 0.10dB typical, ≤0.20dB Max Phosphor Bronze Sleeve: 0.15dB typical, ≤0.30dB Max
Durability	≤0.1dB typical change, 500 matings
Sleeve/Ferrule Withdrawal Force	2.0N ~ 5.9N (200gf ~ 600gf)
Operating Temperature	-40°C to +75°C

*The above Specifications were obtained by using OPTKO recommended products and procedures.

*Measured using JDSU meter and Master Jumper.



ST Simplex, Metal Housing



ST Duplex, Metal Housing



ST Duplex, Plastic Housing

Adapter		Fiber Channel		Sleeve		Dust Cap Color	
999	Standard	1	Simplex, Metal Housing	1	Zirconia	R	Red
		2	Duplex, Metal Housing, Horizontal	2	Phosphor Bronze	Y	Yellow
		3	Duplex, Plastic Housing, Horizontal			K	Black

Ordering Example: 999-11Y

Hybrid Adapters

The OPTKO Hybrid Adapters offer a solution for any hybrid applications where different connectors incorporate into a system configuration or vice versa. The hybrid adapters' high-precision sleeve enables reliable mating of the ferrule diameters, ensuring low insertion and return loss. They are available with a square or rectangular flange, and metal or plastic housing.

OPTKO offers several types of Hybrid Adapters for singlemode and multimode fiber which are suitable for any industrial applications. Its design provides junction between SC/FC/ST/LC/MU/E-2000 connectors, both of Male and Female interface type. Custom models are also available and welcome to make.

Female To Female



LC-SC Standard Adapter



SC-FC Hybrid Adapter



SC-ST Hybrid Adapter



FC-ST Hybrid Adapter

Hybrid Adapter		Fiber Channel		Sleeve		Housing Material	
HLS	LC-MU	1	Simplex	1	Zirconia	1	All Metal
HLF	LC-FC	2	Duplex	2	Phosphor Bronze	2	All Plastic
HSF	SC-FC					3	All Metal
HSF	SC-ST						
HFT	FC-ST						

Ordering Example: HLS-1-1-2

Male To Female



Hybrid Adapter (Male-Female)		Fiber Channel		Housing Material	
MSF	SC(M) to FC(F)	1	Simplex	1	All Metal
MST	SC(M) to ST(F)			2	All Plastic
MSL	SC(M) to LC(F)			3	Metal + Plastic
MFS	FC(M) to SC(F)				
MFT	FC(M) to ST(F)				
MFL	FC(M) to LC(F)				

Ordering Example: MSL-12

Fixed Attenuators

The OPTKO plug-in fixed type attenuators are featured a proprietary type of metal-ion doped fiber which reduces the light signal as it passes through, providing the highest performance in the 1310, C and L Bands. They provide excellent optical characteristics including Low Polarization Dependent Loss (PDL) and stable and independent wavelength distribution. Connector styles include SC, FC, ST, LC and MU.

Ⓞ Features

- Male to female design
- Metal-ion doped fiber (continuous)
- Low back reflection
- Available with various connector types
- High durability with high handle power
- Attenuation levels ranging from 1dB to 30dB
- Wavelength independent

Ⓞ Specification

Item	Value
Operating wavelength	1310, 1490, and 1550nm
Attenuation Value	1 to 25dB
Return Loss	≥55dB(UPC) Typical
	≥60dB(APC)
Attenuation Tolerance	Standard: ≤5dB : ±0.5, 6 to 30dB : ±10%
	Premium: 1 to 10dB : ±0.5, 11 to 25 dB : ±5%
Maximum Handle Power	500mW
Operating Temperature	-40°C to +75°C

*Note: For full wavelength type 1270~1650nm, attenuation tolerance will be increased ±10%.

Male-Female



Attenuator		Type		Attenuation		*Customized	
ATP	Female-Male Fixed	SU	SC/UPC	01	1dB	R	Reference
		SA	SC/APC	02	2dB		
		FU	FC/UPC	05	5dB		
		FA	FC/APC		
		TU	ST/UPC	10	10dB		
		LU	LC/UPC	15	15dB		
		LA	LC/APC	20	20dB		
		MU	MU/UPC	25	25dB		
				30	30dB		

Ordering Example: ATP-SU-10R

Fast Connector

The OPTKO Fast Connector is a pre-polished, pre-assembled connector for field application, which is without polishing or adhesives. No need for epoxy curing and hand polishing at the installation field, makes the installations quickly and easily. An assembling jig for fix the fiber accurate cutting length, only a fiber cleaver will be required when terminating the connector.

Ⓞ Features

- No polishing, crimp tools required
- Highly stable and reliable
- Easily operation
- Termination within 1 minute
- 100% compatible with standard SC connectors
- Above 95% yield

Ⓞ Specification

Item	SC/UPC	SC/APC
Insertion Loss	0.20dB Typical, ≤0.4dB Max.	0.25dB Typical, ≤0.4dB Max.
Return Loss	≥40dB Typical	≥45dB Typical
Durability	≤0.2dB typical change	
Cable O.D.	3.0*2.0mm drop cable	
Operating Temperature	-40°C to +75°C	

Ⓞ Ordering Code

Part Number	Product Description	Remark
OKCN-SA	SC/APC Fast Connector	Green Housing, Black Boot
OKCN-SU	SC/UPC Fast Connector	Blue Housing, Black Boot

Single-fiber Protector

OPTKO offers high quality Splice Protection Sleeves, which are the industry standard for durable and lasting protection of single fiber splices.



⊙ Features

- Durable stability
- No influence to splice loss
- Strong protective ability
- Transparent and 12 colored available
- Wide operating temperature (-40~85°C)
- RoHS compliant

⊙ Specification

Model	Fusion Tube(mm)		Steel Rod(mm)		After Shrink(mm)		Tube Material		Strength Member	Standard Package (pcs/bag)
	O.D	L	O.D	L	O.D	L	Inner	Outer		
Larger Sleeves										
FSPS-01-L23	1.4	23	1.5	18	3.0	23	PE	EVA	Stainless Steel Rod	100
FSPS-01-L45	1.4	45	1.5	40	3.0	45	PE	EVA	Stainless Steel Rod	100
FSPS-01-L60	1.4	60	1.5	55	3.0	60	PE	EVA	Stainless Steel Rod	100
Standard Sleeves										
FSPS-01-T25	1.4	25	1.2	21	2.5	60	PE	EVA	Stainless Steel Rod	100
FSPS-01-T30	1.4	30	1.2	26	2.5	45	PE	EVA	Stainless Steel Rod	100
FSPS-01-T40	1.4	40	1.2	36	2.5	40	PE	EVA	Stainless Steel Rod	100
FSPS-01-T45	1.4	45	1.2	41	2.5	30	PE	EVA	Stainless Steel Rod	100
FSPS-01-T60	1.4	60	1.2	56	2.5	25	PE	EVA	Stainless Steel Rod	100
Mini/Micro Sleeves										
FSPS-01-M10	0.5	10	0.5	10	1.3	10	PE	EVA	Stainless Steel Rod	100
FSPS-01-M15	0.5	15	0.5	15	1.3	15	PE	EVA	Stainless Steel Rod	100
FSPS-01-M18	0.5	18	0.5	18	1.3	18	PE	EVA	Stainless Steel Rod	100
FSPS-01-M25	0.5	25	0.5	25	1.3	25	PE	EVA	Stainless Steel Rod	100
FSPS-01-M40	0.5	40	0.5	40	1.3	40	PE	EVA	Stainless Steel Rod	100

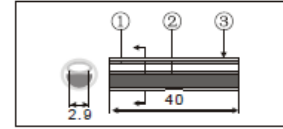
*Custom configuration and package are available upon request.

Connector		Fiber Channel		Steel Rod		Total Length		Boot Type	
351	FC/UPC 1pc	01	Simplex	L	Larger	25	25	T	Transparent
				T	Standard	40	40	R	Colored
				M	Mini/Micro	45	45		
						60	60		

Ordering Example: FSPS-01-T40T

Ribbon-fiber Protector

OPTKO offers high quality Splice Protection Sleeves, which are the industry standard for durable and lasting protection of 4/8/12 fiber ribbon respectively.



Multiple fiber splice protector for 12 fiber ribbons.

- ① Fusion tube
- ② Stainless steel rod (c
- ③ Heat-shrinkable tube

Ⓞ Features

- Durable stability
- No influence to splice loss
- Strong protective ability
- Wide operating temperature (-40~85°C)
- RoHS compliant

Ⓞ Specification

Model	Fiber Count	Total Length(mm)	Strength Member Length(mm)	Inner/Outer Tube Material	Strength Member Material	Sleeve Dimension After Shrink (Max, mm)
For Ribbon Fiber	Up to 8	30	25	EVA / EVA	Ceramic / Quartz	(OD)4.0x(L)30
		45	40	EVA / EVA	Ceramic / Quartz	(OD)4.0x(L)45
		60	55	EVA / EVA	Ceramic / Quartz	(OD)4.0x(L)60
	Up to 12	30	25	EVA / EVA	Ceramic / Quartz	(OD)5.0x(L)30
		45	40	EVA / EVA	Ceramic / Quartz	(OD)5.0x(L)45
		60	55	EVA / EVA	Ceramic / Quartz	(OD)5.0x(L)60

*Custom configuration and package are available upon request.

Code		Fiber Channel		Total Length		Strength Member	
FSPS	Splice Protection Sleeve	04	Ribbon (Up to 4)	30	30	1C	Simplex Ceramic
		08	Ribbon (Up to 8)	45	45	2C	Duplex Ceramic
		12	Ribbon (Up to 12)	60	60	1Q	Simplex Quartz

Ordering Example: FSPS-04-45-1C

OTDR Launching Cables

OTDR Launch cable is designed to aid in the testing of fiber optic cable when using an OTDR. The OTDR Launch Fiber box is used with Optical Time Domain Reflectometers (OTDR's) to help minimize the effects of the OTDR's launch pulse on measurement uncertainty. Available in different configurations and fiber lengths.



⊙ Features

- Standard boxes along with custom configurations for OTDR applications.
- Compact and rugged packaging.
- Portable for field use.
- Prevents fiber damage and ensures accurate results.
- Pulse suppressor, Launch Box, Delay Line, Installation/Testing, Training, Calibration.
- Compound latch for positive seal and easy opening with locking feature.
- Water and dust prove allowing the unit to be taken into almost any environment.
- Case can house up to 2,000 meters of fiber.
- Auto Purge Valve for changes in altitude and temperature.

Mechanical & Environmental Characteristics	
Dimension	23.8CMx 14.1CM x 6.7CM
Material	SR Polypropylene
Color	Yellow
Weight	0.75kg without fiber
Packaging	Rugged, hard-shell transit case
Storage Temperature	-40°C to +85°C
Operating Temperature	-40°C to +85°C
Humidity	0 to 95%, non-condensing

Fiber & Connector Characteristics	
Fiber Types	G652D, G657A, OM1, OM2, OM3, OM4
Fiber Length (m)	100 up to 2000 (max)
Lead Length	2 Meters, 3mm buffer
Typical Loss	<0.5dB @ 1310 for 1000 meters
Connector Type	SC/LC/FC/ST
Polish	PC, UPC, APC
Return Loss*	UPC>=50dB, APC>=60dB, PC>=35dB
Repeatability (dB)	<=0.2 (1000 times)

OTDR Launching Cables	Connector Type		Fiber Type		Fiber Length	
	Input Connector	Output Connector				
FOTC						
	LU	LC/UPC	9	SM OS2	05	500m
	LA	LC/APC	7	G.657.A1	10	1000m
	SU	SC/UPC	20	20000m
	SA	SC/APC		
	FU	FC/UPC				
	FA	FC/APC				
	TU	ST/UPC				
				

Ordering Example: FOTC-SASA9-10