

Mini Armored FO Cable Series



凯鸿科技
KAIPHONE

OPTIC COMMUNICATION BUSINESS UNIT

✦ Protector of Optic Fiber

Kaiphone Communication Co.,Ltd.

励精图治 锲而不舍



Profile of Kaiphone Optical Communication Business Unit

Optical Communication Business Unit is one of the organizations of Kaiphone Group. From 2000, Kaiphone began to call in optical experts, established the Optical Communication Business Unit, and then, launched into the research, development and production of Mini Armored Fiber Optic Cable, meantime, merged with the longtime rich mechanical knowledge and experience, developed innovative products, designed various effective solutions for the customer. While the demand for optical fiber in high-speed and wide brand network, indicates the endless prosperous future too.

Kaiphone Optical Communication Business Unit equipped with optical professional technique and longtime skillful mechanical design experience, makes the optic fiber patch cord can be electric cable-like handling and easy to install. They are widely used in Optical Communication System, LAN, CATV, CO, Military, Optical Sensor System and etc. Its unique mechanical performance makes the installation and replacement much more easily, promotes the durability of Fiber optic, extends the life of fiber optic, reduces the cost for the end customer, and increases the benefit.

In 2001, Kaiphone Optical Communication Business Unit started to develop the application solutions for optical communication, and began to produce Mini Armored Optic Fiber Cable series products -- Armored Fiber Optic Patch Cord, Armored Fiber Optic Coupler, Armored Dispatching Patch Cord, Mini Armored Fiber Optic Cable and Sensing Cable. Moreover, resorting to the perfect sales network and excellent afterservice, Kaiphone products entered into the market quickly, and got the reliance and support from China Mobile, China Telecom and other well-known customers.

Quality builds the brand. In 2004, our products got the below certification successively --- Practicable New Pattern Patent Certificate, Network Access License for Telecommunication Equipment and TLC; the Certificate of Network Access for Broadcast Equipment, SGS authorization and UL certificate, which provides quality guarantee further for Kaiphone products. Our team believes that providing the most excellent products and service can bring optimal income for the customer definitely.

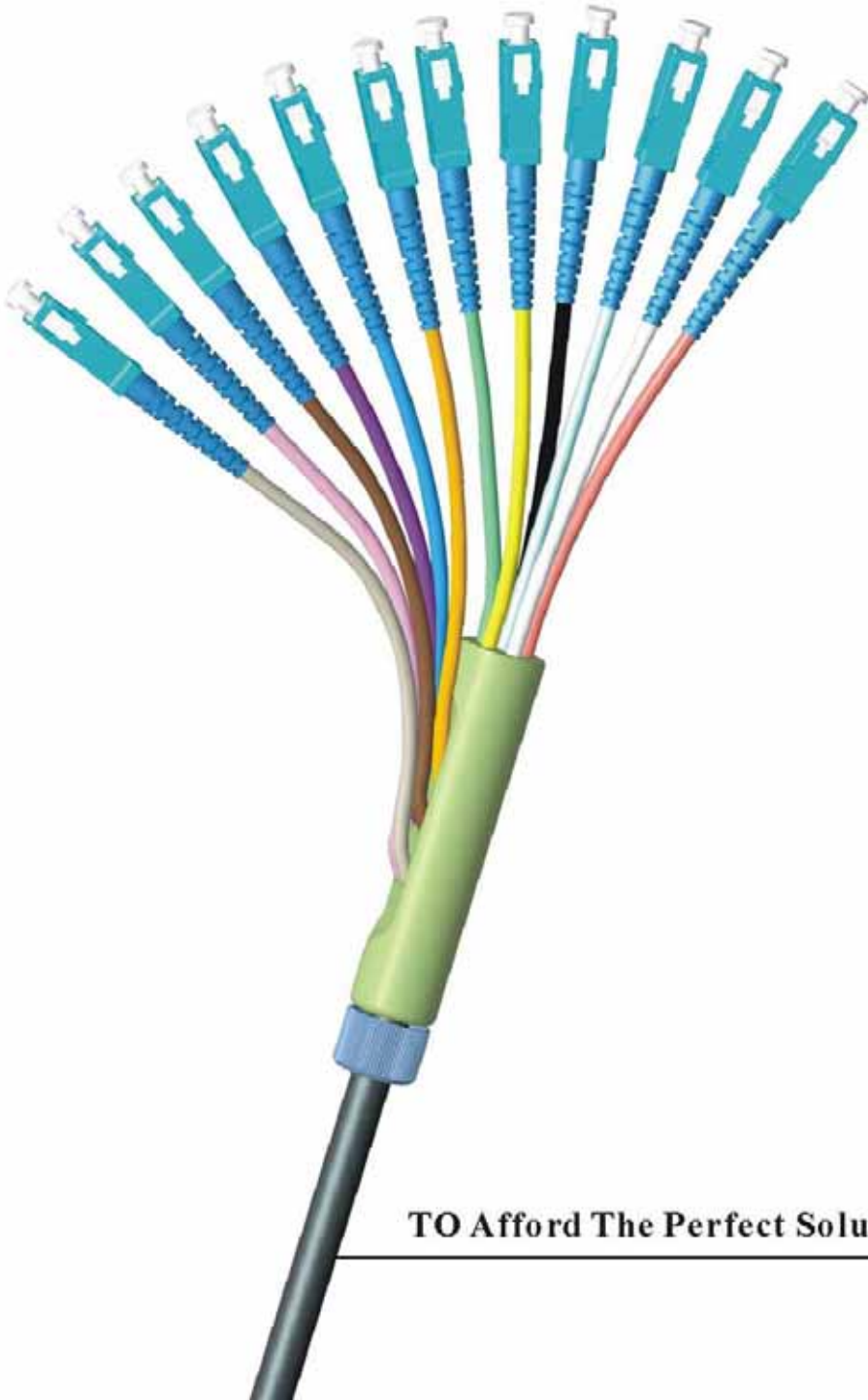
To face the future, our team is full of confidence. We will make great efforts to develop photoelectric communication products, provide new FTTH solutions, design high-grade wiring solutions and etc. Kaiphone Optical Communication Business Unit will continue to take quality and innovation as the basis of enterprise developing, dedicate to the development of Optical Communication Industry, and provide first-class products and service for our customer !





CONTENTS

- 1、 **Aromred Optical Fiber Patch Cord**
 - Simplex FO Patch Cord**
 - Duplex FO Patch Cord**
- 2、 **Armored Optical Fiber Coupler**
- 3、 **Optical Dispatching Patch Cord**
- 4、 **Optical Dispatching Patch Cord for Emergency**
- 5、 **Optical Dispatching Patch Cord for Live Broadcasting**
- 6、 **HDTV Video Camera Connection Assemble**
- 7、 **Mini Armored Optical Fiber Cable**



TO Afford The Perfect Solution To Our Customers Is Our Tenet

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開拓創新

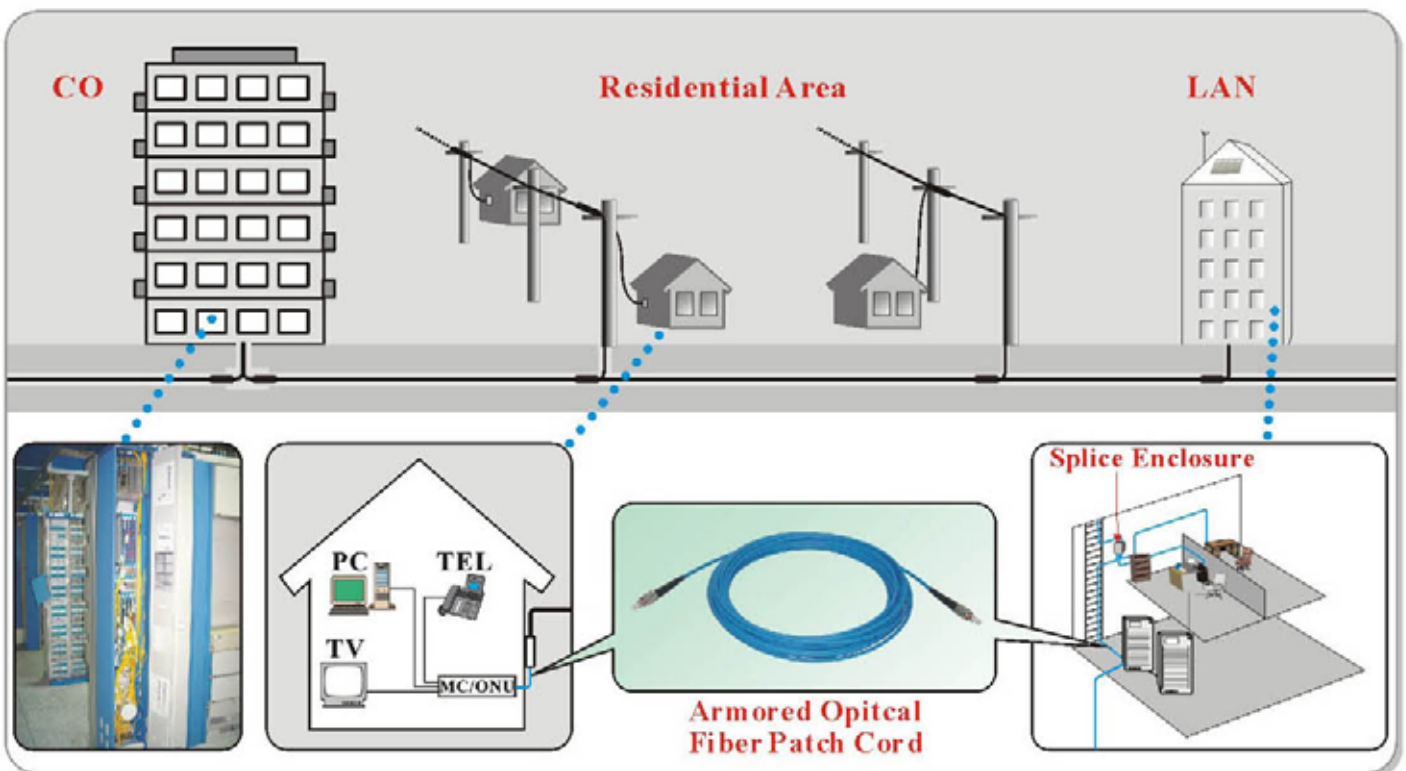
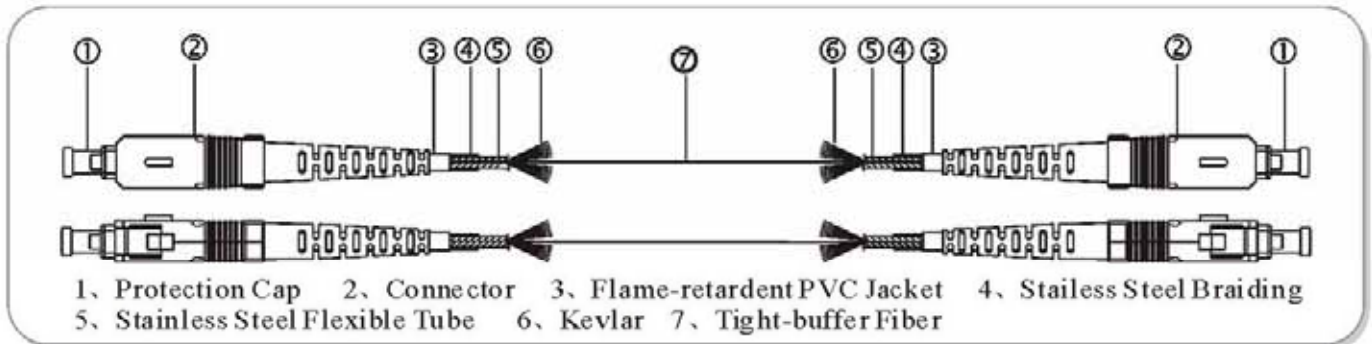
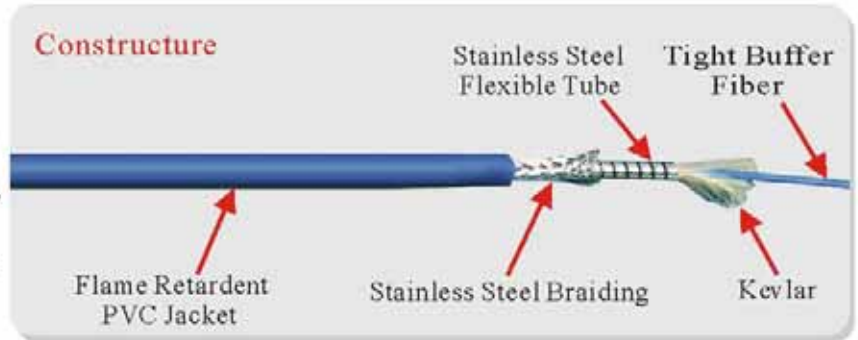
It is available to deploy directly without additional protecting tube in CO or any harsh environment, thus, it can save the space, low down the construction cost, and make the maintenance very convenient; moreover, because it is protected by stainless steel flexible tube from destroyed, it can improve the safety and stability of whole system.



Micro Armored FO Cable Series—Simplex Armored FO Patch Cord

Characteristics:

- Protected by mini diameter stainless tube
- Avoid improper twisting
- High tensile resistance and pressure resistance
- Electric cable-like handling and easy to install, adapt to any harsh condition.
- Needn't worry about the destroy by outside force
- Reduce the maintenance cost



Compared with the Traditional FO Patch Cord



1. The Traditional FO Patch Cord needs additional protection from corrugate tube which occupies more space and limits the possibility of extending. The Armored FO Patch Cord can be deployed directly without additional protection, and have high performance of tensile, pressure resistance. Most suitable for using in harsh environment.

2. The remaining length of traditional FO patch cord can only be put inside the ODF which makes the ODF full and disorder, delay the efficiency of dispatching and allotting FO patch cord under a emergency. The armored FO patch cord can be put outside the ODF and on the rack directly, easy to handle and expand.



JE-1-FC-1-FC-S1-33-B

● Specification:

	Single Mode		
	PC	UPC	APC
Insert Loss	≤0.2dB	≤0.2dB	≤0.2dB
Return Loss	≥45dB	≥55dB	≥65dB
Repeatability	≤0.1dB	≤0.1dB	≤0.1dB
Operating Temperature	-40℃~+85℃		
O.D.	φ 3.3mm, φ 3.0mm		



JE-1-FC-1-LC-S1-25-B

● Specification:

	Single Mode		
	PC	UPC	APC
Insert Loss	≤0.2dB	≤0.2dB	≤0.2dB
Return Loss	≥45dB	≥55dB	≥65dB
Repeatability	≤0.1dB	≤0.1dB	≤0.1dB
Operating Temperature	-40℃~+85℃		
O.D.	φ 2.5mm		



JE-1-FC-1-MU-S1-25-B

● Specification:

	Single Mode		
	PC	UPC	APC
Insert Loss	≤0.2dB	≤0.2dB	≤0.2dB
Return Loss	≥45dB	≥55dB	≥65dB
Repeatability	≤0.1dB	≤0.1dB	≤0.1dB
Operating Temperature	-40℃~+85℃		
O.D.	φ 2.5mm		



JE-1-FC-1-SC-S1-33-B

● Specification:

	Single Mode		
	PC	UPC	APC
Insert Loss	≤0.2dB	≤0.2dB	≤0.2dB
Return Loss	≥45dB	≥55dB	≥65dB
Repeatability	≤0.1dB	≤0.1dB	≤0.1dB
Operating Temperature	-40℃~+85℃		
O.D.	φ 3.3mm, φ 3.0mm		



JE-1-FC-1-ST-S1-33-B

● Specification:

	Single Mode		
	PC	UPC	APC
Insert Loss	≤0.2dB	≤0.2dB	≤0.2dB
Return Loss	≥45dB	≥55dB	≥65dB
Repeatability	≤0.1dB	≤0.1dB	≤0.1dB
Operating Temperature	-40℃~+85℃		
O.D.	φ 3.3mm, φ 3.0mm		



JE-1-SC-1-SC-S1-33-B

● Specification:

	Single Mode		
	PC	UPC	APC
Insert Loss	≤0.2dB	≤0.2dB	≤0.2dB
Return Loss	≥45dB	≥55dB	≥65dB
Repeatability	≤0.1dB	≤0.1dB	≤0.1dB
Operating Temperature	-40℃~+85℃		
O.D.	φ 3.3mm, φ 3.0mm		

● Recommended Application

- Communication Office
- FTTH
- LAN
- Test Equipment
- National Defence
- Measure Equipment
- Optical Sensor
- Optical fiber Communication
- CATV
- PON Component and Equipment

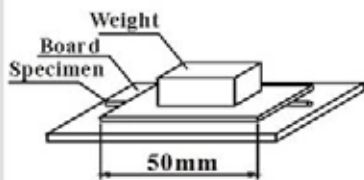


The remain length can be wrapped into a reel and put on the ODF, which make the inside of ODF more orderly



Applied in the CO

The armored members Protect the fiber from destruction of improper handling and adap to the harsh environment



Type	Weight Load	Testing Result
Traditional	10kg	10The fiber break out
Armored	300kg	Deforming Rate of Armored Tube >50% FO is still working



JE-1-SC-1-ST-S1-33-B

● Specification:

	Single Mode		
	PC	UPC	APC
Insert Loss	≤0.2dB	≤0.2dB	≤0.2dB
Return Loss	≥45dB	≥55dB	≥65dB
Repeatability	≤0.1dB	≤0.1dB	≤0.1dB
Operating Temperature	-40℃~+85℃		
O.D.	φ 3.3mm, φ 3.0mm		



JE-1-SC-1-LC-S1-25-B

● Specification:

	Single Mode	
	PC	UPC
Insert Loss	≤0.2dB	≤0.2dB
Return Loss	≥45dB	≥55dB
Repeatability	≤0.1dB	≤0.1dB
Operating Temperature	-40℃~+85℃	
O.D.	φ 2.5mm	



JE-1-SC-1-MU-S1-25-B

● Specification:

	Single Mode	
	PC	UPC
Insert Loss	≤0.2dB	≤0.2dB
Return Loss	≥45dB	≥55dB
Repeatability	≤0.1dB	≤0.1dB
Operating Temperature	-40℃~+85℃	
O.D.	φ 2.5mm	



JE-1-ST-1-ST-S1-33-B

● Specification:

	Single Mode		
	PC	UPC	APC
Insert Loss	≤0.2dB	≤0.2dB	≤0.2dB
Return Loss	≥45dB	≥55dB	≥65dB
Repeatability	≤0.1dB	≤0.1dB	≤0.1dB
Operating Temperature	-40℃~+85℃		
O.D.	φ 3.3mm, φ 3.0mm		



JE-1-ST-1-LC-S1-25-B

● Specification:

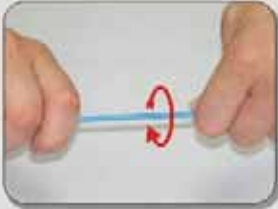
	Single Mode	
	PC	UPC
Insert Loss	≤0.2dB	≤0.2dB
Return Loss	≥45dB	≥55dB
Repeatability	≤0.1dB	≤0.1dB
Operating Temperature	-40℃~+85℃	
O.D.	φ 2.5mm	



JE-1-ST-1-MU-S1-25-B

● Specification:

	Single Mode	
	PC	UPC
Insert Loss	≤0.2dB	≤0.2dB
Return Loss	≥45dB	≥55dB
Repeatability	≤0.1dB	≤0.1dB
Operating Temperature	-40℃~+85℃	
O.D.	φ 2.5mm	



Resist improper twisting



Strong performance of pressure resistance



The armored FO patch cord secures transmission power, avoid extra attenuation due to over tie



Tie 12 Fibers to a bundle	Attenuation before tie up	
	Traditional	Armored
ID of tied belt: 1mm	0.07dB	0.07dB

Tie 12 Fibers to a bundle	Attenuation after tie up	
	Traditional	Armored
ID of tied belt: 1mm	0.58dB	0.07dB

Tie 12 Fibers to a bundle	Variation of attenuation	
	Traditional	Armored
ID of tied belt: 1mm	>0.5dB	<0.01dB



JE-1-LC-1-LC-S1-25-B

● Specification:

	Single Mode	
	PC	UPC
Insert Loss	≤0.2dB	≤0.2dB
Return Loss	≥45dB	≥55dB
Repeatability	≤0.1dB	≤0.1dB
Operating Temperature	-40°C~+85°C	
O.D.	φ2.5mm	



JE-1-LC-1-MU-S1-25-B

● Specification:

	Single Mode	
	PC	UPC
Insert Loss	≤0.2dB	≤0.2dB
Return Loss	≥45dB	≥55dB
Repeatability	≤0.1dB	≤0.1dB
Operating Temperature	-40°C~+85°C	
O.D.	φ2.5mm	



JE-1-MU-1-MU-S1-25-B

● Specification:

	Single Mode	
	PC	UPC
Insert Loss	≤0.2dB	≤0.2dB
Return Loss	≥45dB	≥55dB
Repeatability	≤0.1dB	≤0.1dB
Operating Temperature	-40°C~+85°C	
O.D.	φ2.5mm	



JE-1-MTRJ-1-MTRJ/M-S1-33-B

● Specification:

	Single Mode
Insert Loss	≤0.75dB
Return Loss	≥35dB
Repeatability	≤0.1dB
Operating Temperature	-40°C~+85°C
O.D.	φ3.3mm

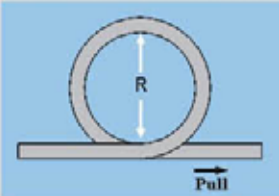


High tensile resistance



Gentle and flexible

The armored members protect the fiber from destruction of improper handling and adapt to the harsh environment



Bending Radius (R)	Attenuation before bending	
	Traditional	Armored
30mm	0.07dB	0.07dB
25mm	0.07dB	0.07dB

Bending Radius (R)	Attenuation after bending	
	Traditional	Armored
30mm	0.07dB	0.07dB
25mm	0.27dB	0.25dB

Bending Radius (R)	Variation of attenuation	
	Traditional	Armored
30mm	0dB	0dB
25mm	0.2dB	0.18dB



JE-1-FC-1-FC-G2-33-G

●Specification:

	Multi-mode
Insert Loss	≤0.3dB
Return Loss	—
Repeatability	≤0.1dB
Operating Temperature	-40℃~+85℃
O.D.	φ 3.3mm, φ 3.0mm



JE-1-FC-1-SC-G2-33-G

●Specification:

	Multi-mode
Insert Loss	≤0.3dB
Return Loss	—
Repeatability	≤0.1dB
Operating Temperature	-40℃~+85℃
O.D.	φ 3.3mm, φ 3.0mm



JE-1-FC-1-ST-G2-33-G

●Specification:

	Multi-mode
Insert Loss	≤0.3dB
Return Loss	—
Repeatability	≤0.1dB
Operating Temperature	-40℃~+85℃
O.D.	φ 3.3mm, φ 3.0mm



JE-1-FC-1-LC-G2-25-G

●Specification:

	Multi-mode
Insert Loss	≤0.3dB
Return Loss	—
Repeatability	≤0.1dB
Operating Temperature	-40℃~+85℃
O.D.	φ 2.5mm



JE-1-FC-1-MU-G2-25-G

●Specification:

	Multi-mode
Insert Loss	≤0.3dB
Return Loss	—
Repeatability	≤0.1dB
Operating Temperature	-40℃~+85℃
O.D.	φ 2.5mm



JE-1-SC-1-SC-G2-33-G

●Specification:

	Multi-mode
Insert Loss	≤0.3dB
Return Loss	—
Repeatability	≤0.1dB
Operating Temperature	-40℃~+85℃
O.D.	φ 3.3mm, φ 3.0mm



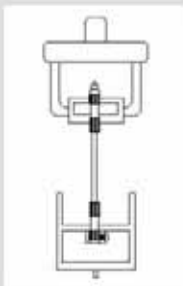
Prevent Mouse Bite



Anti Trample



The armored member protect the fiber from destroying by improper handling and suitable for using in harsh environment



Type	Weight Load	Result
Traditional	10kg	Optical fiber break out
Armored	20kg	Optical fiber break out

Specimen Length: 1M
Tensile velocity: 50mm/min



JE-1-SC-1-ST-G2-33-G

●Specification:

	Multi-mode
Insert Loss	≤0.3dB
Return Loss	—
Repeatability	≤0.1dB
Operating Temperature	-40℃~+85℃
O.D.	φ 3.3mm, φ 3.0mm



JE-1-SC-1-LC-G2-25-G

●Specification:

	Multi-mode
Insert Loss	≤0.3dB
Return Loss	—
Repeatability	≤0.1dB
Operating Temperature	-40℃~+85℃
O.D.	φ 2.5mm



JE-1-SC-1-MU-G2-25-G

●Specification:

	Multi-mode
Insert Loss	≤0.3dB
Return Loss	—
Repeatability	≤0.1dB
Operating Temperature	-40℃~+85℃
O.D.	φ 2.5mm



JE-1-ST-1-ST-G2-33-G

●Specification:

	Multi-mode
Insert Loss	≤0.3dB
Return Loss	—
Repeatability	≤0.1dB
Operating Temperature	-40℃~+85℃
O.D.	φ 3.3mm, φ 3.0mm



JE-1-ST-1-LC-G2-25-G

●Specification:

	Multi-mode
Insert Loss	≤0.3dB
Return Loss	—
Repeatability	≤0.1dB
Operating Temperature	-40℃~+85℃
O.D.	φ 2.5mm



JE-1-ST-1-MU-G2-25-G

●Specification:

	Multi-mode
Insert Loss	≤0.3dB
Return Loss	—
Repeatability	≤0.1dB
Operating Temperature	-40℃~+85℃
O.D.	φ 2.5mm



Good moistureproof performance



Very good applicability and deploying easily

The armored member protect the fiber from destroying by improper handling and suitable for using in harsh environment

Excellent Twist-resistant Performance



Specimen length: 1M, fixing one end and hang a weight of 2kg on the other end.	Bc for twisting	
	Traditional	Armored
Twisting for 2.5 circle	0.07dB	0.07dB

Specimen length: 1M, fixing one end and hang a weight of 2kg on the other end.	After twisting	
	Traditional	Armored
Twisting for 2.5 circle	0.18dB	0.11dB

Specimen length: 1M, fixing one end and hang a weight of 2kg on the other end.	Variation of attenuation	
	Traditional	Armored
Twisting for 2.5 circle	>0.1dB	<0.05dB

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JE-1-LC-1-LC-G2-25-G

●Specification:

	Multi-mode
Insert Loss	≤0.3dB
Return Loss	—
Repeatability	≤0.1dB
Operating Temperature	-40℃~+85℃
O.D.	φ2.5mm



JE-1-LC-1-MU-G2-25-G

●Specification:

	Multi-mode
Insert Loss	≤0.3dB
Return Loss	—
Repeatability	≤0.1dB
Operating Temperature	-40℃~+85℃
O.D.	φ2.5mm



JE-1-MU-1-MU-G2-25-G

●Specification:

	Multi-mode
Insert Loss	≤0.3dB
Return Loss	—
Repeatability	≤0.1dB
Operating Temperature	-40℃~+85℃
O.D.	φ2.5mm



JE-1-MTRJ-1-MTRJ/M-G2-33-G

●Specification:

	Multi-mode
Insert Loss	≤0.3dB
Return Loss	—
Repeatability	≤0.1dB
Operating Temperature	-40℃~+85℃
O.D.	φ3.3mm



The Armored Duplex-cores FO Patch Cord can be deployed in the CO without additional protect, satisfies the outdoor environment, which saves much space, low down the cost of deployment, improve the reliability and the the PO network and make the maintenance more convenient.



Mini Armored OF Cable Series — Armored Duplex-cores Patch Cord

Features:

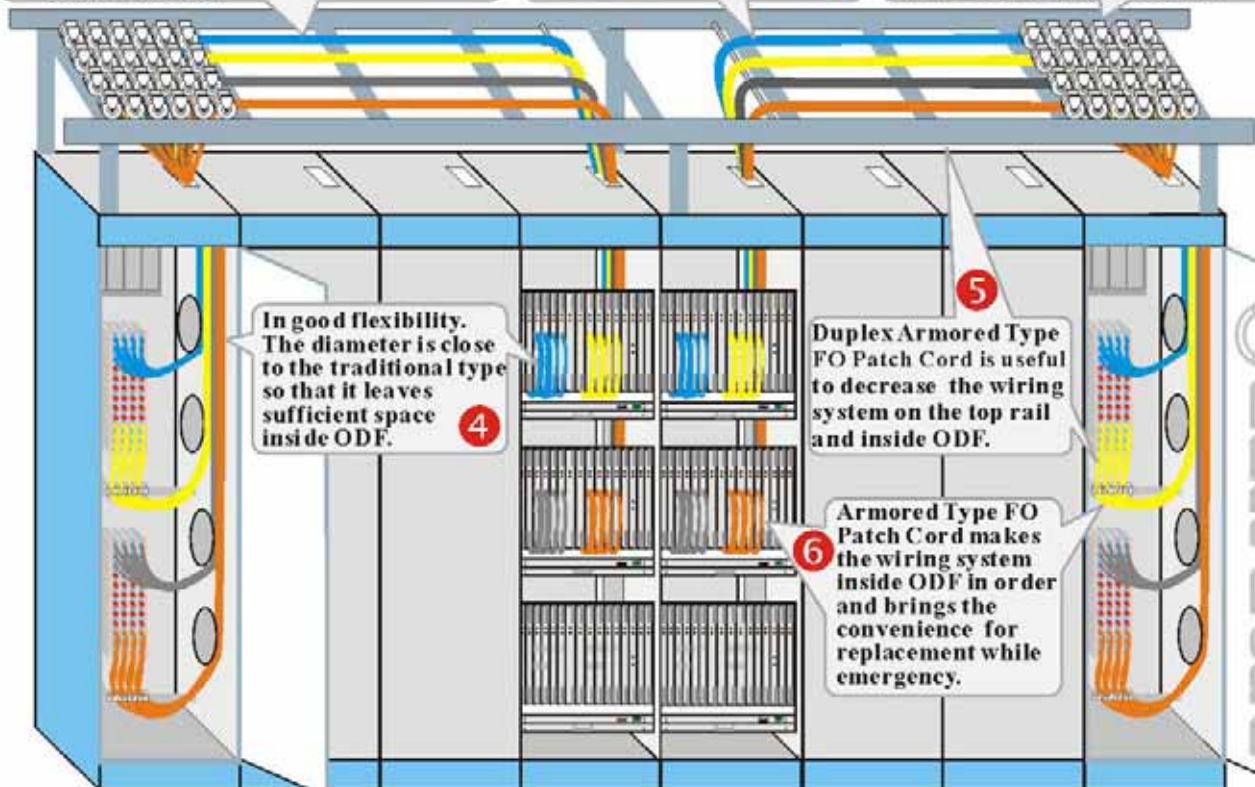
- Deploy easily and reduce the cost of wiring, improve the inside situation of the ODF
- The fibers are protected by the stainless steel flexible with mini diameter
- Stronger tensile, pressure and twist resistance
- Deploy more easily and no need to worry about the destruction of OF from wiring and maintaining, avoid improper operation and satisfied for the outdoor environment
- Low attenuation makes sure the quality of transmission of signal
- The cables in the CO became more orderly extending and replacing become easily, reduce the cost of remaintenance



1 The SUS flexible armored tube in micro diameter introduces the great promotion for communication safety in CO because of its excellent performance in resisting/preventing pull strength, pressing, bending, improper twisting and the bite of ants or mice.

Armored type FO patch cord can be handled as easy as an electric wire and deployed directly. Easy and quick for installation/maintenance. **2**

The surplus lengths of armored type of FO Patch Cord can be kept on the top rail in several rolls. Easy and quick for new installation and replacement. **3**



4 In good flexibility. The diameter is close to the traditional type so that it leaves sufficient space inside ODF.

5 Duplex Armored Type FO Patch Cord is useful to decrease the wiring system on the top rail and inside ODF.

6 Armored Type FO Patch Cord makes the wiring system inside ODF in order and brings the convenience for replacement while emergency.

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Long distance transmission, save cost and space of ODF

● Features

- Mini diameter stainless steel flexible tube as safeguard
- High tensile and pressure resistance, avoid mouse bit
- No need to worry about the destruction from deployment and maintenance, wire more easily
- Low attenuation makes sure the quality of transmission
- Capable for rough environment and improper operation
- Make the cable more regular in the ODF, extending and Replacing become more convenient and save the cost of Wiring and maintaining

● Application

- Communication Office
- FTTH
- LAN
- Test Equipment
- National Defence
- Measure Equipment
- OF sensor
- FO communication system
- CATV
- PON component and Equipment



JE-2-SC-2-SC-S1-33-B

● Specification:

	Single Mode		
	PC	UPC	APC
Insert Loss	≤0.2dB	≤0.2dB	≤0.2dB
Return Loss	≥45dB	≥55dB	≥65dB
Repeatability	≤0.1dB	≤0.1dB	≤0.1dB
Operating Temperature	-40℃~+85℃		
O.D.	φ3.3mm		



JE-2-FC-2-FC-S1-33-B

● Specification:

	Single Mode		
	PC	UPC	APC
Insert Loss	≤0.2dB	≤0.2dB	≤0.2dB
Return Loss	≥45dB	≥55dB	≥65dB
Repeatability	≤0.1dB	≤0.1dB	≤0.1dB
Operating Temperature	-40℃~+85℃		
O.D.	φ3.3mm		



JE-2-SC-2-FC-S1-33-B

● Specification:

	Single Mode		
	PC	UPC	APC
Insert Loss	≤0.2dB	≤0.2dB	≤0.2dB
Return Loss	≥45dB	≥55dB	≥65dB
Repeatability	≤0.1dB	≤0.1dB	≤0.1dB
Operating Temperature	-40℃~+85℃		
O.D.	φ3.3mm		



JE-2-SC-2-SC-G2-33-G

● Specification:

	Multi-mode
Insert Loss	≤0.3dB
Return Loss	—
Repeatability	≤0.1dB
Operating Temperature	-40℃~+85℃
O.D.	φ3.3mm



JE-2-FC-2-FC-G2-33-G

● Specification:

	Multi-mode
Insert Loss	≤0.3dB
Return Loss	—
Repeatability	≤0.1dB
Operating Temperature	-40℃~+85℃
O.D.	φ3.3mm



JE-2-SC-2-FC-G2-33-G

● Specification:

	Multi-mode
Insert Loss	≤0.3dB
Return Loss	—
Repeatability	≤0.1dB
Operating Temperature	-40℃~+85℃
O.D.	φ3.3mm

Real-time
Monitoring
on line

● **Features**

- Macro diameter stainless steel flexible tube as safeguard
- High tensile and pressure resistance, avoid mouse bit
- No need to worry about the destruction from deployment and maintance,wire more easily
- Low attenuatino makes sure the quality of transmission
- Capable for rough envirnmen and improper operation
- Make the cable more regular in the ODF, extending and replacing become more convenient and save the cost of wiring and maintaining

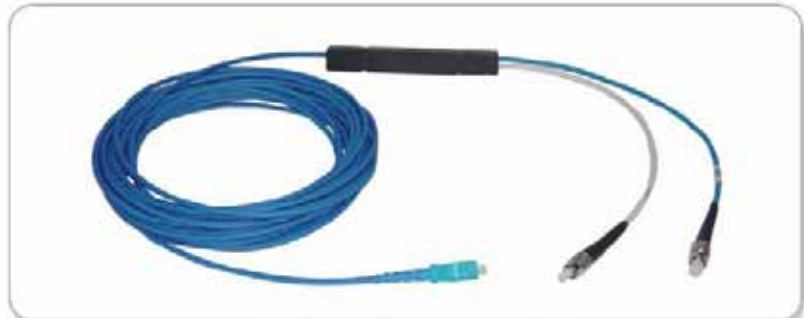
● **Application**

- Low insert loss
- Low additional Loss
- Well uniformity
- Low PDL
- High stability and reliability

● **Application**

- Communication Office
- FTTH
- LAN
- Test Equipment
- FO communication system
- CATV

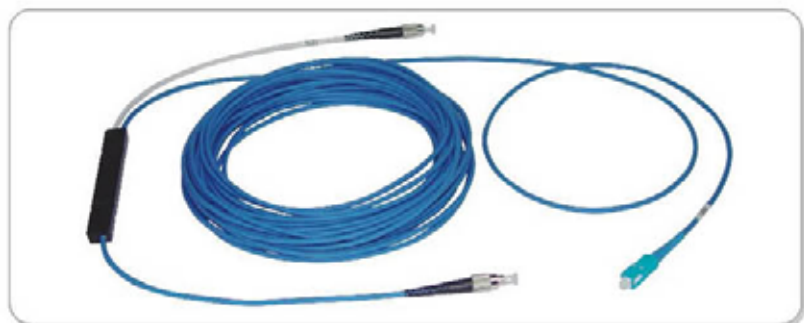
Armored Optical Fiber couplers are mainly applied to split and control optical signals, and have the features of low loss and well uniformity, high stability and reliability. Widely used in FO communication, CATV, LAN, etc.



JE-1-SC-2-FC-S1-P-33-B

● **Specifications**

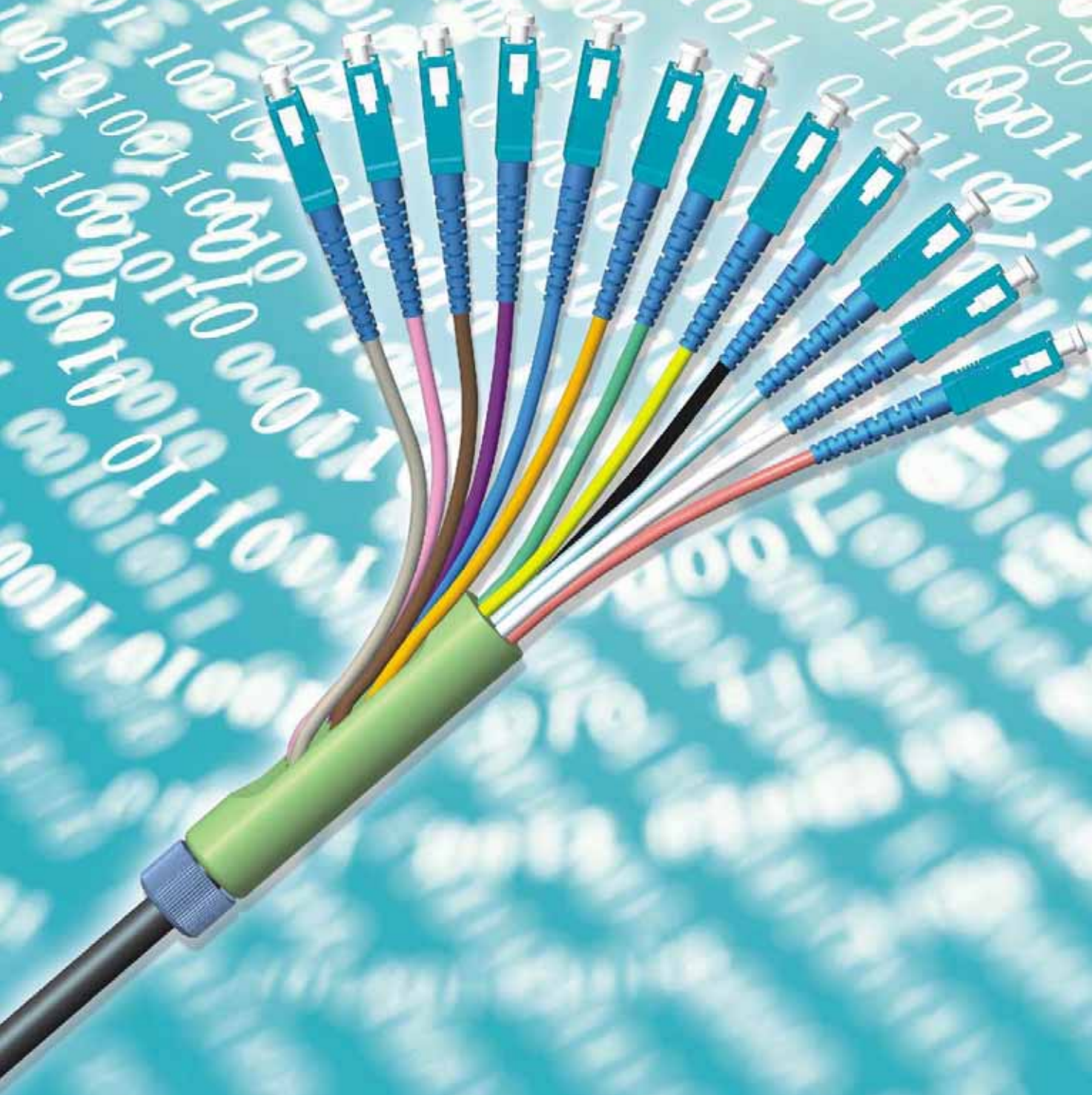
Item	Grade	P	A
		Operating Wavelength (nm)	1310, 1550 or Other
Operating Waveband (nm)	±20		
Addition Loss(dB)		≤0.1	≤0.15
Insert Loss (dB)	50/50	≤3.6	≤3.8
	40(White)/60(Blue)	≤4.6/2.8	≤4.8/3.0
	20(White)/80(Blue)	≤7.7/1.4	≤7.9/1.5
	10(White)/90(Blue)	≤11/0.8	≤11.7/1.0
PDL (dB)		≤0.10	≤0.15
Directivity (dB)		≥55	
Operating Temperature		-40℃~+85℃	
Fiber Length		To any specified length	



JE-2-FC-1-SC-S1-P-33-B

信息传输

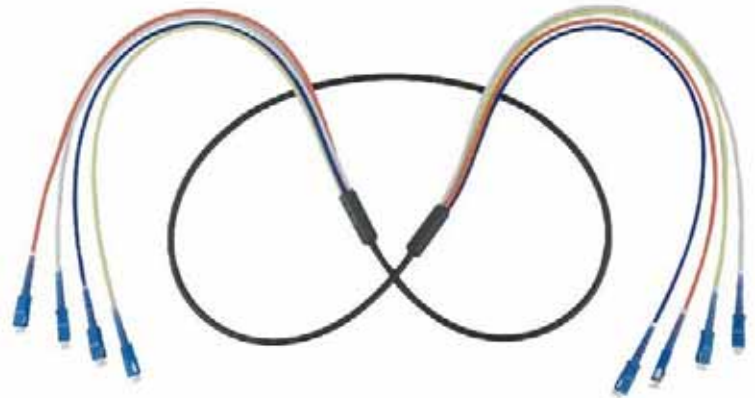
无限连接





● **Features**

- Protected by stainless steel flexible tube, prevent high pull strength, pressing, twist and mouse bite
- Electric cable-like handling and easy to install, adapt to any harsh condition
- The PVC coating is optional with 12 standard colors(IEC 6030) for easy identification
- The connectors are optional with FC/SC/ST/MU/LC which are compatible with international standard



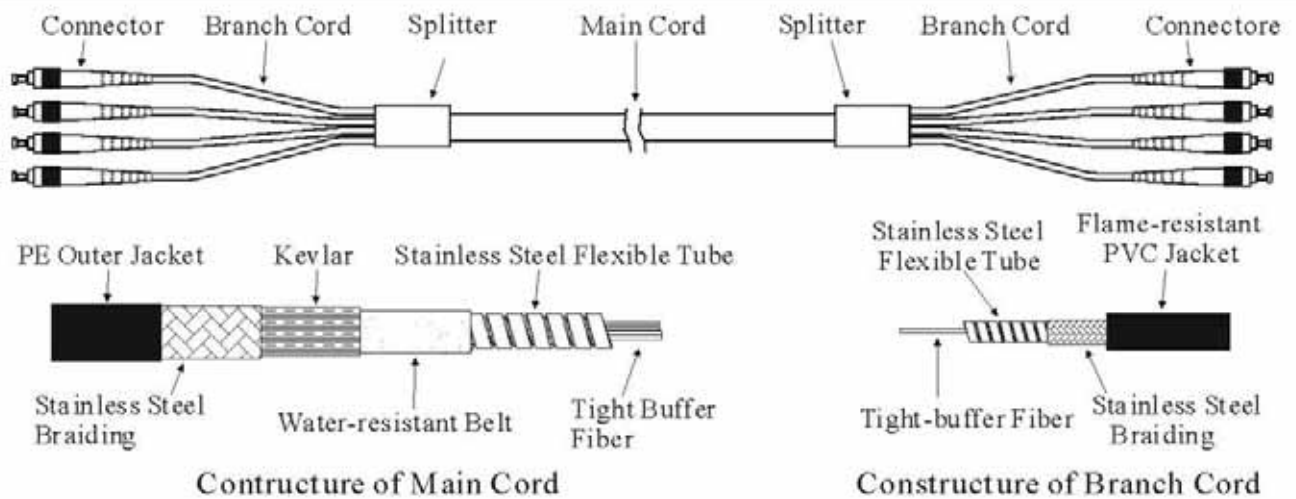
● **The Constructure of the Main Cable of the Patch Cord**

4~12 cores ϕ 0.6 colored tight buffer fibers (Optional with Single-mode, Multi-mode <50/125, 62.5/125>, OM2, OM3, G.655)+Stainless steel flexible tube +water-resistant belt +Kevlar+Stainless steel braiding+Outer Jacket (Optional with various materials)

● **Constructure of the Dispatching Patch Cord**

- 1、Main cable +Splitter+Breakout subcable (ϕ 2.5、 ϕ 3.3 Armored type<Tensile-resistant:300N>) + Connectors
- 2、Main cable+Splitter+Breakout subcable (ϕ 3.0 PVC Jacket <Tensile-resistance:100N>) +Connectors
- 3、Main cable + Splitter + Breakout subcable (ϕ 0.6 Tight-buffer fiber <Tensile resistance:15N>) +Connectoers

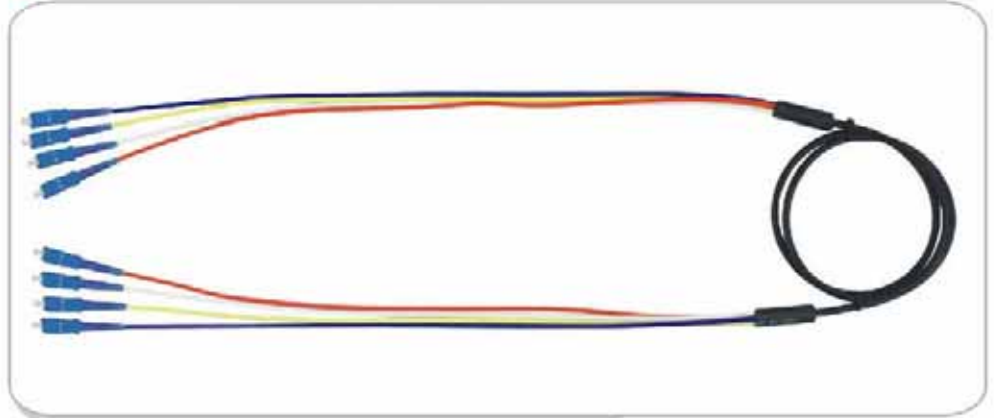
● **Constructure of Dispatching FO Patch Cord**



Features

1. High strength and weight ratio design, compact construction make wiring more easily and save more space
2. The PE outer jacket and water-resistant belt prevent the fiber from water and humidity, ensure the reliability of transmission

JS-4-SC-4-SC-S1-P-60-BL-30M



Specification

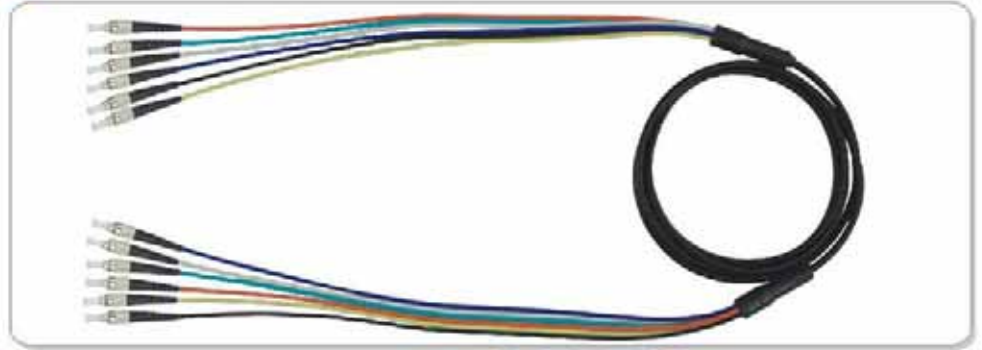
Fiber Type	Single Mode			Multi-mode
	PC	UPC	APC	PC
Core Count	4, 6, 8, 12			
Connector Type	SC/FC/ST/LC/MU/MT-RJ			
Insert Loss	≤0.2dB	≤0.2dB	≤0.2dB	≤0.3dB
Return Loss	≥45dB	≥50dB	≥60dB	---
Repeatability	≤0.1dB			
Vibratility	≤0.2dB			
Interconvertity	≤0.2dB			
Pressure Resistance	≤300kg			
Operating Temperature	-40℃~+85℃			
Tensile Resistance	Branch Cord	15kg		
	Main Cord	100kg		
Outer Dia.	Branch Cord	2.5/3.3mm ±0.1mm		
	Main Cord	6.0/6.9mm ±0.1mm		
Cable Length	Custom length available upon request			



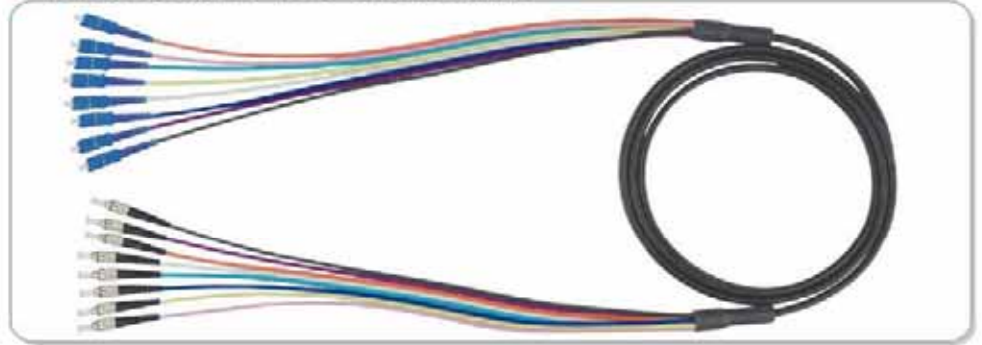
● **Application**

1. Connecting between multi-cores with one assemble in the ODF
2. Satisfy for wiring in building
3. Widly use in communicatin between floors in emergency
4. Most suitable for the transmittion in the last 100-meter of FTTH

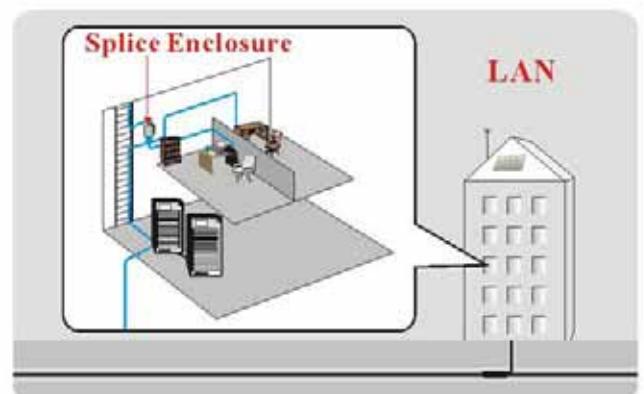
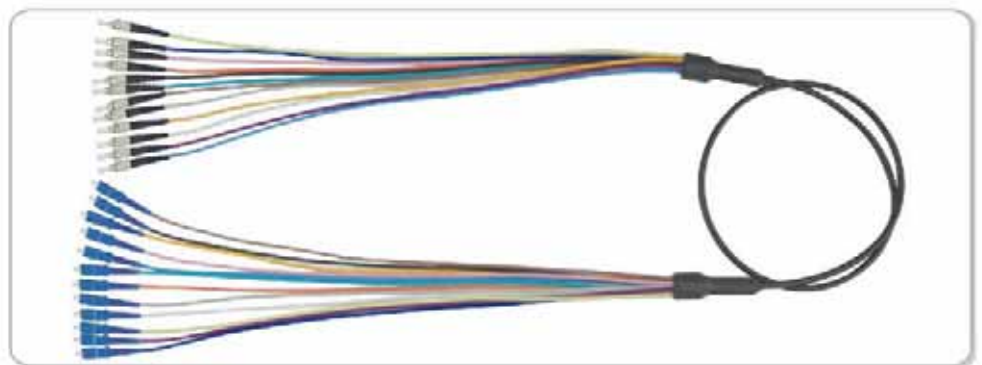
● **JS-6-FC-6-FC-S1-P-60-BL-30M**



● **JS-8-FC-8-SC-S1-P-69-BL-30M**

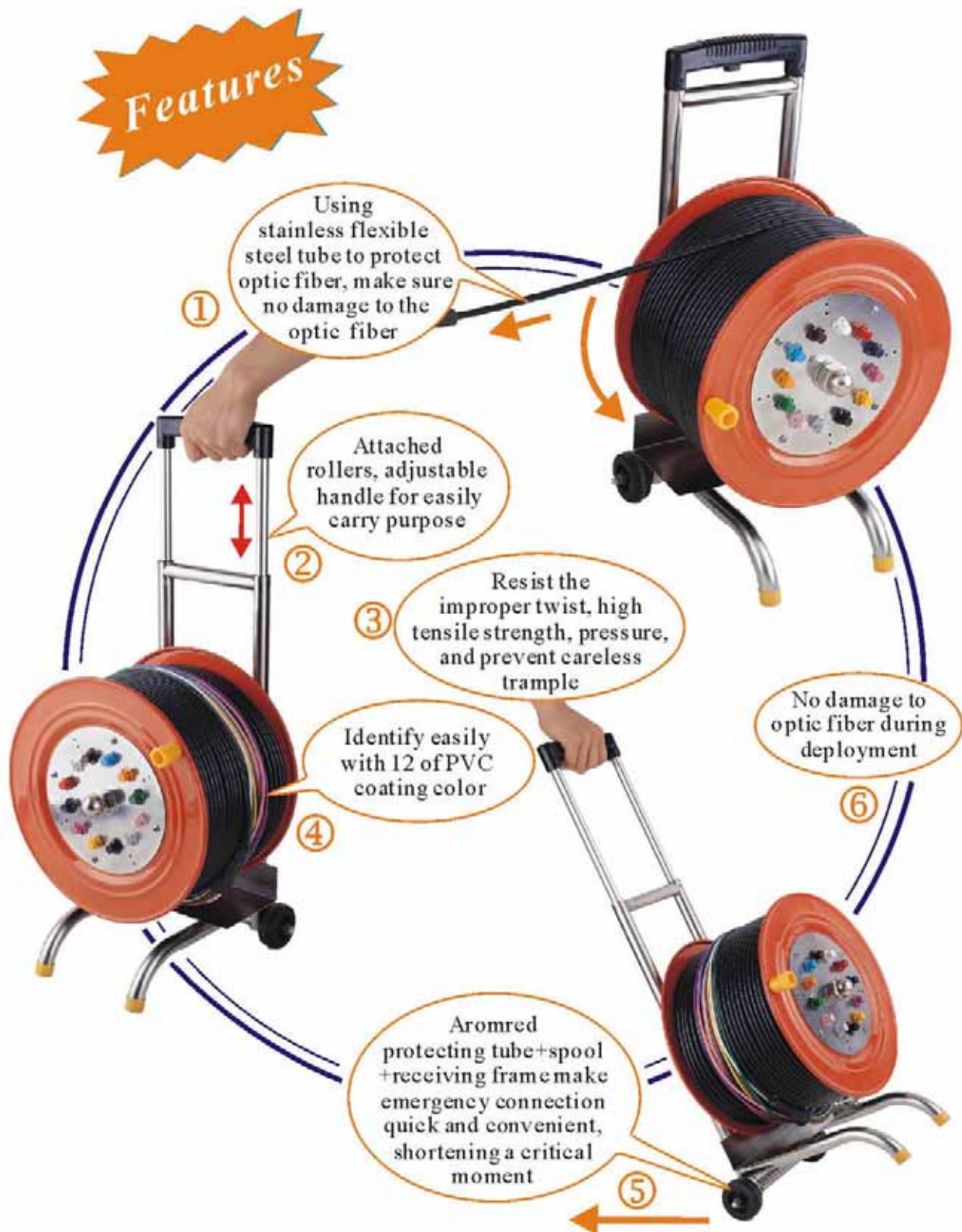


● **JS-12-FC-12-SC-S1-P-69-BL-30M**



**LIVE BROADCASTING
ENGINEER OVERHAUL
DISPATCHING IN CO
CIRCUIT TEST**





WORK AT MAKING THE FO PATCH CORD HANDLING WIRE-LIKE

- Application
- Live broadcast
- Engineer overhaul
- Dispatching in CO
- Circuit Test

● Toolbox fittings table

No.	Description of accessories	Count
1	Kevlar cutter	1suit
2	cable barker	1suit
3	Alcohol bottle with pump	1suit
4	FO non-dust Paper	1suit
5	Needle canister	5suits
6	Storage box	1suit
7	Sword for opening cable	1suit
8	Adhesive plaster	1suit
9	Sheath stripper	1suit
10	Steel wire diagonal pliers	1suit
11	Sharp nose pliers	1suit
12	FC naked fiber adapter	20suits
13	Armored FO cutter	1suit



JS-12-FC-12-FC-S1-P-69-BL-120M



JS-4-FC-4-FC-S1-P-60-BL-120M



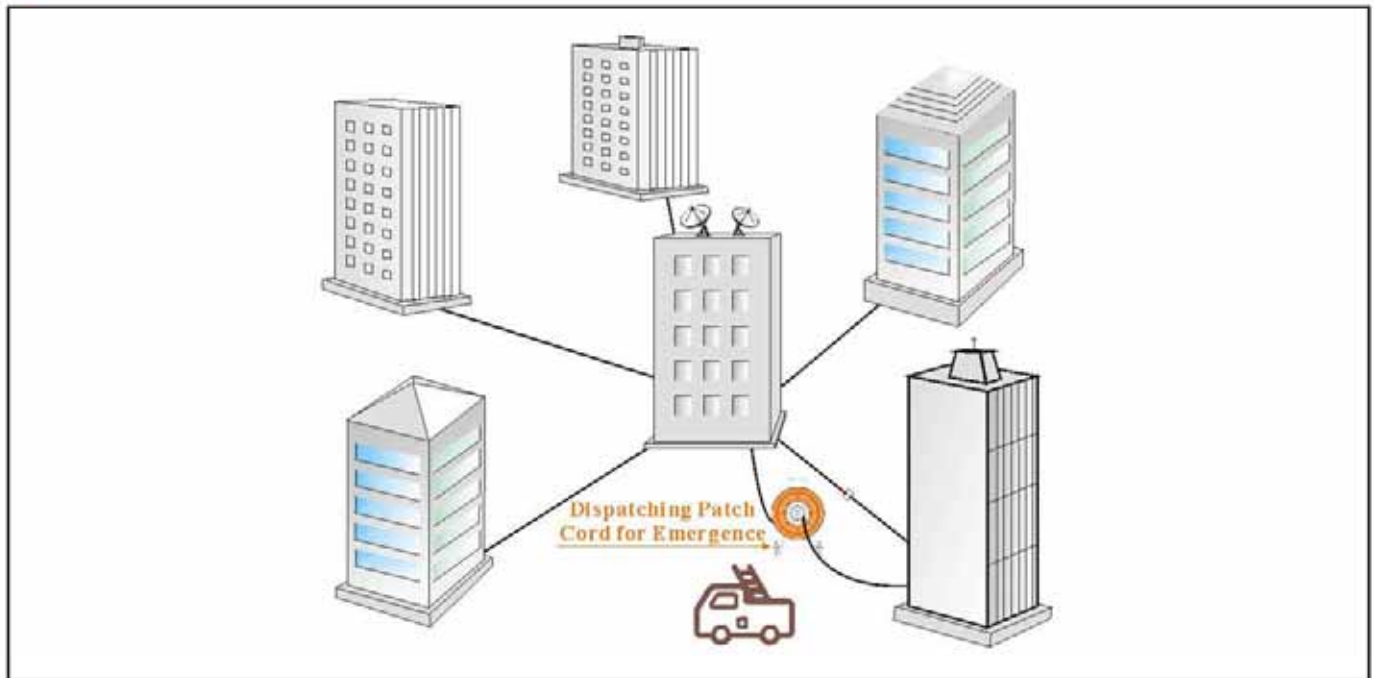
JS-6-SC-6-SC-S1-P-60-BL-60M

Specification

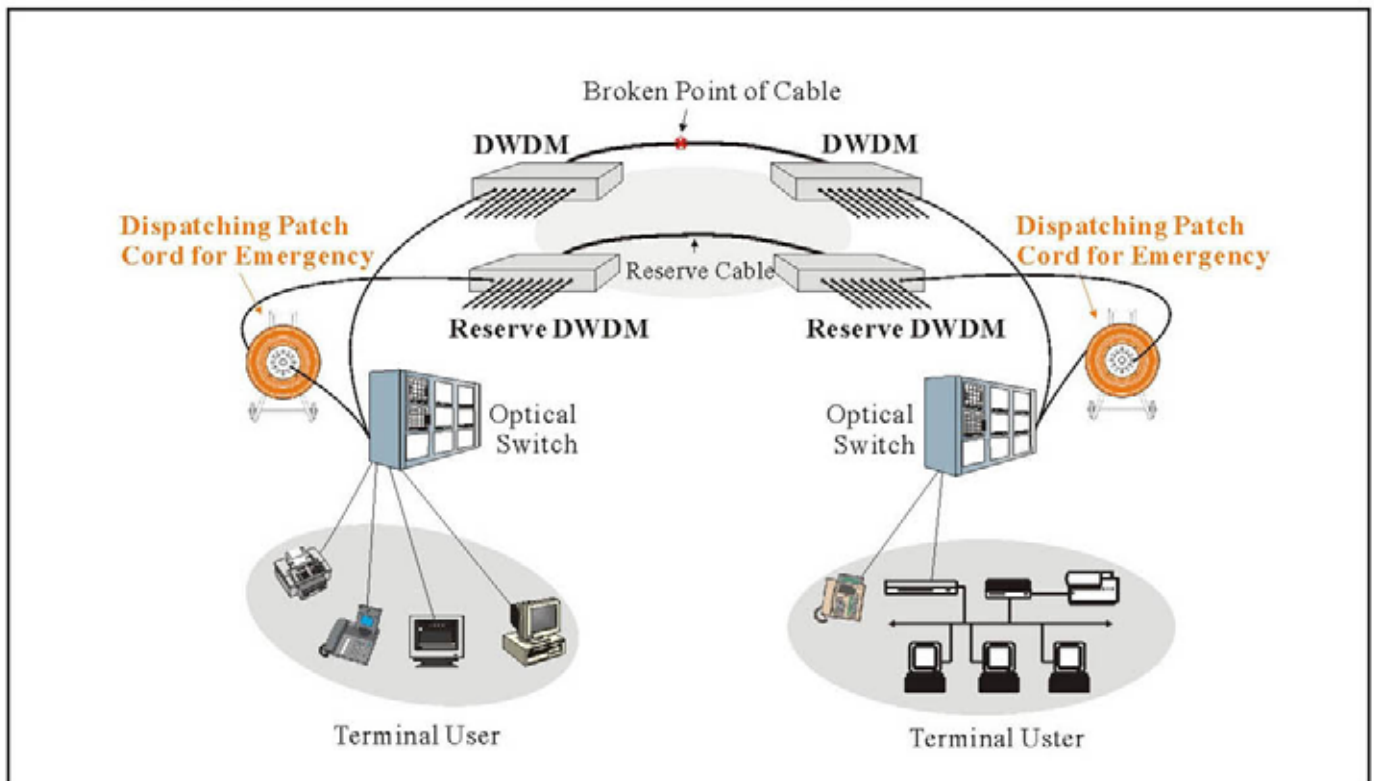
Fiber Type	Single Mode			Multi-mode
	PC	UPC	APC	PC
Core Count	4, 6, 8, 12			
Connector Type	SC/FC/ST/LC/MU/MT-RJ			
Insert Loss	≤0.2dB	≤0.2dB	≤0.2dB	≤0.3dB
Return Loss	≥45dB	≥50dB	≥60dB	—
Repeatability	≤0.1dB			
Vibratility	≤0.2dB			
Interconvertity	≤0.2dB			
Pressure Resistance	≤300kg			
Operating Temperature	-40°C~+85°C			
Tensile Resistance	Branch Cord	15kg		
	Main Cord	100kg		
Outer Dia.	Branch Cord	2.5/3.3mm ±0.1mm		
	Main Cord	6.0/6.9mm ±0.1mm		
Dimension	330(L)×290(W)×520(H)			
Cable Length	Custom length available upon request			

WORK AT MAKING THE FO PATCH CORD HANDLING WIRE-LIKE

- As temporary connection when LAN is interrupted or broken



- As temporary connection when optical cable is interrupted or broken



WORK AT MAKING THE FO PATCH CORD HANDLING WIRE-LIKE

- Application
- Live broadcast
- Engineer overhaul
- Dispatching in CO
- Circuit Test



JS-4-FC-4-FC-S1-P-60-BL-60M



JS-12-FC-12-FC-S1-P-69-BL-30M



JS-4-FC-4-FC-S1-P-60-BL-30M



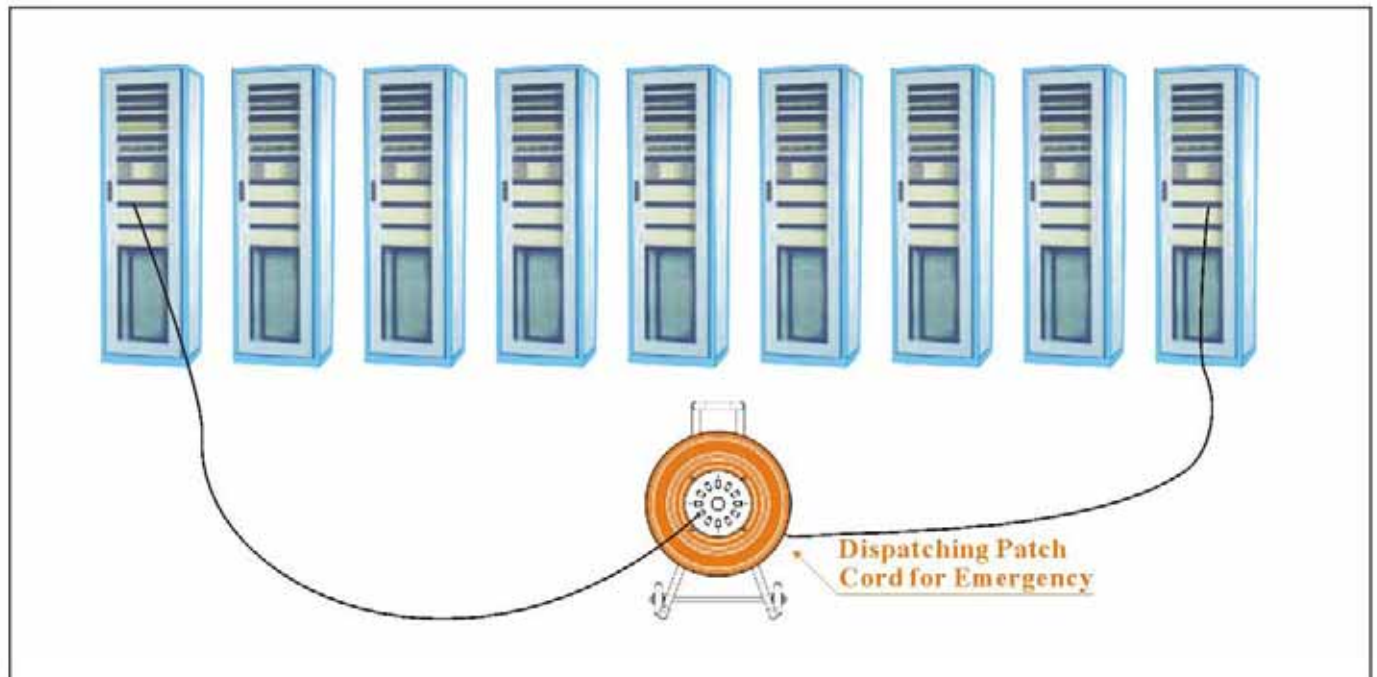
JS-4-FC-4-FC-S1-P-60-BL-120M

Specification

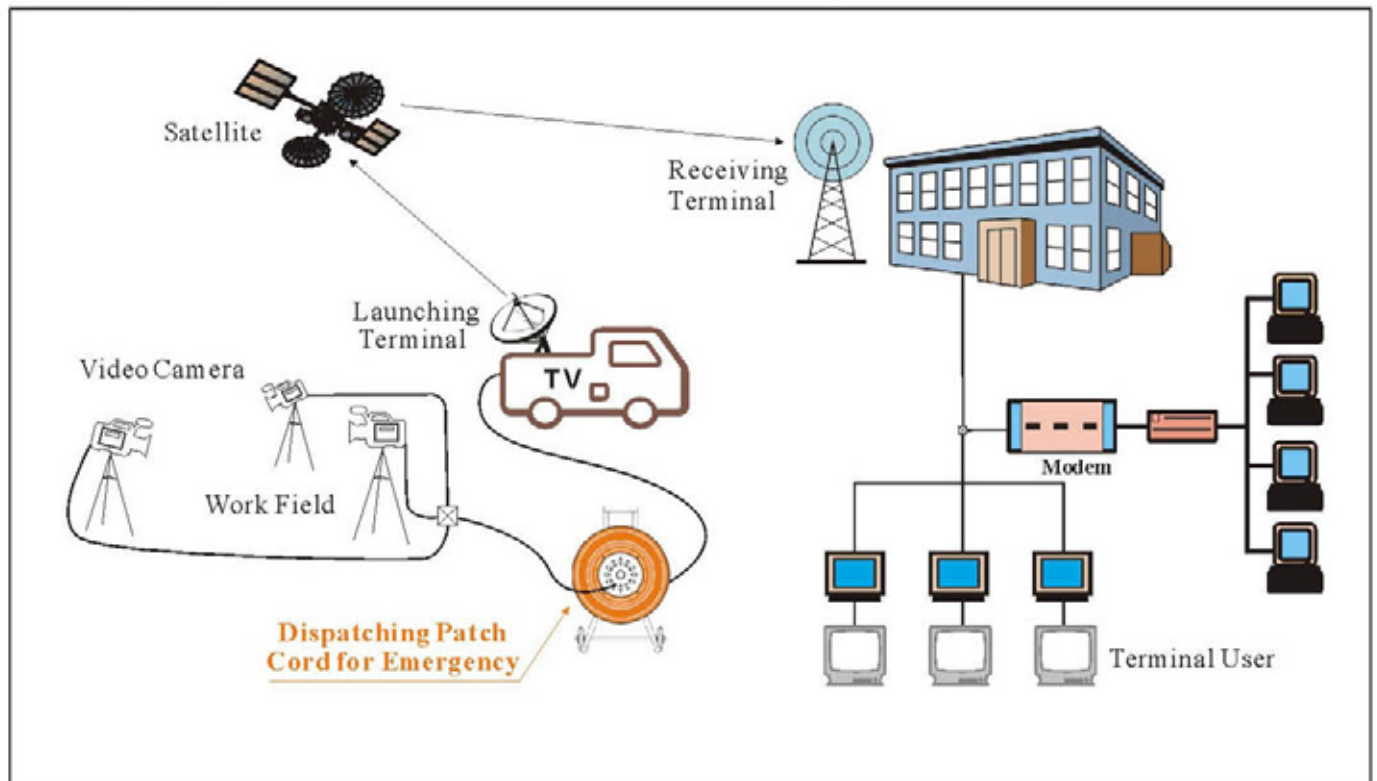
Fiber Type	Single Mode			Multi-mode
	PC	UPC	APC	PC
Core Count	4, 6, 8, 12			
Connector Type	SC/FC/ST/LC/MU/MT-RJ			
Insert Loss	≤0.2dB	≤0.2dB	≤0.2dB	≤0.3dB
Return Loss	≥45dB	≥50dB	≥60dB	—
Repeatability	≤0.1dB			
Vibratility	≤0.2dB			
Interconvertity	≤0.2dB			
Pressure Resisitance	≤300kg			
Operating Temperature	-40℃~+85℃			
Tensile Resistance	Branch Cord	15kg		
	Main Cord	100kg		
Outer Dia.	Branch Cord	2.5/3.3mm ±0.1mm		
	Main Cord	6.0/6.9mm ±0.1mm		
Dimension	330(L)×290(W)×520(H)			
Cable Length	Custom length available upon request			

WORK AT MAKING THE FO PATCH CORD HANDLING WIRE-LIKE

- As temporary connection of switches from two remote ends in the building



- As temporary connection for outside live broadcasting



Armored Optic Fiber for Live Broadcasting



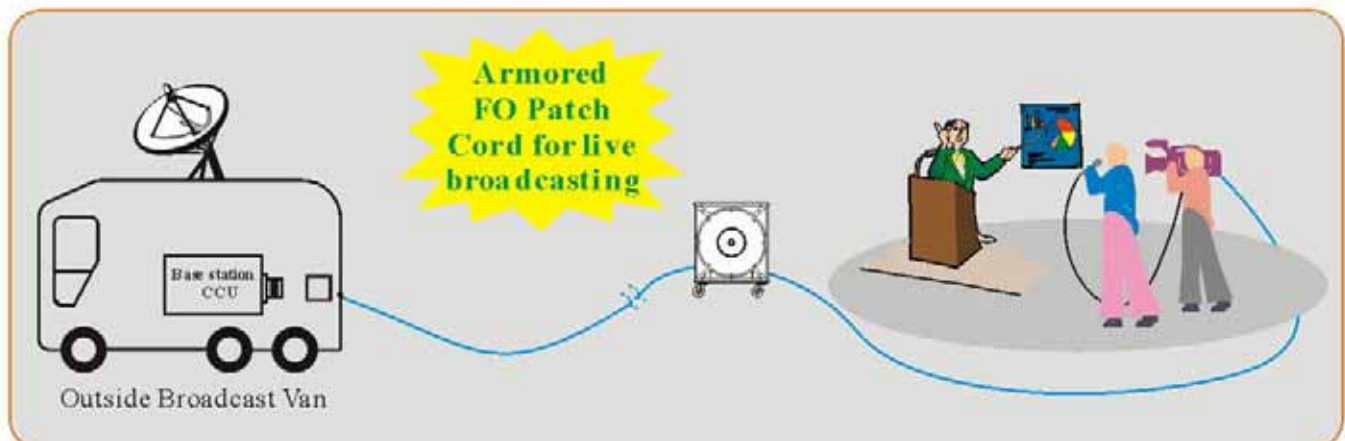
● Feature



● Specification

Core Count	1,4,6,8,12			
Connectore Type	SC/FC (To any specified type)			
Fiber Type	Single Mode			Multi-mode
Polish Method	PC	UPC	APC	PC
Insert Loss	$\leq 0.2\text{dB}$	$\leq 0.2\text{dB}$	$\leq 0.2\text{dB}$	$\leq 0.3\text{dB}$
Return Loss	$\geq 45\text{dB}$	$\geq 55\text{dB}$	$\geq 65\text{dB}$	--
Repeatability	$\leq 0.1\text{dB}$	$\leq 0.1\text{dB}$	$\leq 0.1\text{dB}$	$\leq 0.1\text{dB}$
Operating Temperature	$-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$			
Tensile Resistance	Main Cord	15kg		
	Branch Cord	100kg		
Outer Diameter	Main Cord	$2.5/3.3\text{mm} \pm 0.1\text{mm}$		
	Branch Cord	$6.0/6.9\text{mm} \pm 0.1\text{mm}$		
Dimension	460(L)×340(W)×520(H)mm			
Length	30/60/120m (Custom length available upon request)			

● Application- Outdoor Interview



HDTV Video Camera Connection Set



● **Feature**

- ◆ Using stainless steel flexible tube to protect optic fiber, ensure no damage to optic fiber and wires
- ◆ Resist the improper twist, high tensile strength, pressure and wearable
- ◆ Strong receiving frame+spool+attached rollers make installation quick and convenient, make sure working safety and construction efficiency



● **Specification**

● **Dispatching Patch Cord**

Component	Item	Content
	Optical fiber count	2 purchase
Power Core	Conductor	Tinned copper wire (21 pcs/0.18mm)
	Nominal thickness of HDPE insulation	Standard: 0.4mm
Control Core	Conductor	Tinned copper wire (7pcs/0.18mm)
	Nominal thickness of HDPE insulation	Standard: 0.3mm
Tension Member		Galvanized steel wire with HDPE insulation, outer diameter 2.0mm
Cable assembly		Power Core, Tension Member, Optic Fiber, Control Core
Outer jacket		Anti-abrasive plastic sheath
Approx. Overall Diameter		Standard: 11.5±0.2mm

● **Mechanical Characteristics**

Item	Specification
Max Allowed Tensile Strength	Standard: 200kgf
Allowed Bending Radius	More than 6 times of outer diameter

● **Dimension of Shape: 360(L)×340(W)×520(H)mm**

● **Optic Fiber**

Item	Specification
Fiber type	Single mode silica optic fiber
Model-field diameter	9.5±1 μm
Cladding diameter	125±3 μm
Offset	Less than 1 μm
Cut-off wavelength	1.10~1.35 μm
Tight buffer diameter	0.9±0.1mm
Attenuation	≤0.5dB/km (1.3 μm)

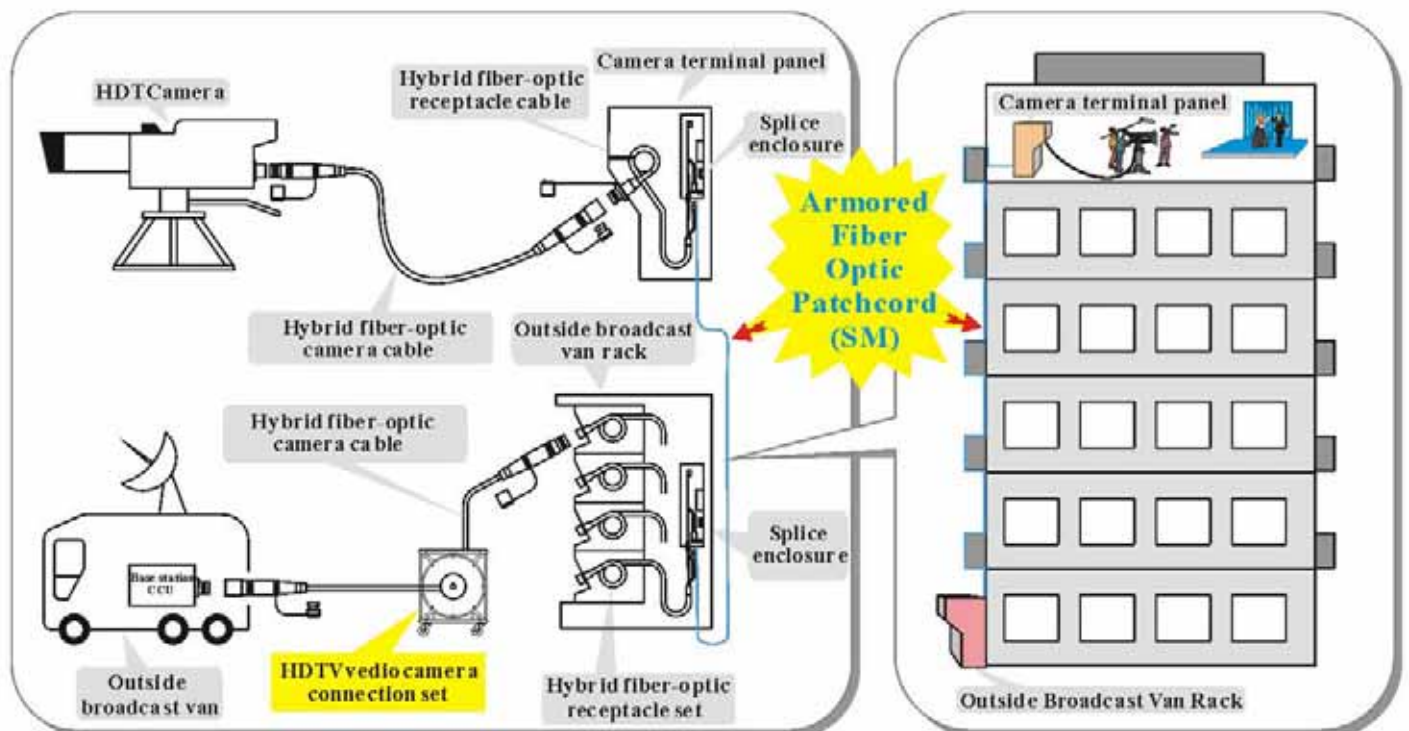
● **Power Core**

Item	Specification
Conductor Resistance	37.5 Ω /km
Insulation Resistance	10.000M Ω .km
Voltage	AC.1KV/1min

● **Control Wire**

Item	Specification
Conductor resistance	113 Ω /km
Insulation resistance	10.000M Ω .km
Voltage	AC.1KV/1min

● **Length :100m**



Mini Armored FO Cable with High Mechanical and Transmission Performance Can Be Widly Used in the CATV,



● Constructure

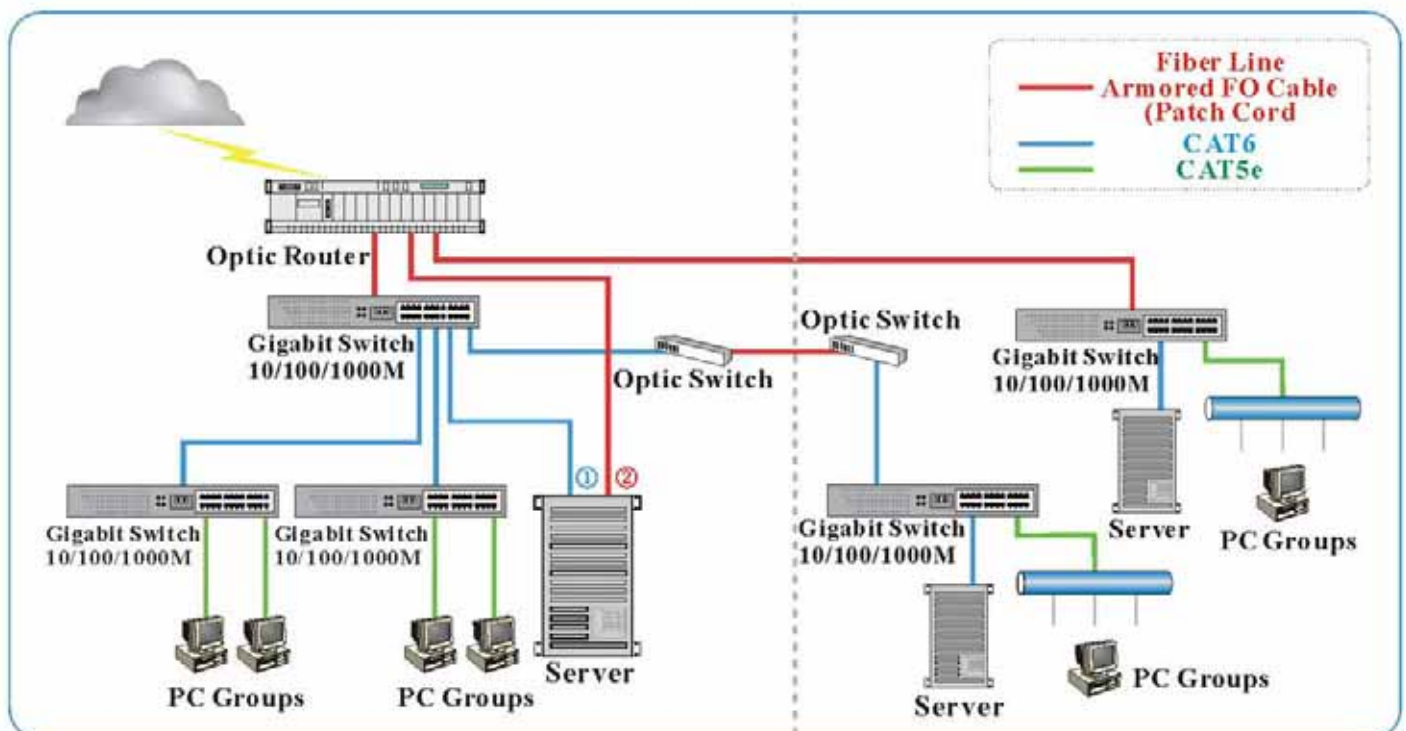
- Kavlar strengen member enhance the tensile resistance of the cable.
- Normal diameter ensure the cable to be compatible with various types of connecto and equipment
- Flame-retarden, enviromental material outer jacket make the cable light-weight
- $\phi 0.6$ tight-buffer fiber (optional with single-mode, multi-mode, Om2, OM3, G.655) + Kevlar + stainless steel flexible tube + stainless steel braiding + outer jacket (various kinds of material are optional)

● Specification

Fiber count	O.D. (mm)		Weight (kg/km)	Min bending radius(mm)	Tensile resistance (N)	Pressure resistance (N/50mm)	Operating temp.(°C)	Outer Jacke Material
1	2.8	3.3	25	30	300	3000	-40°C~+85°C	PVC, LSZH, PE, PU, PTEE, SGS
2	3.3		25	30	300	3000	-40°C~+85°C	ULand environmental Material

● Application

1. Suitable for deploying directly along wall, ceiling, interlayer and tube. compatible with various normal connector, equipment
2. Idea for high density cabling system in build ing, between floors, trunking and LAN and multi-connection field
3. suitable for indoor and outdoor use, act as intra-building backbone
4. Small minimum bend radius, used for bulky, muti-users' indoor installation and unit installation
5. Connect the backbone network and buiding directly, isolate the thunder, enhance the reliability





Feature

Kavlar as a strengthen member improve the tensile resistance of the cable, make the cable more flexible, deployment easily

Protected by stainless steel flexible tube, prevent the fiber from mechanical destruction

Fiber count can be specified from 2 to 12 by the customer



LDPE outer jacket avoid the destruction from ultraviolet radiating, moisture, environmental stress. No acidic gas generated which does not erode the equipment, most suitable for indoor use and high requirement for re-flame -restardent level

The water-resistant belt prevent the fiber from erode by water or moisture, which improve the reliability of the cable

The stainless steel flexible make the cable more gentle and flexible

Mechanical Character

Fiber Count	Outer Diameter (mm)		Cable Weight(kg/km)		Max Tensile Load (N)		Minimum Bending Radius (mm)	
	Inter-locked	Spring	Inter-locked	Spring	Short Term	Long Term	Short term	Long Term
4	7.7	6.0	81	54	1200	800	8 times of the outer diameter	12 times of the outer diameter
6	7.7	6.0	81	54	1200	800		
8	7.7	6.9	81	58	1200	800		
12	8.6	6.9	91	67	1200	800		

Application

1. Ideal for high density cabling system in building , trunking and LAN distribution
2. Suitable for indoor and outdoor use, act as intra-building backbone
3. Ideal for direct terminated with various types of connector and equipment
4. Small minimum bend radius, used for bulky, multi users indoor installation and unit installation
5. Connect the backbone network and building directly, isolate thunder, enhance the reliability



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<http://www.kaiphonefiber.com>

Kaiphone Communication Co., Ltd.

Add: 4th Baisha Village, Humen, Dongguan,
Guangdong, Chin Zip: 523912

Tel : 86-769-5524-576

Fax: 86-769-5524-578

Http://www.kaiphone.com

E-mail:sales@kaiphone.com

Sale hot line: 86-769-5190-588
E-mail:optic@kaiphone.com