

Company Introduction

CARITEX FIBER PRODUCTS CO., LTD is a professional high technology enterprise which engages in research, development, manufacture and sale of various kinds of devices and accessories for fiber transmissions system.

Our company manufactures in Shenzhen , China . We have over 100 skilled workers, including technicians and engineers, as well as administrative staffs, with 4 production lines.

In the products aspect, we provide consistent quality products with competitive price. Our company has been accredited with ISO 9001 and the products also have been approved with ROHS certification. Moreover, all products do comply with standard of ITU-T. We have enjoyed an excellent reputation for quality products in our field for many years.

Main products are Fiber Optic Patch cord, Fiber Optic Pigtail, Fiber Optic Adapter, Fiber Optic Attenuator, Fiber Optic Splitter, ODF, and FTTH/FTTD/FTTA Products...

Our Principles:

- * Full customer satisfaction
- * Commitment to high-quality service
- * Relationships based on mutual trust and respect
- * Long-term cooperation rather than one time profitable sale

Company Shows

Office



Production Line



Warehouse



Caritex
Fiber Components

Fiber Optic Patch Cord

SC/FC/LC/ST/MTRJ regular patch cords



A patch cord is a fiber optic cable used to attach one device to another for signal routing. Normally, there are 5 types of connectors: SC/FC/LC/ST/MTRJ. 3 types of ferrules: PC, UPC, APC.

SC stands for Subscriber Connector- a general purpose push/pull style connector. It is a square, snap-in connector latches with a simple push-pull motion and is keyed.

FC stands for Fixed Connection. It is fixed by way of threaded barrel housing. FC connectors are generally constructed with a metal housing and are nickel-plated.

LC patch cord is a fiber optic cable used to attach one device to another for signal routing. LC stands for Lucent Connector. It is a small form-factor fiber optic connector, half the size of the SC.

ST stands for Straight Tip- a quick release bayonet style connector. ST connectors are cylindrical with twist lock coupling. They are push-in and twist types.

MTRJ stands for Mechanical Transfer Registered Jack. It's half the size of the SC connector.



PC stands for Physical Contact. With PC connector, the two fibers meet as they do with the flat connector, but the end faces are polished to be slightly curved or spherical. This eliminates the air gap and forces the fibers into contact.

UPC stands for Ultra Physical Contact. The end faces are given an extended polishing for a better surface finish. These connectors are often used in digital, CATV, and telephony systems.

APC stands for Angled Physical Contact. The end faces are still curved, but they're angled at an industry-standard eight degrees. This maintains a tight connection. These connectors are preferred for CATV and analogue systems.

Parameter

Specification	Unit	FC, SC, LC, ST, MTRJ			
		SM			MM
		PC	UPC	APC	PC
Insertion loss(typical)	dB	≤0.3	≤0.2	≤0.3	≤0.2
Return loss	dB	≥45	≥50	≥60	≥30
Operating wavelength	nm	1310, 1510			
Operating temperature	°C	-40~75			
Storage temperature	°C	-45~85			
Cable diameter	mm	φ 3.0, φ 2.0, φ 0.9			

MPO/MTP Series

MPO (Multifiber Pull Off) was the first generation of MTP designed by NTT. It is now the name of the category of multi-fiber connectors produced by several companies. MTP (Mechanical Transfer Pull Off), however, is USCONEC's trade name for their superior style of MPO connector.



Features

- Push-pull latching
- Easy assembly, no crimp tool needed
- Alignment achieved with high precision guide pins
- Designed for low loss and standard loss SM and MM applications
- Ruggedized round cable, oval cable and bare ribbon options available
- Color coded housings available to differentiate fiber type, polish type and/or connector grade

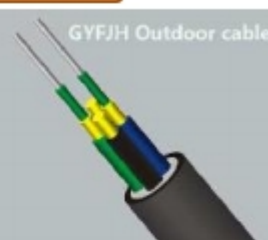
Application

- Array trunk cables
- Array fiber to single fiber fan-out and cassettes
- High fiber density card edge access
- Optical switching interframe connections
- Datacenter cabling

Parameter

Specification	MM Low loss Multimode MT Ferrule	Standard Multimode MT Ferrule	SM Low loss Singlemode MT Ferrule	Standard Multimode MT Ferrule
Insertion Loss	Typical<0.30dB Maximum<0.5dB	Typical<0.50dB Maximum<0.7dB	Typical<0.30dB Maximum<0.5dB	Typical<0.50dB Maximum<0.7dB
Return Loss	>20dB	>20dB	PC>=45dB	PC>=45dB
			APC>=60dB	APC>=60dB

FTTA (Fiber-to-the-Antenna) Patch Cord



Features

- Good mechanical and environmental characteristics;
- Flame retardant characteristics meet the requirements of relevant standards;
- The mechanical characteristics of jacket meet the requirements of relevant standards;
- Soft, flexible, water blocked, UV resistant, easy to lay and splice, and with big capacity data transmission;
- Meet various requirements of market and clients

Application

- 3G 4G base stations used
- Aerospace & Defence
- Equipment diagnosis
- FTTA ,FTTP, FTTX,WIMAX
- BBU, RRU, RRH, LTE
- FO sensor

Parameter

Insertion Loss	<=0.3dB
Repeatability	<=0.2dB
Fiber Core	2
Mating times	>=500N
Working temperature	-40 ~ +80°C

ODC Patch Cord

The ODC Connector together with the far transmission cable, are becoming the standard interface specified in 3G, 4G and Wimax Base Station remote radios and FTTA (Fiber-to-the-Antenna) applications.



Feature

- Screwed locking mechanism, confirm the connection is long-term and reliable.
- Guide structure, can be installed blindly, simply and quickly.
- Airtight construction: Water proof, dust proof and corrosion resistant. Protection caps.
- Compact appearance, robust and flexible.
- Sealing design through wall.
- Reduce the times of splicing.

Application

- Indoor and Outdoor applications
- Outdoor & Military communication equipment connection.
- Oil field, mine communication connection.
- Far transmission wireless base station.
- Video Surveillance system
- Optical fiber sensor.
- Railway signal control.
- Intelligent substation

Parameter

Insertion Loss	$\leq 0.7\text{dB}$
Repeatability	$\leq 0.5\text{dB}$
Fiber Core	2
Mating times	$\geq 500\text{N}$
Working temperature	$-40 \sim +80^{\circ}\text{C}$

FTTH Drop Patch Cord



Coating Fiber
FRP & (Steel
Jacket (White

Application

- CATV
- Telecommunication networks
- Active device termination
- Metro
- Local Area Networks (LANs)
- Data processing networks
- Test equipment
- Premise installations
- Wide Area Networks (WANs)

Cable Parameter

Items		Specifications
Fiber Count		1 / 2 / 4 Core
Colored Coating Fiber	Dimension	$250 \pm 15 \mu\text{m}$
	Color	White / Black / Others
Jacket	Dimension	$(2.0 \pm 0.1) \text{ mm} \times (3.1 \pm 0.1) \text{ mm}$
	Material	LSZH / PVC
	Color	Black / White
Strength Member		FRP & Steel Wire

Patch Cord Parameter

Item	Singlemode	Multimode
Insertion loss	$\leq 0.3\text{dB}$	$\leq 0.3\text{dB}$
Return loss	$\geq 50\text{dB}$	$\geq 35\text{dB}$
Operating temperature	$-40 \sim +85^{\circ}\text{C}$	
Ceramic ferrule spec	125.5um concentricity deviation $\leq 1 \mu\text{m}$	127um concentricity deviation $\leq 3 \mu\text{m}$
Mode type	9/125 μm	50/125 μm , 62.5/125 μm

LX.5 Patch Cord

The LX.5 was developed with carrier-class reliability to ensure network integrity. Available in simplex or duplex configurations, the LX.5 maintains single circuit access and incorporates safety shutters on both the connector and adapter body to provide protection from dust, dirt, and ferrule end-face handling damage. The connector also features a latching mechanism that effectively releases the connector from the adapter. Its user-friendly and intuitive design prevents cables from snagging at the back of the connector.



Features

- Doubles the density; twice as many fiber connections
- Exactly half the size of the SC connector; adapter fits the SC footprint
- Shutters on both the adapter and connector
- Incorporates proven, reliable ceramic ferrules
- Available in singlemode and multimode versions
- Easy to convert between simplex and duplex connectors

Application

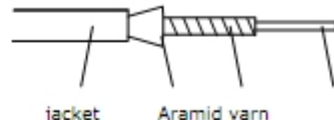
- Telecom
- LAN, WAN
- CATV

Systems
 Measuring Technique
 Utilities, Railways

Parameter

Insertion Loss	$\leq 0.2\text{dB (UPC)}$
	$\leq 0.5\text{dB (APC)}$
Boot OD:	3.0mm, 2.0mm, 1.6mm, 0.9mm optional
Operating temperature	$-40 \sim +75^{\circ}\text{C}$

Armored Patch Cord



Armored patch cord can be laid in all kinds of environmental extremes. It is used without protection tube which saves space and is quite convenient for maintenance. Also it has the construction including stainless steel tube which protects optical fiber and provide better security for the whole system.

Features

- Protection of stainless steel tube with small caliber.
- Avoid the damage of torsion.
- High tensile coefficient and stress coefficient.
- Convenient for application, highly security.
- Application without damage to cable.
- Manufacture without damage to cable.
- Cost cutting for maintenance.

Application

- Machine room
- FTTH
- Area network
- Test equipment
- National defence
- FO sensor
- Light communication system
- Common antenna TV system

Parameter

Fiber Core	1/2/4/8 cores
Insertion Loss	$\leq 0.3\text{dB}$
Tensile strength	Short term: $\geq 300\text{N}$; long term: $\geq 150\text{N}$.
Working temperature	$-40 \sim +85^{\circ}\text{C}$

Waterproof Pigtail/ Patch Cord

Waterproof fiber pigtail/Patch cord can be used in harsh environment. It is mainly used in outdoor connection of the optical transmitter. Waterproof fiber pigtail is designed with a stainless steel strengthened waterproof unit and armored outdoor PE jacketed cables. Waterproof fiber pigtails/Patch cord are widely used in data transmission network, typical types are with 2 fiber cores, 4 fiber cores or 8, 12 fiber cores. By adopting the special structure cables and connectors, these fiber cable assemblies are widely used in CATV and other applications.



Features

- Waterproof features & reliable performance
- Pull& erosion resistance, good grounding
- Low insertion loss, high return loss, excellent exchangeability, high stability
- The cable and pigtail is not moved when tighten the connection screw, which ensure the convenient construction.

Application

- CATV & LAN
- Data& Communication System
- Connection for main fiber and optical receiver.

Parameter

Fiber Core	1/2/4/8/12 cores
Insertion Loss	$\leq 0.3\text{dB}$
Max OD (mm)	Inner cable OD: 2.0mm, Outer cable OD: 11.8mm. Inner cable OD: 1.6mm. Outer cable OD: 9.8mm
Working temperature	-20 ~ +70°C

More New Patch Cords



Mode Conditioning Patch Cord



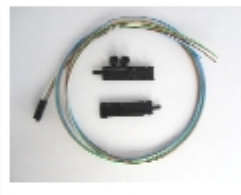
Bundle Patch Cord



Pulling eyes Patch



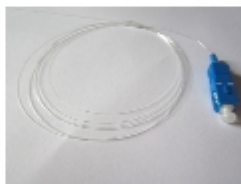
Loopback Jumper



Fan-out Kit Tubing



Bare ferrule Pigtail



Bare fiber Pigtail



Spring patch cord



E2000 Patch Cord



DIN Patch Cord



MU Patch Cord

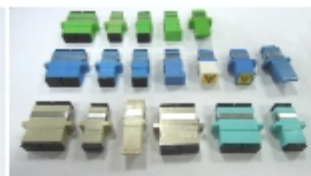


PDLC Patch Cord

Fiber Optic Adapter



LC Adapter



SC Adapter



FC Adapter



MTRJ Adapter



MPO Adapter

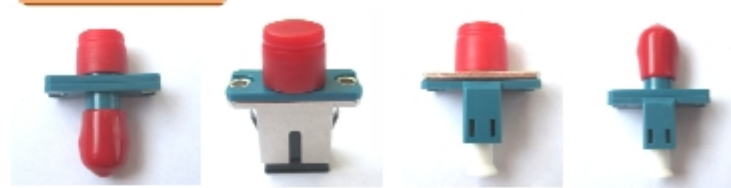


ST Adapter

Parameter

Parameter	Unit	SC/LC/FC/ST/MTRJ/MPO			
		SM			MM
		PC	UPC	APC	PC
Insertion Loss	dB	≤0.3	≤0.2	≤0.3	≤0.2
Exchangeability	dB	≤0.2			
Repeatability	dB	≤0.2			
Durability	Time	> 1000			
Operating Temperature	°C	-40~75			
Storage Temperature	°C	-45~85			

Hybrid Adapter



FC-ST

FC-SC

FC-LC

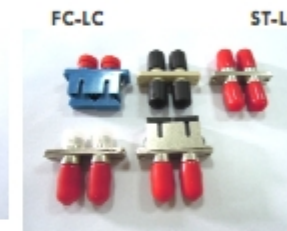
ST-LC



ST-SC



SC-LC



FC-SC FC-ST SC-ST Duplex.....

Hybrid fiber optic adapters offer a solution for hybrid applications where the two different kinds of fiber connectors or cable assemblies need to be linked with each other.

Parameter

Parameter	Unit	FC-ST, FC-SC, FC-LC, ST-LC, ST-SC, SC-LC			
		SM			MM
		PC	UPC	APC	PC
Insertion Loss	dB	≤0.3	≤0.2	≤0.3	≤0.2
Exchangeability	dB	≤0.2			
Repeatability	dB	≤0.2			
Durability	Time	> 1000			
Operating Temperature	°C	-40~75			
Storage Temperature	°C	-45~85			

Bare Adapter



Bare Fiber Adapter is a most affordable and easy method for temporarily connecting bare fiber with all industry standard connectors. We provide a simple and easy method to quickly interconnect any standard fiber connector to a piece of un-terminated (bare) fiber to meet service, test or communication requirements.

Application

- Temporarily connect bare fiber
- Testing bare fiber, fiber on the reel, fiber before and after installation
- Temporary connections to OTDRs, Power Meters, Talksets, Demo Equipment, Light Sources, Data & Telecom Equipment and Dark Fiber
- Maintenance, Restoration and Installation Jobs

Feature

- Technology Award Finalist
- Constructed of machined aluminum
- Stainless steel connector modules
- Requires only .14" to .55" of fiber exposed after cleaving
- Accepts buffer up to 900uM
- Reusable, easy clean-out
- Interchangeable connector modules
- Unique holding mechanism utilizing new micropads to hold the fiber secure during testing

Male to Female Adapter



Male to female fiber optic adapters allow user to convert from one connector type to another. These adapters are comprised of a polymer/metal outer body and inner assembly fitted manufactured to demanding specifications. The combination of ceramic /Phosphor bronze alignment sleeves and a precision moulded polymer housing provides consistent long-term mechanical and optical performance.

Application

- Fiber optic transmission system
- CATV networks
- LAN
- Testing/Measurement Instruments
- Fiber distribution frame, mounts in Fiber Optic Wall Mount and Rack Mount Cabinets

Feature

- Female to male hybrid adaptor
- Application for system requirement
- Saving cost

Paramet

Parameter	Unit	Male to Female Adapter			
		SM			MM
		PC	UPC	APC	PC
Insertion Loss	dB	≤0.3	≤0.2	≤0.3	≤0.3
Operating Temperature	°C	+40~85			
Storage Temperature	°C	+45~85			

More New Adapters



MTRJ Adapter- flange type



MTRJ Adapter SC Type



FC-MU Adapter



LC-MU Adapter



SC-MU Adapter



MU Adapter



MU DX Adapter



SC SX Shutter



SC DX Shutter



FC-E2000 Adapter



LC-E2000 Adapter

Adapter



MPO Adapter



DIN Adapter



LC DX Shutter



LC/APC Quad Shutter

Fiber Optic Attenuator

Male to female type optical attenuator/
flange type optical attenuator

Features

- Low back reflection and Low PDL
- High precision attenuation value
- Wide attenuation range
- Precision ceramic ferrule
- FC, SC, ST, LC ... optional
- Plastic or metal housing material

Specification

Item	Unit	Parameter
Operating Wavelength	nm	SM: 1310/1550nm MM: 850/1300nm
Attenuation Range	dB	1-10dB(1dB step), 15, 20, 25, 30dB
Return Loss	dB	PC: ≥ 50 UPC: ≥ 55 APC: ≥ 60
Attenuation Tolerance	dB	$\leq \pm 0.5(1-10\text{dB})$ or $\leq \pm 1.0(11-30\text{dB})$

More New Attenuators

Adjustable optical attenuator



FC Type



line Optical Attenuator

Fiber Optic Splitter

FTB Splitter



The FBT Splitter can couple the optical signals in the coupling area, and then re-distribute the light power. The key parameters include operating wavelength, bandwidth, and excess loss, coupling ratio, PDL and so on.

Specification

Directivity(dB)	> 55
Operating Temperature(°C)	-20~+70
Storage Temperature(°C)	-40~+85
Fiber Pigtail Length(m)	1or Customer On Request
Port Configuration	1X4 to 32X32

Single mode Dual/Three Window Tree/Star Couplers

Port Configuration	1X4	1X8	1X16	1X32
Max. Insertion Loss (dB)	7.2	10.8	14.4	17.8
Uniformity (Max.) (dB)	0.8	1.7	2.0	2.5
Operating Wavelength (nm)	1310/1550 $\pm$ 40, 1310/1490/1550 $\pm$ 40 or Custom wavelength			

FTB Splitter



Planar light wave circuit (PLC) splitter is a type of optical power management device that is fabricated using silica optical waveguide technology. It features small size, high reliability, wide operating wavelength range and good channel-to-channel uniformity, and is widely used in PON networks to realize optical signal power splitting.

Specification- 1xN PLC Splitter

Parameters	1x2	1x4	1x8	1x16	1x32	1x64	1x128
Operating Wavelength (nm)	1260 ~ 1650						
Fiber Type	G657A1 or customer specified						
Insertion Loss (dB) (P/S Grade)	3.8/4.0	7.1/7.3	10.2/10.5	13.5/13.7	17/17.4	20./20.4	23.8/24.2
Loss Uniformity (dB)	0.4	0.6	0.8	1.2	1.5	2.0	2.5
Polarization Dependent Loss(dB)	0.2	0.2	0.2	0.25	0.3	0.35	0.4
Return Loss (dB) (P/S Grade)	55/50	55/50	55/50	55/50	55/50	55/50	55/50
Directivity (dB)	55	55	55	55	55	55	55
Wavelength Dependent Loss (dB)	0.3	0.3	0.3	0.5	0.5	0.5	0.5
Temperature Stability (-40 ~ 85 °C)(dB)	0.4	0.4	0.4	0.5	0.5	0.5	0.5
Operating Temperature (°C)	-40 ~ 85						
Storage Temperature (°C)	-40 ~ 85						
Device Dimension (mm)	40x4x4	40x4x4	40x4x4	50x4x4	50x7x4	60x12x4	N/A
Module Dimension (mm)	100x80x10	100x80x10	100x80x10	120x80x18	140x115x18	140x115x18	140x115x18
Mini-Module Dimension (mm)	50x7x4	50x7x4	50x7x4	60x12x4	80x20x6	100x40x6	N/A

Fiber Joint enclosure

In-line/ Horizontal type



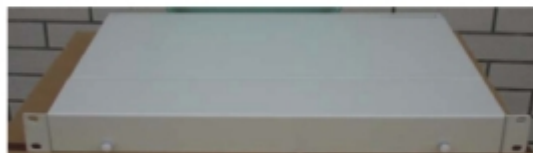
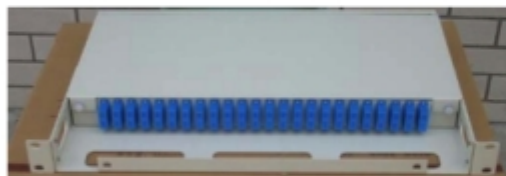
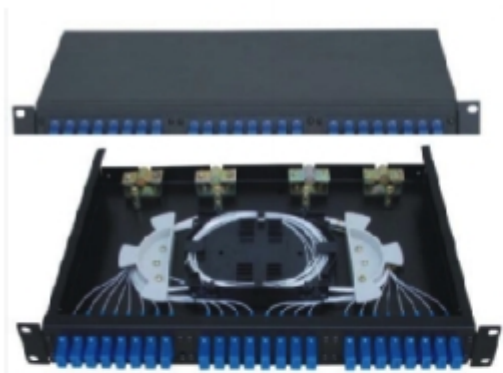
Specification

Item	T1	T2	T3	T5	T6	T7
Dimension (mm)	435x190x85	435x190x120	435x190x120	435x190x80	435x140x75	435x190x170
Weight(kg)	2.6	2.8	2.6	2.3	1.5	4.7
Cable diameter(m)	Φ10 ~ Φ17	Φ10 ~ Φ22	Φ10 ~ Φ22	Φ10 ~ Φ17	Φ10 ~ Φ12.5	Φ10 ~ Φ22
Cable ports	2 in,2 out				1 in,1 out	4 in,4 out
Capacity of splice tray	24	24	24	24	12	24
Max pcs of splice tray	4	8	8	4	4	12
Max capacity	96	192	192	96	48	288
Sealing structure	Sticky structure					

Fiber Optic Terminal Box

19" Rack Mounted Fixed type

Fiber Optic Terminal Box can be applied in the branch connection of fiber termination, such as distribution box, 19" standard structure, rack mounting, be able for installation of FC, SC, ST, LC adapters.



Type	Dimension(mm)	Max capacity cores	Remark
	480*250*1U	12/24	The body is made of cold rolled steel sheet, with electrostatic spraying. We can install adaptors for you, available for FC, ST, SC, LC.
	480*250*1U	36/48	
	480*300*2U	12/24	
	480*300*1U	12	
	480*250*1U	24	
	480*250*2U	48	
..	480*250*1U	24	

19" Rack Mounted Sliding/ Drawer type

Sliding rack mounted fiber optic terminal box has the drawer for splicing, it's easy to withdraw the fibers during testing and distributing. It has aluminum sliding fittings with self-locking function to prevent the drawer from falling.

Model	Dimension(mm)	Max capacity(cores)	Remark
	430*300*1U	12	Cold rolled steel sheet, with electrostatic spray, suitable for FC, SC, ST, LC adapters.
		24	
		48	
	430*300*2U	48	

Fiber Optic Distribution Panel

Wall Mounted type



Available for small capacity communication system, wall mounting, reasonable and compact structure, harmonized with machine room. The cabinet is composed of two parts, one links with optical cables for fusion connection between optical cable and fiber pigtail and another links with patch cord.

Features

- Provide fusion and storage application for optical cables
- Reliable protection appliance of fixing, stripping and earthing for optical cables.
- Whole range protected design for fiber lay to ensure the bending radius=40mm
- Provide various accessories to avoid any unexpected damage to the fiber

Specification

Type	Dimension(mm)	Max capacity cores	Remark
	455*405*80	24	cold rolled steel sheet, electrostatic spraying. Provide 24*72 adaptors, available for FC, ST, SC, LC. Fit for wall mounting
	455*405*120	48	
	455*405*150	72	cold rolled steel sheet, electrostatic spraying. Provide 48*72 adaptors, available for FC, ST, SC, LC. Fit for wall mounting
	455*405*120	48	
	455*405*150	72	cold rolled steel sheet, electrostatic spraying. Provide 12*24 adaptors, available for FC, ST, SC, LC. Fit for wall mounting
	350*350*80	24	
	350*300*80	12	
		24	

Fiber Splitter box

4/8/16 Ports Outdoor Splitter Box



Features

- FTTH network and CATV system application.
- Available for 1x2, 2x2, 1x4, 1x8, 2x8, 1x16 and 2x16 PLC Splitter.
- Suitable for both Outdoor& Indoor use, IP65 Grade.
- Waterproof, Anti-UV, Ultra violet resistant and rainfall resistant.
- Light weight, small cubage, small installation size, reliable sealing.
- Could be connected with FTTH Drop cables inside.

Specification

Model	Capacity	Size(mm)
	4 ports	210(W)x140(H)x40(D)
	8 ports	200(W)x215(H)x54(D)
	16 ports	260(W)x320(H)x115(D)

32/ 64 Ports Outdoor Splitter Box



Features

High quality cold rolled steel body, electrostatic spray with waterproof powder.
 Operating temperature: -30°C~+55°C, storage temperature: -40°C~+60°C.
 With access to 2pcs of 12 cores fiber optic cables and up to 32pcs or customer cables.

Item	Dimension (mm)	Cable	Cable parts	Max capacity	Remark
	H450Xw350xD150	Φ10~Φ14	2	48	Suitable for 36pcs of SC, FC, ST adapter.
	H550Xw450xD220			96	

FTTH Products

Quick Assembly Connector



Quick assembly connector has easy assembly and excellent stability features without further processing, such as polishing, adhesives to facilitate the termination of the fiber in the field and working hard to secure space environment alone can access for assembling like pole, manholes.

In addition, it can be reduced the defect rate dramatically by worker's connection error, due to being able to reconnected.

Features

- No special assembling tool is required
- Easy for assembling with mechanical splice and no polishing
- Easy for learning technology by a simple assembling method (within 1.5 minutes)
- Minimize the defect rate by features of removal and reusable.

Specification

Article	value
Insertion loss	≤0.3 (max 0.4)
Return loss	≥40dB
Connector type	SC/PC
Cable	drop 3.0mm/ flat 2x3mm cable

Mechanical Splice



Mechanical Splicer provides quick and easy fiber splice in the field.

It employs the mature V-groove technology, and can be widely applicable for splicing different optical cables, optical fiber splicing of floor distribution units (FDU), splicing of the optical drop cables with the pigtails in the multimedia boxes, and repairing any damaged lines to realize firm and reliable splicing in optical fibers. Mechanical Splicer applies to connect any single-core MM/SM fiber.

FTTH Customer Terminal Box



Features

- Applicable for FTTH, FTTO an FTTD, etc., and allows easy use in different installation environments.
- The clasp design of the cover has greatly reduced the installation strength.

Specification

Model	Inner carton dimension (mm)	Inner carton weight(kg)
	86×86×23	0.08
	225×125×40	0.25
	150×110×30	0.15

Media Converter

10/100M Single Fiber Media Converter

Features

- Complies with IEEE 802.3 10 Base-T standard.
- Complies with IEEE 802.3u 10/100 Base-TX/FX standard
- Complies with IEEE 802.3X standard
- 10/100/ Mbps port with full/half duplex auto-negotiation
- Back pressure flow control for full duplex
- Twisted-pair connector: NODE/HUB or SWITCH (5 class UTP)
- Back pressure flow control for full/half duplex IEEE802.3X
- Automatic identification of MDI/MDI-X cross-line
- High-performance 155Mbps memory bandwidth
- Complies with FCC, 15 CLASS A, ROHS and CE MARK



Applications

- Apply to ready to rise to 10M extended enterprise network bandwidth 100M
- Apply to images, voice and other multimedia data on an integrated transport network point
- Applies to the computer signal transmission in need of the occasion widely used for computer data transmission network to meet a variety of business needs
- Apply to the campus broadband network, broadcasting network and intelligent residential broadband fiber-to-floor fiber to the home data transfer with the switches and other computer network equipment can be combined to form chain, star, ring-type network and other computer networks

Technical Specification

Standard Protocol	IEEE802.3 10 Base-T standard	
	IEEE802.3u 10/100Base-TX/FX standard	
	IEEE 802.3d standard.	
	IEEE 802.3Q standard.	
Band Width	RJ 45 Port: 10/100Mbps	Optical Port: 155Mbps
Operation Mode	Full /Half duplex mode	
Connectors	UTP: RJ-45	Fiber connector: SC/ST/FC
Operation Mode	Full /Half duplex mode	
LED Indicators	POWER, FPL,10/100, FRX, TRX , FDX.	
Power Supply	External	DC-48V,DC24V,DC12V,DC5V
	Internal	AC110-250V/50Hz
	Power Consumption	≤5W
	Power Consumption	≤5W
Environmental Parameters	Work Temperature	0℃~50℃ (32 °F ~ 122 °F)
	Storage Temperature	-40℃~70℃ (-40 °F ~ 158 °F)
	Humidity	5%-90% non-condensing
TP Cable	Cat5 UTP cable (the max distance up to 100m)	
Fiber Cable	8. 3/125, 8. 7/125, 9/125, 10/125μm(the max distance up to 20- 120km)	
	50/125, 62. 5/125μm(the max distance up to 2km or 5km)	
MTBF (Hours)	>50000	
Dimensions(mm)	External power supply	94*70*25mm(3.7 *2.8*0.98 inch)
	Internal power supply	140*110*30mm(5.5 *4.3 *1.2 inch)
	Socket Card	157*128*31mm6.2 *5.1 *1.2 inch)
Gross Weight	External power supply	0.4 kg
	Internal power supply	0.8kg
	Socket Card	1.0kg

10/100M Dual Fiber Media Converter

Features

- Complies with IEEE 802.3 10 Base-T standard.
- Complies with IEEE 802.3u 10/100 Base-TX/FX standard
- Complies with IEEE 802.3X standard
- 10/100/ Mbps port with full/half duplex auto-negotiation
- Back pressure flow control for full duplex
- Twisted-pair connector: NODE/HUB or SWITCH (5 class UTP)
- Back pressure flow control for full/half duplex IEEE802.3X
- Automatic identification of MDI/MDI-X cross-line
- High-performance 155Mbps memory bandwidth
- Complies with FCC, 15 CLASS A , ROHS and CE MARK



Application

- Apply to ready to rise to 10M extended enterprise network bandwidth 100M
- Apply to images, voice and other multimedia data on an integrated transport network point
- Applies to the computer signal transmission in need of the occasion widely used for computer data transmission network to meet a variety of business needs
- Apply to the campus broadband network, broadcasting network and intelligent residential broadband fiber-to-floor fiber to the home data transfer with the switches and other computer network equipment can be combined to form chain, star, ring-type network and other computer networks

Technical Specification

Standard Protocol	IEEE802.3 10 Base-T standard	
	IEEE802.3u 10/100Base-TX/FX standard	
	IEEE 802.3d standard.	
	IEEE 802.3Q standard.	
Band Width	RJ 45 Port: 10/100Mbps	Optical Port: 155Mbps
Operation Mode	Full /Half duplex mode	
Connectors	UTP: RJ-45	Fiber connector: SC/ST/FC
Operation Mode	Full /Half duplex mode	
LED Indicators	POWER, FPL, 10/100, FRX, TRX , FDX.	
Power Supply	External	DC-48V, DC24V, DC12V, DC5V
	Internal	AC110-250V/50Hz
	Power Consumption	≤5W
Environmental Parameters	Work Temperature	0℃~50℃ (32 °F ~ 122 °F)
	Storage Temperature	-40℃~70℃ (-40 °F ~ 158 °F)
	Humidity	5%~90% non-condensing
TP Cable	Cat5 UTP cable (the max distance up to 100m)	
Fiber Cable	8. 3/125, 8. 7/125, 9/125, 10/125μm(the max distance up to 20 -120km)	
	50/125, 62. 5/125μm(the max distance up to 2km or 5km)	
MTBF (Hours)	>50000	
Dimensions(mm)	External power supply	94*70*25mm(3.7*2.8*0.98inch)
	Internal power supply	140*110*30mm(5.5*4.3*1.2inch)
	Socket Card	157*128*31mm(6.2*5.1*1.2inch)
Gross Weight	External power supply	0.4 kg
	Internal power supply	0.8kg
	Socket Card	1.0kg

Features

- Complies with IEEE 802.3 10 Base-T standard.
- Complies with IEEE 802.3u 10/100 Base-TX/FX standard.
- Complies with IEEE 802.3X standard.
- 10/100/1000Mbps port with full/half duplex auto-negotiation
- Back pressure flow control for full duplex
- Converter mode with auto-change-forward(Switch)function
- Back pressure flow control for full/half duplex IEEE802.3X.
- Automatic identification of MDI/MDI-X cross-line.
- High-performance 1.25Gbps bandwidth.
- Complies with FCC, 15 CLASS A , Rosh and CE MARK.



Application

- Apply to ready to rise to 1000M extended enterprise network up to 120km
- Apply to images, voice and other multimedia data on an integrated transport network point
- Applies to the computer signal transmission in need of the occasion widely used for computer data transmission network to meet a variety of business needs
- Apply to the campus broadband network, broadcasting network and intelligent residential broadband fiber-to-floor fiber to the home data transfer with the switches and other computer network equipment can be combined to form-chain, star, ring-type network and other computer networks

Technical Specification

Standard Protocol	IEEE802.3 10 Base-T standard	
	IEEE802.3u 10/100Base-TX/FX standard	
	IEEE802.1q, IEEE802.1p QoS,	
	IEEE802.1d Spanning Tree	
	IEEE 802.3z standard	
Band Width	IEEE 802.3ab standard.	
	RJ 45 Port:10/100/1000Mbps	Optical Port: 1.25Gbps
Operation Mode	Full /Half duplex mode	
Connectors	UTP : RJ-45	Fiber connector: SC/ST/FC
Operation Mode	Full /Half duplex mode	
LED Indicators	POWER, FPL,10/100, FRX, TRX , FDX.	
Power Supply	External	DC5V 2A
	Internal	AC110-250V/50Hz
	DC -32~-72V	
	Power Consumption	≤5W
Environmental Parameters	Work Temperature	0℃~50℃ (32 °F ~ 122 °F)
	Storage Temperature	-40℃~70℃ (-40 °F ~ 158 °F)
	Humidity	5%~90% non-condensing
TP Cable	Cat5 UTP cable (the max distance up to 100m)	
Fiber Cable	8. 3/125, 8. 7/125, 9/125, 10/125μm(the max distance up to 20 -120km)	
	50/125, 62. 5/125μm(the max distance up to 2km or 5km)	
MTBF (Hours)	>50000	
Dimensions(mm)	External power supply	94*70*25mm(3.7*2.8*0.98inch)
	Internal power supply	140*110*30mm(5.5*4.3*1.2inch)
	Socket Card	157*128*31mm(6.2*5.1*1.2inch)
Gross Weight	External power supply	0.4 kg
	Internal power supply	0.8kg
	Socket Card	1.0kg

10/100/1000M Dual Fiber Media Converter

Features



- Provide one fiber connector and one UTP connector
- Fully complies with IEEE802.3 10Base-T, IEEE802.3u 100Base-TX, IEEE802.2ab 1000Base-TX, IEEE802.3z 1000Base-FX standard
- Auto-detection of half/full duplex transfer mode for TX port
- Auto-negotiation of 10/100/1000Mbps rate and Auto-MDI/MDIX for TX port
- Provide switch configuration of half/full duplex transfer mode for FX port
- Extend fiber distance up to 2km for multi-mode fiber and 20-120km for single-mode fiber
- Compact size for easy installation and working with Media Chassis
- Choice of fiber-connector from SC, LC and WDM, multi-mode / single-mode fiber for 1000Base SFP interface
- Easy-to-view LED indicators provides status to easily monitor network activity Internal power supply
- 1000Base-SX: 50/125 μ m or 62.5/125 μ m multi-mode fiber cable, up to 220/550m
- 1000Base-T: 2-pair Cat. 5/5e/6 UTP cable, up to 100 meters
- Back pressure flow control for full duplex IEEE802.3 X and half duplex.

Technical Specification

Standard Protocol	IEEE802.3 1000 Base-T standard	
	IEEE802.3u 10/100/1000Base-SX/TX standard	
	IEEE802.1q, IEEE802.1p QoS	
	IEEE802.1d Spanning Tree	
	IEEE 802.3z standard.	
Band Width	IEEE 802.3ab standard.	
	IEEE 802.3ab standard.	
Band Width	RJ 45 Port: 10/100/1000Mbps	Optical Port: 1.25Gbps
Operation Mode	Full /Half duplex mode	
Connectors	UTP: RJ-45	Fiber connector: SC/ST/FC/LC
Operation Mode	Full /Half duplex mode	
LED Indicators	POWER, FPL, 10/100, FRX, TRX, FDX.	
Power Supply	External	5V DC 2A
	Internal	AC110-250V/50Hz DC -32~-72V
	Power Consumption	$\leq 5W$
Environmental Parameters	Work Temperature	0 $^{\circ}$ C~50 $^{\circ}$ C (32 $^{\circ}$ F ~ 122 $^{\circ}$ F)
	Storage Temperature	-40 $^{\circ}$ C~70 $^{\circ}$ C (-40 $^{\circ}$ F ~ 158 $^{\circ}$ F)
	Humidity	5%~90% non-condensing
TP Cable	Cat5 UTP cable (the max distance up to 100m)	
Fiber Cable	8. 3/125, 8. 7/125, 9/125, 10/125 μ m(the max distance up to 20 -120km)	
	50/125, 62. 5/125 μ m(the max distance up to 2km or 5km)	
MTBF (Hours)	>50000	
Dimensions(mm)	External power supply	94*70*25mm(3.7*2.8*0.98inch)
	Internal power supply	140*110*30mm(5.5*4.3*1.2inch)
	Socket Card	157*128*31mm(6.2*5.1*1.2inch)
Gross Weight	External power supply	0.4 kg
	Internal power supply	0.8kg
	Socket Card	1.0kg

10/100/1000M 4 RJ45+ 2 Fiber Ports Ethernet Optical Transceiver

Features

- In conformity to IEEE 802.3 10 Base-T standard. In conformity to IEEE 802.3u 100 Base-TX, IEEE802.3z, IEEE802.3ab standard
- Built in high efficiency SRAM for packet buffer, with 1K-entry look up table and 4-way associative hash algorithm.
- Half duplex: back pressure flow control
- Full duplex: IEEE802.3x flow control
- Automatic Identification of MDI/MDI-X cross line.
- In conformity to safety code of FCC and 15 CLASS A and CE MARK.



Specification

- Standard Protocol: IEEE802.3 10 Base-T standard
- IEEE 802.3u 100Base-TX and IEEE802.3z standard
- Connector: Two UTP RJ-45 connector, two SC/ST connector
- Operation mode: full duplex mode or half duplex mode
- Power supply parameter:
- Power line (External): 110-265V AC; Power Adapter 5V 1A DC
- Environmental temperature: -20°C ~ 70 °C
- Relative humidity: 5%-90%
- TP cable: Cat5 UTP cable
- Transfer fiber:
- multi-mode: 50/125, 62.5/125 or 100/140µm
- single mode: 8.3/125, 8.7/125, 9/125 or 10/125µm
- Dimensions:
- Power external: 185mm(L) x 112mm(W) x 35mm(H)

Fiber Media Converter 14 slot 2U Rack Mount Chassis

Features

- Versatile chassis for multiple converter installations
- Fourteen/ Sixteen front panel slots for FHC Media Converters
- 19" Rack Mount
- Plug and Play Operation
- LED Indication for Primary and Secondary Power Supplies
- LED Indication for Converters
- Metal Case



Available Converter Modules

- Gigabit ethernet 1000Base-T to 1000Base-SX/LX converter (multimode and single mode)
- 100Base-TX to 100Base-FX (SC/ST or FC) converter (multimode and single mode)
- N-Way 10/100Base-TX to 100Base-FX (SC/ST or FC) converter (multimode and single mode)
- 1000Base-SX (single mode/SC) to 1000Base-SX (multimode/SC) converter
- 100Base-FX (single mode/SC) to 100Base-FX (multimode/SC) converter
- 10Base-T (STP) to 10Base-FL (ST) converter (multimode and single mode)
- 10/100Base-TX to 100Base-FX 2 wavelength WDM switch converter
- The 2U-Chassis is a versatile, flexible and cost effective solution for fiber conversion installations particularly when many fibers are terminated in one 19-inch rack

Specification

Diagnostic LED: MB, MN

Safety Standards: UL, CSA, FCC Part 15 Class B, CE

Number of Ports: 14 slots for Series media converter

Dimension: 294x 283 x 100 mm (WxDxH)

Weight: 5 Kg (Net Weight)

Power Input: 100-240V, 150W, 50-60Hz

Redundant Power(Optional) Input: 100-240V, 150W, 50-60Hz

Operating Temperature: 0oC ~ +50oC

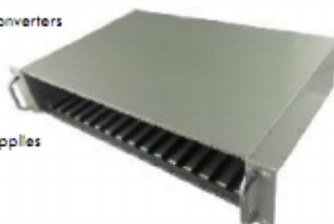
Storage Temperature: -40oC ~ +70oC

Humidity: 5 ~ 90% non condensing

16 Slot Fiber Media Converter Rack Chassis 19" 2U

Features

- Versatile chassis for multiple converter installations
- Fourteen/Sixteen front panel slots for FHC Media Converters
- 19" Rack Mount
- Optional redundant power supply
- Plug and Play Operation
- LED Indication for Primary and Secondary Power Supplies
- LED Indication for Converters
- Metal Case



Available converter modules

- Gigabit ethernet 1000Base-T to 1000Base-SX/LX converter (multimode and single mode)
- 100Base-TX to 100Base-FX (SC/ST or FC) converter (multimode and single mode)
- N-Way 10/100Base-TX to 100Base-FX (SC/ST or FC) converter (multimode and single mode)
- 1000Base-SX (single mode/SC) to 1000Base-SX (multimode/SC) converter
- 100Base-FX (single mode/SC) to 100Base-FX (multimode/SC) converter
- 10Base-T (STP) to 10Base-FL (ST) converter (multimode and single mode)
- 10/100Base-TX to 100Base-FX 2 wavelength WDM switch converter
- The 2U-Chassis is a versatile, flexible and cost effective solution for fiber conversion installations particularly when many fibers are terminated in one 19-inch rack

Specification

- Diagnostic LED: MB, MN
- Safety Standards: UL, CSA, FCC Part 15 Class B, CE
- Number of Ports: 16 slots for Series media converter
- Dimension: 294x 283 x 100 mm (WxDxH)
- Weight: 5 Kg (Net Weight)
- Power Input: 100-240V, 150W, 50-60Hz
- Redundant Power (Optional) Input: 100-240V, 150W, 50-60Hz
- Operating Temperature: 0°C ~ +50°C
- Storage Temperature: -40°C ~ +70°C
- Humidity: 5 ~ 90% non condensing

Video Converter

2 Channels Fiber Optic Video Converter Singlemode 20/40/60km

Features

- 10-digit coding and non-compression video transmission
- Automatically reply for overloading protection
- Status Indicating
- No electromagnetic, frequency and ground current interference;
- Surface mounted technology
- Advanced auto-adaptive technology avoiding on-site electric or optical adjustment
- LED status indicating the operation of the surveillance.



Specification

Port	2
Video interface	BNC
Video in/output impedance	75Ω
Video in/output voltage	(typical)1.0Vp-p/max 1.5Vp-p
Bandwidth	5-8MHz
Differential phase	<0.6°
SNR	≥68dB
Field gradient	<0.5%

Data Characteristics

Physical connector	phoenix contact (DATA)
Data connector	RS-485/422, RS232
Channels of data	forward and reverse path data multi-channels
Interface port	Industrial standard interface port

Environment Specification

Working temperature(°C)	-30~+75
Storage temperature(°C)	-40~+85
Relative humidity	0~95%

Optical Budget

Fiber type	MM	SM	SM	SM
Budget	20dBm	20dBm	22dBm	25dBm
Transmission Distance	2km	20km	40km	60km

Other Specification

Dimension(mm)	143x107x28
Input rating voltage	AC220V/50Hz
Power supply	DC 5V/2A
Power	≤5W
Sampling rate	15MHZ
MTBF	≥100,000h

Fiber Optic Video Converter 16 Channels 20km

Features

- 10-digit coding and non-compression video transmission;
- Automatically reply for overloading protection;
- No electromagnetic, frequency and ground current interference;
- Surface mounted technology;
- Advanced auto-adaptive technology avoiding on-site electric or optical adjustment;
- LED status indicating operation of the surveillance.

Specification

Video Specification				
Port	16			
Video interface	BNC			
Video in/output impedance	75Ω			
Video in/output voltage	(typical)1.0Vp-p/max 1.5Vp-p			
Bandwidth	5-8MHz			
Differential phase	<0.6°			
SNR	≥68dB			
Field gradient	<0.5%			
Data Characteristics				
Physical connector	phoenix contact (DATA)			
Data connector	RS-485/422,RS232			
Channels of data	forward and reverse path data multi-channels			
Interface port	Industrial standard interface port			
Environment Specification				
Working temperature(°C)	-30~+75			
Storage temperature(°C)	-40~+85			
Relative humidity	0~95%			
Optical Budget				
Fiber type	MM	SM	SM	SM
Budget	20dBm	20dBm	22dBm	25dBm
Transmission Distance	2km	20km	40km	60km
Other Specification				
Dimension(mm)	490x255x45			
Input rating voltage	AC220V/50Hz			
Power supply	DC 5V/5A			
Power	≤20W			
Sampling rate	1.5MHZ			
MTBF	≥100,000h			

Fiber Optic Video Converter 8 Channels 20km

Features

- 10-digit coding and non-compression video transmission;
- Automatically reply for overloading protection;
- No electromagnetic, frequency and ground current interference;
- Advanced auto-adaptive technology avoiding on-site electric or optical adjustment;
- LED status indicating the operation of the surveillance.

Specification

Video Specification				
Port	8			
Video interface	BNC			
Video in/output impedance	75Ω			
Video in/output voltage	(typical)1.0Vp-p/max 1.5Vp-p			
Bandwidth	5-8MHz			
Differential phase	<0.6°			
SNR	≥68dB			
Field gradient	<0.5%			
Data Characteristics				
Physical connector	phoenix contact (DATA)			
Data connector	RS-485/422, RS232			
Channels of data	forward and reverse path data multi-channels			
Interface port	Industrial standard interface port			
Environment Specification				
Working temperature(°C)	-30~+75			
Storage temperature(°C)	-40~+85			
Relative humidity	0~95%			
Optical Budget				
Fiber type	MM	SM	SM	SM
Budget	20dBm	20dBm	22dBm	25dBm
Transmission Distance	2km	20km	40km	60km
Other Specification				
Dimension(mm)	176x176x47			
Input rating voltage	AC220V/50Hz			
Power supply	DC 5V/5A			
Power	≤10W			
Sampling rate	1.5MHZ			
MTBF	≥100,000h			

1 Channel Fiber Optic Video Converter Single mode, 20/40/60km

Features

- 10-digit coding and non-compression video transmission;
- Automatically reply for overloading protection;
- No electromagnetic, frequency and ground current interference;
- Advanced auto-adaptive technology avoiding on-site electric or optical adjustment;
- LED status indicating the operation of the surveillance



Specification

Video Specification				
Port	1			
Video Interface	BNC			
Video In/output Impedance	75Ω			
Video In/output voltage	(typical)1.0Vp-p/max 1.5Vp-p			
Bandwidth	5-8MHz			
Differential gain				
Differential phase	<0.6°			
SNR	≥68dB			
Field tile	<0.5%			
Data Characteristics				
Physical connector	phoenix contact (DATA)			
Data connector	RS-485/422,RS232			
Channels of data	forward and reverse path data multi-channels			
Interface port	Industrial standard Interface port			
Environment Specification				
Working temperature(°C)	-30~+75			
Storage temperature(°C)	-40~+85			
Relative humidity	0~95%			
Optical Budget				
Fiber type	MM	SM	SM	SM
Budget	20dBm	20dBm	22dBm	25dBm
Transmission Distance	2km	20km	40km	60km
Other Specification				
Dimension(mm)	133x107x28			
Input rating voltage	AC220V/50Hz			
Power supply	DC 5V/1A			
Power	≤5W			
Sampling rate	15MHZ			
MTBF	≥100,000h			

WDM

1310/1490/1550nm Filter Wavelength Division Multiplexer(FWDM)

Features

- Wide Operating Wavelength Range
- Low Insertion Loss
- Ultra Flat Wide Passband
- High Channel Isolation
- High Stability and reliability
- Epoxy-free on Optical Path

Application

- Testing Instruments
- FTTH Tri-Play System

Specification



Parameter		FWDM 4/35	FWDM 5/34	FWDM 34/5
Pass Band Wavelength Range (nm)		1480~1500	1540~1560	1260~1360&1480~1500
Reflection Band 1 Wavelength Range (nm)		1260~1360	1260~1360	1540~1560
Reflection Band 2 Wavelength Range (nm)		1540~1560	1480~1500	
Insertion loss (dB)	Reflect Channel	≤0.6		
	Pass Channel	≤0.8		
Pass Band Rippler (dB)		<0.3		
Isolation	Reflect Channel	>15		
	Pass Channel	>30		
Insertion Loss Temperature Sensitivity (dB/℃)		<0.005		
Polarization Dependent Loss (dB)		<0.1		
Polarization Mode Dispersion (ps)		<0.1		
Directivity (dB)		>50		
Return loss (dB)		>50		
Maximum Power Handling (mW)		1000		
Operating Temperature (℃)		-20~+80		
Storage Temperature (℃)		-40~+85		
Package Dimension (mm)		Φ5.5x34 (L38 for 900um Loose tube)		

Above specification are tested without connector.

Multimode 1310/1550nm Filter Wavelength Division Multiplexer(MM FWM)

Features

- Wide Operating Wavelength Range
- Low Insertion loss
- Ultra Flat Wide Passband
- High Channel Isolation
- High stability and reliability
- Epoxy-free on Optical Path

Application

- System Monitoring
- WDM Network
- Transmitters and Fiber lasers
- Fiber Optical amplifier
- Fiber optic instruments

Specification



Parameter	Specification				
Pass Channel Wavelength (nm)	1500 ~ 1600 (or 1260 ~ 1360)				
Reflect Channel Wavelength (nm)	1260 ~ 1360 (or 1500~1600)				
Insertion Loss (dB)	<table border="1"> <tr> <td>Reflect Channel</td> <td>≤0.5</td> </tr> <tr> <td>Pass Channel</td> <td>≤0.6</td> </tr> </table>	Reflect Channel	≤0.5	Pass Channel	≤0.6
Reflect Channel	≤0.5				
Pass Channel	≤0.6				
Insertion Loss Variation (dB)	<0.3				
Isolation (dB)	<table border="1"> <tr> <td>Reflect Channel</td> <td>>15</td> </tr> <tr> <td>Pass Channel</td> <td>>40</td> </tr> </table>	Reflect Channel	>15	Pass Channel	>40
Reflect Channel	>15				
Pass Channel	>40				
Insertion Loss Temperature Sensitivity (dB/°C)	<0.005				
Polarization Dependent Loss (dB)	<0.1				
Polarization Mode Dispersion	<0.1				
Directivity (dB)	>50				
Return Loss (dB)	>50				
Maximum Power Handling (mW)	500				
Operating Temperature (°C)	-2~+80				
Storage Temperature (°C)	-40~+85				
Package dimension (mm)	Φ5.5x34 (L38 for 900um Loose tube)				

Above specification are for device without connector.

CWDM

1x2 CWDM Device (3ports)

Features

- Low Insertion Loss
- Wide pass band
- High Channel Isolation
- High Stability and reliability
- Epoxy-free on Optical Path

Application

- Line Monitoring
- WDM Network
- Telecommunication



- Cellular Application
- Fiber Optical amplifier
- Access Network

Specification

Parameter	Specification				
Channel Wavelength (nm)	1260 ~ 1620				
Center wavelength Accuracy (nm)	±0.5				
Channel Spacing (nm)	20				
Channel Passband (@0.5dB bandwidth (nm)	>13				
Pass Channel Insertion Loss (dB)	≤0.6				
Reflection Channel Insertion Loss (dB)	≤0.4				
Channel Ripple (dB)	<0.3				
Isolation (dB)	<table border="1"> <tr> <td>Adjacent</td> <td>>30</td> </tr> <tr> <td>Non-adjacent</td> <td>>40</td> </tr> </table>	Adjacent	>30	Non-adjacent	>40
Adjacent	>30				
Non-adjacent	>40				
Insertion Loss Temperature Sensitivity (dB/°C)	<0.005				
Wavelength Temperature Shifting (nm/°C)	<0.002				
Polarization Dependent Loss (dB)	<0.1				
Polarization Mode Dispersion	<0.1				
Directivity (dB)	>50				
Return Loss (dB)	>45				
Maximum Power Handling (mW)	300				
Operating Temperature (°C)	-25~+75				
Storage Temperature (°C)	-40~85				
Package dimension (mm)	Φ5.5x34 (L38 for 900um Loose tube)				

Specifications may change without notice.

Above specification are for device without connector.

CWDM Mux Demux Module Packed In ABS Box

Features

- Low Insertion Loss
- Wide pass band
- High Channel Isolation
- High Stability and reliability
- Epoxy-free on Optical Path
- Access Network



Application

- Line Monitoring
- WDM Network
- Telecommunication
- Cellular Application
- Fiber Optical amplifier
- Access Network

Specification

Parameter	4 Channel		8 Channel		16 Channel	
	Mux	Demux	Mux	Demux	Mux	Demux
Channel Wavelength (nm)	1270~1610					
Center wavelength Accuracy (nm)	±0.5					
Channel Spacing (nm)	20					
Channel Passband (@-0.5dB bandwidth (nm))	>13					
Insertion Loss (dB)	≤1.6		≤2.5		≤4.5	
Channel Uniformity (dB)	≤0.6		≤1.0		≤1.5	
Channel Ripple (dB)	0.3					
Isolation (dB)	Adjacent	N/A >30	N/A >30	N/A >30	N/A >30	N/A >30
	Non-adjacent	N/A >40	N/A >40	N/A >40	N/A >40	N/A >40
Insertion Loss Temperature Sensitivity (dB/°C)	<0.005					
Wavelength Temperature Shifting (nm/°C)	<0.002					
Polarization Dependent Loss (dB)	<0.1					
Polarization Mode Dispersion	<0.1					
Directivity (dB)	>50					
Return Loss (dB)	>45					
Maximum Power Handling (mW)	300					
Operating Temperature (°C)	-5~+75					
Storage Temperature (°C)	-40~85					
Package dimension (mm)	L100 x W80 x H10			L142 x W102 x H14.5		

Above specification are for device without connector.

Mini CWDM Mux/ Demux Module

Features

- Mini Size
- High Reliability
- Low Insertion Loss and Better Uniformity
- Ultra High Thermal Stability
- Epoxy-free in Optical Path
- ROHS Compliant

Application

- CWDM System
- CATV System
- Network upgrading

Specification



Parameter		Unit	Values			
Channel Number	CH		4	8	8(+E1)	8(+E2)
Central Wavelength		nm	1270, 1290...1610 or 1271, 1291...1611			
Passband	Channels	Min.	+/-0.5			
	Upgrade port	Min.	1310+/-50			
Isolation	Mux	Adjacent Channel	Min.	30		
		Non-adjacent Channel	Min.	40		
		Upgrade port	Min.	15		
	Demux	Adjacent Channel	Min.	30		
		Non-adjacent Channel	Min.	40		
		Upgrade port	Min.	15		
Insertion Loss	Channels	Max.	dB	1.0	1.5	1.6
	Upgrade port	Max.			1.2	1.2
Ripple in Passband		Max.	dB	0.3		
Directivity		Min.	dB	50		
Polarization Dependent Loss		Max	dB	0.15		
Polarization Mode Dispersion		Max	ps	0.10(GD)		
Return Loss		Min.	dB	45		
Fiber Type				Corning SMF-28 with 900mm loose tube		
Fiber Length		m		1.0+/-0.1		
Power Handling	Max	mW		500		
Operating Temperature		°C		-10~70		
Storage Temperature		°C		-40~85		
Package Dimension		mm		[L]60x[W]29x[H]10		

1. All specifications include the effect of operating temperature and all states of polarization.

2. Values referenced without connectors and insertion loss for a connector-pair is 0.20dB (typ.) and 0.30dB (max.).

3. Fiber length includes rubber boot and excludes the connector.

8+1-CH Coarse Wavelength Division Multiplexer (CWDM Mux/ Demux) Module

Features

- Low Insertion Loss
- Wide pass band
- High Channel Isolation
- High Stability and reliability
- Epoxy-free on Optical Path
- Access Network

Application

- Line Monitoring
- WDM Network
- Telecommunication
- Cellular Application
- Fiber Optical amplifier
- Access Network

Specification

Parameters		8+1-CH Mux	8+1-CH Demux
Channel Wavelength (nm)		1270-1610 or 1271-1611	
Center Wavelength Accuracy (nm)		± 0.05	
Channel Spacing (GHz)		20nm	
Channel Passband (@-0.5dB bandwidth (nm))		>13	
Insertion Loss (dB) (Without skip component)		≤ 2.8	
Insertion Loss (dB) (With skip component)		≤ 2.0	
Channel Uniformity (dB)		≤ 0.6	
Channel Ripple (dB)		≤ 0.3	
Isolation (dB)	Ad acent	≥ 30	
	Non-ad acent	≥ 40	
	Express Port	≥ 12	
Insertion Loss Temperature Sensitivity (dB/°C)		≤ 0.005	
Wavelength Temperature Shifting (nm/°C)		≤ 0.002	
Polarization Dependent Loss (dB)		≤ 0.1	
Polarization Mode Dispersion (ps)		≤ 0.1	
Return Loss (dB)		≥ 50	
Directivity		≥ 45	
Max Power Handling (mW)		300	
Operating Temperature (°C)		-5 ~ +75	
Storage Temperature (°C)		-40 ~ +85	
Package Dimension (mm)		L100 X W80 X 10	

Note: All parameters are for device without connectors.

4, 8, 16, 18- Channel CWDM OADM Module

Features

- Low Insertion Loss
- Wide pass band
- High Channel Isolation
- High Stability and reliability
- Epoxy-free on Optical Path
- Access Network



Application

- Line Monitoring
- WDM Network
- Telecommunication
- Cellular Application
- Fiber Optical amplifier
- Access Network

Specification

Parameter	4 Channel		8 Channel		16 Channel		
	Mux	Demux	Mux	Demux	Mux	Demux	
Channel Wavelength (nm)	1270~1610						
Center wavelength Accuracy (nm)	±0.5						
Channel Spacing (nm)	20						
Channel Passband (@-0.5dB bandwidth (nm))	>13						
Insertion Loss (dB)	≤1.6		≤2.5		≤4.5		
Channel Uniformity (dB)	≤0.6		≤1.0		≤1.5		
Channel Ripple (dB)	0.3						
Isolation (dB)	Adjacent	N/A	>30	N/A	>30	N/A	>30
	Non-adjacent	N/A	>40	N/A	>40	N/A	>40
Insertion Loss Temperature Sensitivity (dB/℃)	<0.005						
Wavelength Temperature Shifting (nm/℃)	<0.002						
Polarization Dependent Loss (dB)	<0.1						
Polarization Mode Dispersion	<0.1						
Directivity (dB)	>50						
Return Loss (dB)	>45						
Maximum Power Handling (mW)	300						
Operating Temperature (℃)	-5~+75						
Storage Temperature (℃)	-40~85						
Package dimension (mm)	L100 x W80 x H10			L142 x W102 x H14.5			

Above specification are for device without connector.

DWDM

100G, 200G DWDM Optical Add-Drop Multiplexer (1x2 DWDM OADM)

Features

- Low Insertion Loss
- Wide pass band
- High Channel Isolation
- High Stability and reliability
- Epoxy-free on Optical Path

Application

- Channel Add/Drop
- DWDM Network
- Wavelength Routing
- Fiber Optical amplifier
- CATV fiber optic System

Specification



Parameter		MUX/DEMUX	
Channel Wavelength (nm)		ITU Grid	
Center wavelength Accuracy (nm)		±0.5	±0.1
Channel Spacing (GHz)		100	200
Channel Passband (@-0.5dB bandwidth (nm)		>0.22	>0.5
Pass Channel Insertion Loss (dB)		≤1.0	≤0.9
Reflection Channel Insertion Loss (dB)		≤0.6	≤0.6
Channel Ripple (dB)		<0.3	
Isolation (dB)	Adjacent	>30	
	Non-adjacent	>40	
Insertion Loss Temperature Sensitivity (dB/°C)		<0.005	
Wavelength Temperature Shifting (nm/°C)		<0.002	
Polarization Dependent Loss (dB)		<0.1	
Polarization Mode Dispersion		<0.1	
Directivity (dB)		>50	
Return Loss (dB)		>45	
Maximum Power Handling (mW)		500	
Operating Temperature (°C)		-10~+75	
Storage Temperature (°C)		-40~85	
Package dimension (mm)		Φ5.5x34 (L38 for 900um Loose tube)	

Above specification are for device without connector.

100GHz Dense Wavelength Division Multiplexer (DWDM Module 4, 8, 16 Channel)

Features

- Low Insertion Loss
- Wide pass band
- High Channel Isolation
- High Stability and reliability
- Epoxy-free on Optical Path

Application

- Channel Add/Drop
- DWDM Network
- Wavelength Routing
- Fiber Optical amplifier
- CATV fiber optic System

Specification



Parameter		4 Channel		8 Channel		16 Channel	
		Mux	Demux	Mux	Demux	Mux	Demux
Channel Wavelength (nm)		ITU 100GHz Grid					
Center wavelength Accuracy (nm)		±0.1					
Channel Spacing (nm)		100					
Channel Passband (@-0.5dB bandwidth (nm)		>0.25					
Insertion Loss (dB)		≤1.8		≤3.7		≤5.5	
Channel Uniformity (dB)		≤0.6		≤1.0		≤1.5	
Channel Ripple (dB)		0.3					
Isolation (dB)	Adjacent	N/A	>30	N/A	>30	N/A	>30
	Non-adjacent	N/A	>40	N/A	>40	N/A	>40
Insertion Loss Temperature Sensitivity (dB/°C)		<0.005					
Wavelength Temperature Shifting (nm/°C)		<0.002					
Polarization Dependent Loss (dB)		<0.1		<0.1		<0.15	
Polarization Mode Dispersion		<0.1					
Directivity (dB)		>50					
Return Loss (dB)		>45					
Maximum Power Handling (mW)		300					
Operating Temperature (°C)		-5~+75					
Storage Temperature (°C)		-40~85					
Package dimension (mm)		L100 x W80 x H10			L142 x W102 x H14.5		

Above specification are for device without connector.

100G, 200G DWDM OADM Module (4, 8 Channel)

Features

- ITU channel spacing
- Low Insertion loss
- Wide pass band
- High Channel Isolation
- High Stability and reliability
- Epoxy-free on Optical Path
- Access Network

Application

- Channel Add/Drop
- DWDM Network
- Wavelength Routing
- Fiber Optical amplifier
- CATV fiber optic System

Specification



Parameter	4 Channel		8 Channel		
	Add	Drop	Add	Drop	
Channel Wavelength (nm)	ITU Grid				
Center wavelength Accuracy (nm)	±0.05 (100G) / ±0.1 (200G)				
Channel Spacing (GHz)	100				
Channel Passband (@-0.5dB bandwidth (nm))	>0.22 (100G) / >0.5(200G)				
Insertion Loss (dB)	In-Drop@drop	2.0	3.2		
	Add---Out@add	2.0	3.2		
	In---out@other	2.5	5.0		
Add/Drop Channel Ripple (dB)	<0.3				
Isolation @Add/Drop Channel	Adjacent	N/A	>30	N/A	>30
	Non-adjacent	N/A	>40	N/A	>40
Insertion Loss Temperature Sensitivity (dB/°C)	<0.005				
Wavelength Temperature Shifting (nm/°C)	<0.002				
Polarization Dependent Loss (dB)	<0.1				
Polarization Mode Dispersion (ps)	<0.1				
Directivity (dB) (Input to add, Output to drop, add to drop)	>50				
Return Loss (dB)	>45				
Maximum Power Handling (mW)	500				
Operating Temperature (°C)	-10~+75				
Storage Temperature (°C)	-40~+85				
Package dimension (mm)	L100xW80xH10				

Above specification are for device without connector.

100G DWDM N-CH Packed In 19-in 1U Rack Mount

Features

- Low Insertion loss
- Wide pass band
- High Channel Isolation
- High Stability and reliability
- Epoxy-free on Optical Path

Application

- Channel Add/Drop
- DWDM Network
- Wavelength Routing
- Fiber Optical amplifier
- CATV fiber optic System

Specification



Parameter	4 Channel		8 Channel		16 Channel		
	Mux	Demux	Mux	Demux	Mux	Demux	
Channel Wavelength (nm)	ITU 100GHz Grid						
Center wavelength Accuracy (nm)	±0.1						
Channel Spacing (nm)	100						
Channel Passband (@-0.5dB bandwidth (nm))	>0.25						
Insertion Loss (dB)	≤1.8		≤3.7		≤5.5		
Channel Uniformity (dB)	≤0.6		≤1.0		≤1.5		
Channel Ripple (dB)	0.3						
Isolation (dB)	Adjacent	N/A	>30	N/A	>30	N/A	>30
	Non-adjacent	N/A	>40	N/A	>40	N/A	>40
Insertion Loss Temperature Sensitivity (dB/°C)	<0.005						
Wavelength Temperature Shifting (nm/°C)	<0.002						
Polarization Dependent Loss (dB)	<0.1		<0.1		<0.15		
Polarization Mode Dispersion	<0.1						
Directivity (dB)	>50						
Return Loss (dB)	>45						
Maximum Power Handling (mW)	300						
Operating Temperature (°C)	-5~+75						
Storage Temperature (°C)	-40~85						
Package dimension (mm)	L100 x W80 x H10				L142 x W102 x H14.5		

Above specification are for device without connector.



Cable Cutting



Pre-bending



Jacket Stripping



Cable Identify



Cladding Stripping



Cable Injection



Fiber Inserting



Fiber Curling



Fasten By Jig



9.6 & 10 Polishing



Ultrasonic Cleaning



Microscope Inspection



Crimp Insertion



Kit Assembly



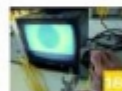
IL & R. Test



Tip Polishing



ADS Polishing



Microscope Inspection



Packaging



FOC



Ready For Snapping

Connecting you and me,
connecting the World.

Caritex
Fiber Components