

Fiber Optics & Telecommunication



QINGDAO SUNET TECHNOLOGIES CO.,LTD

Adress:NO.45 Beijing Road,Qingdao Free Trade Zone,266555,China

TEL:+86 532 80988644

Email:sunet@qdsunet.com

Http://www.qdsunet.com

QINGDAO SUNET TECHNOLOGIES CO.,LTD

www.qdsunet.com

Contents

Company Profile	01
Fiber Optic Patchcord	02
Fiber Optic Pigtail	04
FBT Coupler	06
PLC Splitter-Steel Tube Type	08
PLC Splitter-ABS Box Type	09
PLC Splitter -Insertion Card Type	10
PLC Splitter-Rack Type	11
FWDM	12
CWDM	14
DWDM	16
Fiber Optic Adapter	18
Fast Connector	20
FTTH Box	22
Fiber Optic Attenuator	26
Fiber Optic Connector	28
Fiber Optic Splice Closure	30
Fiber Optic Tool	31
ODF&Terminal Box	32
FTTH Cable	34
Fiber Optic Heat Shrinking Sleeve/Protection Box	36

COMPANY PROFILE

> > > > > > > > >

Qingdao Sunet Technologies Co., Ltd (SUNET), established in 2006 Year(which located in beautiful city QINGDAO, Shandong Province,China), is a high-tech enterprise and a leading worldwide provider for Fiber Optic Components.

Now we are the biggest fiber optic components supplier in North China. Our main products are all kinds of Fiber Optic and FTTH products such as fiber optic Patchcords, fiber optic Pigtails, fiber optic Adapters, fiber optic FBT Couplers, PLC splitters, WDM/CWDM/DWDM, all series of Distribution boxes and FTTH products.

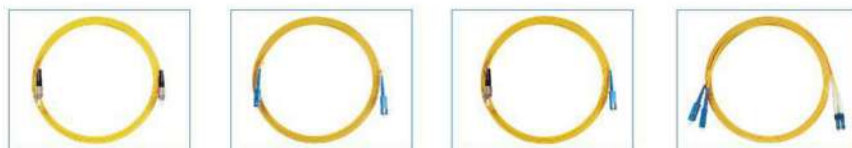
All our products are comply with the international quality standard and are greatly appreciated in a variety of different markets throughout the world!

We have over 300 employees, and because of our high-quality production and excellent customer service, we have gained a global sales network reaching North American, Europe, South American, Asia etc.

We have passed ISO9001: 2008 Quality Management System Certification and ISO14001 Environmental Management System Certification. Our high quality products and outstanding service win the customers from all the world, and SUNET is looking forward to cooperate with you!



Fiber Optic Patch Cord



Description

Fiber Optic Patch Cord is important of optical network, they have same or different connectors which are installed on the end of fiber optic cable. The Fiber Optic Patch Cord series comes with a comprehensive collection of lengths and connectors to fulfill your demand for the deployment.

Feature

- ◆ Price-Competitive
- ◆ Low Insertion Loss & PDL
- ◆ Factory-terminated and Tested
- ◆ Fiber Options: G.652 /G.657/OM1/OM2/OM3 and PM Panda Fiber
- ◆ ConnectorOptions: FC/SC/LC/ST/MU/DIN/SMA/E2000/MT-RJ/MPO/MTP
- ◆ Polishing Options: PC/UPC/APC
- ◆ Feature Connector with Ceramic Ferrules

Application

- ◆ Access Network
- ◆ Telecom/CATV
- ◆ SystemsFTTx

Specification

Parameters	Standard Fiber Cable Assemblies	
Fiber Type	SM(G.652/G.657A)	MM(OM1/OM2/OM3/OM4/OM5)
Jacket Materials	LSZH/OFNR/PVC	
Connector Type	SC/LC/ST/LC/MU/DIN/SMA/MTRJ/MPO/E2000	
Ferrule Materials	Ceramic	
Testing Wavelengths	1310±30/1550±30nm	850±30/1300±30nm
Insertion Lossss(dB)	≤ 0.25dB	≤ 0.3dB
TIA/EIA-455-107	(PC/UPC/APC)	(PC/UPC)
Return Loss(dB)	≥50dB(PC/UPC)	≥40dB(PC/UPC)
TIA/EIA-455-107	≥60dB(APC)	
Exchangeability	≤ 0.2dB	
Cable Assemblies	Pigtail/Simplex/Duplex/Fan-out Patchcord	
Operating Temperature (° C)	-10~ + 70	
Storage Temperature (° C)	-40 ~ +85	
Package	1unit/bag	
*All values specified are with connectors.		

Fiber Optic Pigtail



Description

Optical Fiber Pigtail can provide a quick and easy termination of fibers in the field. Options are available for 900 micron allowing the installer to terminate and make connection in minutes at equipment and fiber patch panels. Our quick connector system removes any requirement for epoxy, adhesives or costly curing ovens. All the key steps have been done in the factory to ensure every connection is excellent.

Feature

- ◆ Low cost
- ◆ Low Insertion Loss & PDL
- ◆ High return loss (low amounts of reflection at the interface)
- ◆ Factory-terminated and Tested
- ◆ Ease of installation
- ◆ Reliability
- ◆ Low environmental sensitivity
- ◆ Connector with Ceramic Ferrules

Application

- ◆ Access Network
- ◆ Telecom/CATV Systems
- ◆ Active device termination
- ◆ Local Area Networks (LANs)
- ◆ Metro
- ◆ Test equipment
- ◆ Data processing networks
- ◆ Wide Area Networks(WANs)
- ◆ FTTx

Specifications

Parameters	ParStandard Fiber Cable Assemblies	
Fiber Type	SM(G.652/G.657A)	SM(G.652/G.657A)
Jacket Materials	LSZH/OFNR/PVC	
Connector Type	SC/LC/ST/LC/MU/DIN/SMA/MTRJ/MPO/E2000	
Ferrule Materials	Ceramic	
Testing Wavelengths	1310±30/1550±30nm	850±30/1300±30nm
Insertion Loss(dB)	≤ 0.25dB	≤ 0.3dB
TIA/EIA-455-107	(PC/UPC/APC)	(PC/UPC)
Return Loss(dB)	≥ 50dB(PC/UPC)	≥ 40dB(PC/UPC)
TIA/EIA-455-107	≥ 60dB(APC)	
Exchangeability	≤ 0.2dB	
Cable Assemblies	Pigtail/Simplex/Duplex/Fan-out Patchcord	
Operating Temperature (° C)	-10~ + 70	
Storage Temperature (° C)	-40 ~ +85	
Package	1unit/bag	
*All values specified are with connectors.		

FBT Coupler

Single Window



Dual Window



Triple Window



Description

1. Fiber Optic FBT splitter is a type of optical power management device that is fabricated using Fused Biconical Tape technology.
2. It features small size, high reliability, cheap cost and good channel-to-channel uniformity, and is widely used in PON networks to realize optical signal power splitting.
3. Sunet provides whole series of 1xN and 2xN splitter products that are tailored for specific applications. All products meet GR-1209-CORE and GR-1221-CORE

Sunet offers both tree and star type inline couplers/splitters. They provide a reliable solution to split/combine signals. The splitting ratio ranges from 1x2 to 1x32 ports for tree couplers, and from 2x2 up to 2x32 for star couplers. Available in single, dual, and tripple wavelength windows(1310/1490/1550nm).

Application

- ◆ Long-haul Telecommunications
- ◆ CATV Systems & Fiber Optic Sensors
- ◆ Local Area Network

Feature

- ◆ Low Excess loss
- ◆ Low PDL
- ◆ Environmentally stable
- ◆ Good Thermal Stability

Technical Parameter

Parameter	Specification	
Channel Number	1x2 or 2x2	
Operating Wavelength (nm)	1310, 1550, 1310/1550, 1310/1550/1490	
Operating Bandwidth (nm)	≥40	
Coupling Ratio	Coupling Ratio Insertion Loss(dB)	
	P Grade	A Grade
50/50	≤3.3	≤3.5
40/60	≤4.5/2.6	≤4.7/2.8
30/70	≤5.7/1.9	≤5.9/2.1
20/80	≤7.6/1.3	≤7.75/1.38
10/90	≤10.85/0.68	≤11.2/0.75
5/95	≤14.4/0.45	≤15.5/0.48
2/98	≤18.5/0.6	≤19.8/0.38
1/99	≤21.8/0.28	≤22.8/0.35
PDL (dB)	≤0.15	≤0.2
Directivity(dB)	≥50	
Return Loss(dB)	≥55	

Technical Parameter

Parameter	Specification							
Operating Wavelength : nm	Single Window1 Dual Window2 Triple Window3							
(1xN)	N=3	N=4	N=5	N=8	N=16	N=24	N=32	N=64
Fiber Type	Corning SMF-28e							
IL(MAX)	dB	5.41/5.62	7.01/7.22	7.81/8.02	10.01/10.42	13.51/13.92	15.01/15.42	17.31/17.52
Uniformity	dB	0.51/0.62	0.51/0.62	0.61/0.82	0.81/1.02	1.11/1.32	1.21/1.52	1.31/1.52
Return Loss	dB	≥55						
Directivity	dB	≥55						
PDL	dB	<0.20	<0.20	<0.30	<0.30	<0.40	<0.50	<0.50

PLC Splitter ---- Steel Tube Type



Description

PLC splitter is based on planar Lightwave circuit technology and precision aligning process, can divide a single/dual optical input(s) into multiple optical outputs uniformly and is denoted 1xN or 2xN. PLC splitter is applied in FTTX deployments, PON networks, CATV links and optical signal distribution currently. SUNET's PLC splitter offers superior optical performance, high stability and high reliability, meet various application requirements in different environments.

Application

- ◆ FTTX networks
- ◆ PON networks
- ◆ CATV links
- ◆ Data Communication

Feature

- ◆ Low Insertion Loss
- ◆ Low Polarization Dependent Loss
- ◆ Wide Operation Wavelength
- ◆ Wide Operation Temperature
- ◆ High Stability and Reliability
- ◆ Telcordia GR-1209 and GR-1221 Compliance
- ◆ YD/T 2000.1-2009 Compliance (TLC Product Certificate Compliance)

Specification

Parameter	Unit	1×2	1×4	1×6	1×8	1×12	1×16	1×32	1×64
Premium Grade									
Insertion Loss at 23°C	Typ. dB	3.9	6.8	9.3	10.0	12.1	13.2	16.5	20.0
	Max dB	4.0	7.0	9.6	10.4	12.6	13.5	16.8	20.5
Channel Uniformity	Max dB	0.6	0.8	1.0	1.0	1.6	1.6	1.6	2.0
PDL	Typ. dB	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
	Max dB	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.5
Standard Grade									
Insertion Loss at 23°C	Typ. dB	4.0	7.0	9.5	10.4	12.4	13.6	17.0	20.5
	Max dB	4.2	7.3	10.0	10.6	12.8	13.8	17.1	20.8
Channel Uniformity	Max dB	0.6	0.8	1.0	1.0	1.0	1.4	1.6	2.0
PDL	Typ. dB	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3
	Max dB	0.2	0.3	0.3	0.2	0.3	0.3	0.3	0.5
Return Loss	Min dB	55 (Premium Grade)/50 (Standard Grade)							
Directivity	Min dB	55							
Operation Wavelength	nm	1260~1650							
Operation Temperature	°C	-4~+85							
Storage Temperature	°C	-4~+85							
Fiber Type	-	G.657A or Customized							

PLC Splitter ---- ABS Box Type



Description

PLC splitter is based on planar Lightwave circuit technology and precision aligning process, can divide a single/dual optical input(s) into multiple optical outputs uniformly and is denoted 1xN or 2xN. PLC splitter is applied in FTTX deployments, PON networks, CATV links and optical signal distribution currently. SUNET's PLC splitter offers superior optical performance, high stability and high reliability, meet various application requirements in different environments.

Application

- ◆ FTTX networks
- ◆ PON networks
- ◆ CATV links
- ◆ Data Communication

Feature

- ◆ Low Insertion Loss
- ◆ Low Polarization Dependent Loss
- ◆ Wide Operation Wavelength
- ◆ Wide Operation Temperature
- ◆ High Stability and Reliability
- ◆ Telcordia GR-1209 and GR-1221 Compliance
- ◆ YD/T 2000.1-2009 Compliance (TLC Product Certificate Compliance)

Specification

Parameter	Unit	1×2	1×4	1×6	1×8	1×12	1×16	1×32	1×64
Premium Grade									
Insertion Loss at 23°C	Typ. dB	3.9	6.8	9.3	10.0	12.1	13.2	16.5	20.0
	Max dB	4.0	7.0	9.6	10.4	12.6	13.5	16.8	20.5
Channel Uniformity	Max dB	0.6	0.8	1.0	1.0	1.6	1.6	1.6	2.0
PDL	Typ. dB	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
	Max dB	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.5
Standard Grade									
Insertion Loss at 23°C	Typ. dB	4.0	7.0	9.5	10.4	12.4	13.6	17.0	20.5
	Max dB	4.2	7.3	10.0	10.6	12.8	13.8	17.1	20.8
Channel Uniformity	Max dB	0.6	0.8	1.0	1.0	1.0	1.4	1.6	2.0
PDL	Typ. dB	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3
	Max dB	0.2	0.3	0.3	0.2	0.3	0.3	0.3	0.5
Return Loss	Min dB	55 (Premium Grade)/50 (Standard Grade)							
Directivity	Min dB	55							
Operation Wavelength	nm	1260~1650							
Operation Temperature	°C	-4~+85							
Storage Temperature	°C	-4~+85							
Fiber Type	-	G.657A or Customized							

PLC Splitter ---- Insertion Card Type



Description

PLC splitter is based on planar Lightwave circuit technology and precision aligning process, can divide a single/dual optical input(s) into multiple optical outputs uniformly and is denoted 1xN or 2xN. PLC splitter is applied in FTTX deployments, PON networks, CATV links and optical signal distribution currently. SUNET's PLC splitter offers superior optical performance, high stability and high reliability, meet various application requirements in different environments.

Application

- ◆ FTTX networks
- ◆ PON networks
- ◆ CATV links
- ◆ Data Communication

Feature

- ◆ Low Insertion Loss
- ◆ Low Polarization Dependent Loss
- ◆ Wide Operation Wavelength
- ◆ Wide Operation Temperature
- ◆ High Stability and Reliability
- ◆ Telcordia GR-1209 and GR-1221 Compliance
- ◆ YD/T 2000.1-2009 Compliance (TLC Product Certificate Compliance)

Specification

Parameter	Unit	1×2	1×4	1×6	1×8	1×12	1×16	1×32	1×64
Premium Grade									
Insertion Loss at 23°C	Typ. dB	3.9	6.8	9.3	10.0	12.1	13.2	16.5	20.0
	Max dB	4.0	7.0	9.6	10.4	12.6	13.5	16.8	20.5
Channel Uniformity	Max dB	0.6	0.8	1.0	1.0	1.6	1.6	1.6	2.0
	Typ. dB	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
PDL	Max dB	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.5
Standard Grade									
Insertion Loss at 23°C	Typ. dB	4.0	7.0	9.5	10.4	12.4	13.6	17.0	20.5
	Max dB	4.2	7.3	10.0	10.6	12.8	13.8	17.1	20.8
Channel Uniformity	Max dB	0.6	0.8	1.0	1.0	1.0	1.4	1.6	2.0
	Typ. dB	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3
PDL	Max dB	0.2	0.3	0.3	0.2	0.3	0.3	0.3	0.5
Return Loss	Min dB	55 (Premium Grade)/50 (Standard Grade)							
Directivity	Min dB	55							
Operation Wavelength	nm	1260~1650							
Operation Temperature	°C	-4~+85							
Storage Temperature	°C	-4~+85							
Fiber Type	-	G.657A or Customized							

PLC Splitter ---- Rack Type



Description

PLC splitter is based on planar Lightwave circuit technology and precision aligning process, can divide a single/dual optical input(s) into multiple optical outputs uniformly and is denoted 1xN or 2xN. PLC splitter is applied in FTTX deployments, PON networks, CATV links and optical signal distribution currently. SUNET's PLC splitter offers superior optical performance, high stability and high reliability, meet various application requirements in different environments.

Application

- ◆ FTTX networks
- ◆ PON networks
- ◆ CATV links
- ◆ Data Communication

Feature

- ◆ Low Insertion Loss
- ◆ Low Polarization Dependent Loss
- ◆ Wide Operation Wavelength
- ◆ Wide Operation Temperature
- ◆ High Stability and Reliability
- ◆ Telcordia GR-1209 and GR-1221 Compliance
- ◆ YD/T 2000.1-2009 Compliance (TLC Product Certificate Compliance)

Specification

Parameter	Unit	1×2	1×4	1×6	1×8	1×12	1×16	1×32	1×64
Premium Grade									
Insertion Loss at 23°C	Typ. dB	3.9	6.8	9.3	10.0	12.1	13.2	16.5	20.0
	Max dB	4.0	7.0	9.6	10.4	12.6	13.5	16.8	20.5
Channel Uniformity	Max dB	0.6	0.8	1.0	1.0	1.6	1.6	1.6	2.0
	Typ. dB	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
PDL	Max dB	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.5
Standard Grade									
Insertion Loss at 23°C	Typ. dB	4.0	7.0	9.5	10.4	12.4	13.6	17.0	20.5
	Max dB	4.2	7.3	10.0	10.6	12.8	13.8	17.1	20.8
Channel Uniformity	Max dB	0.6	0.8	1.0	1.0	1.0	1.4	1.6	2.0
	Typ. dB	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3
PDL	Max dB	0.2	0.3	0.3	0.2	0.3	0.3	0.3	0.5
Return Loss	Min dB	55 (Premium Grade)/50 (Standard Grade)							
Directivity	Min dB	55							
Operation Wavelength	nm	1260~1650							
Operation Temperature	°C	-4~+85							
Storage Temperature	°C	-4~+85							
Fiber Type	-	G.657A or Customized							

FWDM



Description

Three-port WDM specifically refers to three specific wavelength division multiplexing devices. In fiber-optic communications network, using three-port WDM can achieve two-way transmission of voice, video, data, the three most common wavelengths of WDM are 1310nm, 1490 & 1550nm. Three-port WDM filters use principle of mutual collimator after binding the package, you can customize any of three wavelengths. Such devices generally require 24 hours of high temperature cycling and drop test to ensure products' stability and reliability.

Application

- ◆ System Monitoring
- ◆ WDM system
- ◆ Transmitters and Fiber
- ◆ Fiber optical amplifier
- ◆ Fiber optic Instruments

Feature

- ◆ Wide Wavelength Range
- ◆ Low Insertion Loss
- ◆ High Channel Isolation
- ◆ High stability and reliability

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 Band1 Wavelength Range (nm)	1260 ~ 1360	1260 ~ 1360	
Reflection Band2 Wavelength Range (nm)	1540~1560	1480~1500	1540~1560
Insertion Loss (dB)	Reflect Channel	≤0.8	
	Pass Channel	<0.3	
Channel Ripple (dB)		> 15	
Isolation(dB)	Reflect Channel	>30	
	Pass Channel	<0.005	
Insertion Loss Temperature Sensitivity (dB/°C)		<0.1	
Polarization Dependent Loss (dB)		<0.1	
Polarization Mode Dispersion (ps)		>50	
Directivity (dB)		>50	
Return Loss (dB)		500	
Maximum Power Handling (mW)		0 ~+70	
Operating Temperature (°C)		-40 ~+85	
Storage Temperature (°C)		1. Ø5.5 x L38(for 900um Loose tube or bare fiber)	
Package Dimension (mm)		2. L90xW20xH9.5(for 2.0 mm or 3.0mm Cable)	

Order Information

Product	Wavelength	Pigtail Type	Fiber length	Connector
FWDM	4/35=1490pass/1310&1550reflect	0=250um	1=1m	0=None
	5/34=1550pass/1310&1490reflect	1=900um	2=1.5m	1=FC/APC
	34/5=1310&1490pass/1550reflect	2=2.0mm	3=others	2=FC/PC
		3=3.0mm		3=SC/APC
				4=SC/PC
				5=others

CWDM MUX/DEMUX



Description

CWDM is using optical multiplexer to different wavelengths of light to reuse the signals to single fiber transmission, the receiving end of the link, with the aid of photolysis multiplexer to mixed signal in the optical fiber signal is decomposed into different wavelengths, connected to the corresponding receiving equipment.

Application

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

Feature

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

Specification

Parameter		4 Channel		8 Channel		16-18 Channel	
		Mux	Demux	Mux	Demux	Mux	Demux
Channel Wavelength (nm)				1270~1610			
Center wavelength Accuracy (nm)				±0.5			
Channel Spacing (nm)				20			
Channel Passband bandwidth (nm)				±7.5			
Insertion Loss (dB)		≤1.6		≤2.5		≤3.5 4.0	
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
Inertion 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	

Remark: Above specifications are for device without connectors.

Order Information

Configuration	Channel No.	Channel	Pigtail Type	Fiber length	Dimensio(mm)	Connector
M=Mux D=Demux	04=4 Channel	27=1270nm	0=250um	1=1m	1=L100 x W80 x H10	0=None
	08=8 Channel	47=1470nm	1=900um	2=1.5m	2=L120xW80xH18	1=FC/APC
	16=16 Channel	49=1490nm	2=2.0mm	3=others	3=19 1U Rack	2=FC/PC
		3=3.0mm			3=SC/APC
	N=N Channel	61=1610nm				4=SC/PC
	SS=special...				5=other



Description

DWDM multi-channel multiplexer /demultiplexer (Mux /DeMux)modules are available on ITU channel spacing of 100GHz. They demonstrate low loss, temperature insensitivity and reliable performance in any system application.Fixed Mux/DeMux modules offer low-cost wavelength management solutions that are suitable for long haul, metro, and access application.

Application

- ◆ DWDM System
- ◆ PON Networks
- ◆ CATV Links
- ◆ Fiber optical amplifier
- ◆ Wavelength routing

Feature

- ◆ Low Insertion Loss
- ◆ High Isolation
- ◆ Low PDL
- ◆ Compact Design

Specification

Item	Unit	Parameters		
Channel Spacing	GHz	100GHz		
Wavelength Range		C-band ITU channels		
Channel Centers	nm	ITU		
Channels	ch	4	8	16
Passbandwidth	nm	$\geq \pm 0.13$		
Passband Ripple	dB	≤ 0.5		
Channel Insertion Loss	dB	≤ 2.5		
Channel EXP Insertion Loss	dB	≤ 2.8		
Isolation (adjacent channel)	dB	≥ 30		
Isolation (non-adjacent channel)	dB	≥ 40		
Polarization Dependent Loss	dB	≤ 0.2		
Polarization Mode Dispersion	ps	≤ 0.2		
Directivity	dB	≥ 50		
Return Loss	dB	≥ 45		
Optical Power Handling	mW	≤ 500		
Operating Temperature Range	°C	-5 to 70		
Storage Temperature Range	°C	-40 to +85		
Fiber Type	NA	SMF-28e+		

All the specifications are based on the devices with connector

Ordering information

Product	Frequency	Channel	Module Type	Fiber Type	Fiber Length	Connector
DWDM	50~50G	4=4 channel	M=MUX	1=Bare fiber	1=1m	0=None
	10~100G	8=8 channel	D=DEMUX	2=900um	2=2m	1=FC/APC
	20~200G	16=16 channel	O=MUX& DEMUX	3=3.0mm		2=FC/PC
						3=SC/APC
						4=SC/PC
						5=LC

Fiber Optic Adapter

SC



FC



LC



ST



Description

Fiber optic adapters are an important component in a fiber optic network; they are used in a fiber optic patch panel or any other outlet to mate two connectors. Fiber optic adapters are available for all standard connector types in both singlemode and multimode including Simplex and duplex versions. Our fiber optic adapters are made with high precision machines which ensure precise alignment for the connectors when they are plugged in. Fiber optic adapters are color coded allowing easy identification of the adaptor type.

We also offer hybrid and other special types of fiber optic adapters, such as Bare, shuttered and metal housing Fiber optic adapters.

Application

- ◆ Communication Workshop
- ◆ FTTH
- ◆ Local Area Network
- ◆ Fiber Sensor
- ◆ CATV
- ◆ Fiber Optical Communication System

Feature

- ◆ Low insertion and back reflection loss, high precision alignment
- ◆ Telcordia, TIA/EIA compliance
- ◆ Compact design, Plastic housing
- ◆ Good changeability and repeatability
- ◆ Simplex, Duplex

Specification

SC Fiber Optic Adapter						
Item NO.	Test Item	Unit	Standard & Requirement			
			SM			MM
			PC	UPC	APC	PC
1	Insertion Loss(Typical)	dB	≤0.2	≤0.2	≤0.2	≤0.2
2	Return Loss	dB	≥45	≥50	≥60	≥30
3	Exchangeability	dB	≤0.2			
4	Repeatability	dB	≤0.2			
5	Durability	Time	≥1000			
6	Operating Temperature	°C	-40~+75			
7	Storage Temperature	°C	-45~+85			

Fast Connector



Description

Fiber Optic Fast Connector make fiber terminations quick, easy and reliable. These fiber optic connectors offer terminations without any hassles and require no epoxy, no polishing, no splicing, no heating and can achieve similar excellent transmission parameters as standard polishing and splicing technology.

Mechanical Field-Mountable Fiber Optic Connector (FMC) is designed to simple the connection without fusion splicing machine. This connector is quick assembly which requires only normal fiber preparation tools: cable stripping tool and fiber cleaver. The connector adopts Fiber Pre-Embedded Tech with superior ceramic ferrule and aluminum alloy V-groove. Also, transparent design of the side cover which allows visual inspection.

Application

- ◆ Patch panels
- ◆ Distribution frames
- ◆ Maintenance or emergency restoration of fiber networks
- ◆ FTTH Outlets
- ◆ Connection at the desk for LAN environments

Feature

- ◆ No epoxy or polishing required
- ◆ Quick and easy fiber termination in the field
- ◆ Eliminates cable excess length and pigtail splice storage
- ◆ Cost effective

Date sheet

Applicable for	3.1x2.0mm drop cable or 3.0/2.0/0.9mm cable
Optical fiber diameter	φ125um (657A&657B)
Tight buffer diameter	φ250um
Fiber mode	Single mode
Operation time	About 10s (exclude fiber cut)
Insert loss	≤0.3dB (1310nm & 1550nm)
Return loss	≥45dB
Fastening strength of naked fiber	≥ 5N
Tight clamping force cladding	≥ 8N
Tensile strength	≥ 50N
Using temperature	-45°C~+80°C

FTTH Box



86 Terminal Box



SNT-FAT-8H



SNT-FAT-8C



SNT-FAT-16A



SNT-FAT-16C



SNT-FATC-001



SNT-OTB-12A



SNT-OTB-16B



SNT-OTB-16C



SNT-OTB-48B



FTTH Box



SNT-FAT-6A



SNT-FAT-2A



SNT-FAT-4A



SNT-FAT-8G



SNT-FAT-24A



SNT-FAT-12C



SNT-FAT-16A



SNT-FATC-002



SNT-FRB-1A



SNT-FRB-1B



SNT-FRB-2B



SNT-FRB-3A

Fiber Optic Attenuator



Description

Fiber Optic Attenuator is one kind of optical passive device which is used to debug the performance of the optical power in the optical communication system,debugging fiber optic instrument calibration correction, optical signal attenuation.And used for the attenuation of the input optical power, avoid optical receiver distortion due to input optical power powerful. The fixed fiber optic attenuator can achieve the dual function of adapter and attenuators.

Application

- ◆ Fiber optical telecommunication system
- ◆ Fiber optical CATV
- ◆ Fiber optical sensor
- ◆ Testing equipment

Feature

- ◆ Low back reflection and Low PDL
- ◆ High precision attenuation value
- ◆ Precision control of attenuation range
- ◆ Wide attenuation range
- ◆ Precision ceramic ferrule
- ◆ FC, SC, ST, LC ... optional
- ◆ Plastic or metal housing material
- ◆ Comply with Telcodia GR-310-CORE

Parameters

Product type	Coupler Attenuator Male to Female
Operation wavelength	SM: 1200 to 1600nm or 1310/1550nm MM: 850nm, 1300nm
Return Loss	≥ 50 db (PC) ≥ 55 db (UPC) ≥ 65 db (APC)
Attenuation Accuracy	+/-0.5 db for 1 to 5db attenuation +/-10% for 6 to 30db attenuation
Polarization Dependent loss	≤ 0.2db
Mechanical endurance	>1000
Maximum optical Input power	200MW
Operating Temp Range	-40 to + 80degree
Standard	YD/T 1272.4-2007

Fiber Optic Connector



Description

The optical fiber connector is one of the most basic passive components in the optical fiber communication. There are difference ferrule materials (ceramic, plastic, metal), a variety of body and boot color to choose. Through the process of curing and polishing, etc., the connector is combined with various of fiber optic cable and made into different kinds of patchcord (jumper), which have been widely applied to the CATV system, communications system, FTTx system, Local Area Networks, Wide Area Networks, Metro, Test equipment, Active device termination and so on.

Note: Ferrule with/without flange is available

Feature

- ◆ Price-Competitive
- ◆ Low Insertion Loss
- ◆ Factory-terminated and Tested
- ◆ Fiber Options: G.652/G.655/G.657A
- ◆ Connector Options: FC/SC/LC/ST
- ◆ Polishing Options: PC/UPC/APC
- ◆ Feature Connector with Ceramic Ferrules

Application

- ◆ Access Network
- ◆ Telecom/CATV Systems
- ◆ FTTx

Specifications

Connector Type	FC, SC, ST, LC, MPO, MTRJ etc.
Operating Wavelength	1260nm-1650nm
Insertion Loss	≤0.20dB, max 0.3dB
Return Loss	PC≥45.0dB, UPC≥50.0dB, APC≥60.0dB
Exchangeability	≤0.20dB
Vibration	10-60Hz, 1.5mm ≤0.10dB
Tensile	≤0.10dB (0-15Hg, except Ø0.9mm)
Plug times	>1000 (Times), ≤0.20dB, >500(Times), ≤0.10dB
Storage Temperature	-40°C ~ +85°C
Operating Temperature	-40°C ~ +85°C
Relative humidity	95%, (+25°C~ +65°C, after 100h)

Fiber Optic Splice Closure

Dome Type



SNSTD08-2



SNSTD08-4



SNSTD08-6



SNSTD08-7



SNSTD08-9



SNSTD08-10



SNSTD08-11



SNSTD08-a

Horizontal Type



SNTHT 09-01



SNTHT 09-06



SNTHT 09-07



SNTHT 09-10



SNTHT 09-12



SNTHT 09-15



SNTHT 09-16



SNTHT 09-19



SNTHT 09-A

Fiber Optic Tool



ODF & Terminal Box



Description

It can be used in the termination and distribution of partial trunk fiber cable in fiber cable communication system, easy to realize connection, distribution and adjustment, it is distribution and connection equipment.

It is with standard 19 inch size and properly designed to control the bend radius of the cable inside the enclosure to avoid extra optical loss. This frame is ideal for indoor fiber optic cables connection storage, distribution and management.

Feature

- ◆ Electrolysis plate frame, electrostatic spraying in whole
- ◆ Adopt faced cable entry, whole faced operation
- ◆ Safe and flexible, mounting against wall or back-to-back
- ◆ Modular structure, easy to adjust fusion and distribution units available for ribbon and non-ribbon cables.
- ◆ Suitable for inserting installation of SC, FC and ST adapter
- ◆ Adapter and module are 30° in observe, which ensure the bend radius of patch cord and avoid laser burning eyes.
- ◆ Reliable stripping, protection, fixing and earth devices
- ◆ Ensure fiber and cable bend radius is bigger than 40mm everywhere
- ◆ Accomplishing scientific arrangement for patch cords with Fiber Storage Units.
- ◆ According to simple adjustment among the units, cable can lead in from top or bottom, According to simple adjustment among the units, cable can lead in from top or bottom

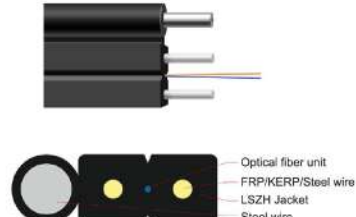
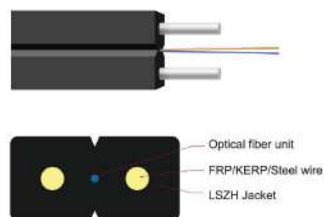
Application

- ◆ Telecommunications subscriber loop
- ◆ Fiber to the home (FTTH)
- ◆ LAN/WAN
- ◆ CATV

Specification

Model	Fiber Quantity	Height	Dimension(mm)	Weight(Kg)
ODF-12F	12	1U	482x295x1U	4
ODF-24F	24	2U	482x295x2U	4.5
ODF-36F	36	2U	482x295x2U	5
ODF-48C	48	3U	482x295x3U	7
ODF-96C	96	5U	482x295x5U	11
ODF-144C	144	7U	482x295x7U	15

FTTH CABLE



Description

The optical fiber unit is positioned in the centre. Two parallel Fiber Reinforced Plastics (FRP) or steel wires are placed at the two sides. A steel wire as the additional strength member is also applied. Then the cable is completed with a black LSZH sheath.

Feature

- ◆ Special low-bend-sensitivity fiber provides high bandwidth and excellent communication transmission property;
- ◆ Simple structure, light weight and high practicability;
- ◆ Novel flute design, easily strip and splice, simplify the installation and maintenance;
- ◆ Low smoke, zero halogen and flame retardant sheath.

Application

- ◆ CATV System
- ◆ Telecommunications
- ◆ Optical Networks
- ◆ FTTH (Fiber to the Home)
- ◆ High speed transmission Systems
- ◆ Testing instruments

Specification

Product model	Fiber Count (core)	Cable Diameter(mm)	Cable Weight(kg/km)	Tensile Strength Long/Short Term(N)	Crush Resistance Long/Short Term(N)	Bending Radius Static/Dynamic
GJXH	1	$(2.1 \pm 0.1) \times (3.1 \pm 0.1)$	10	1000/2200	200/1000	15/30
GJXH	2	$(2.1 \pm 0.1) \times (3.1 \pm 0.1)$	10	1000/2200	200/1000	15/30
GJXH	4	$(2.3 \pm 0.1) \times (3.3 \pm 0.1)$	12	1000/2200	200/1000	15/30
GJXFH	1	$(2.1 \pm 0.1) \times (3.1 \pm 0.1)$	9	800/1800	200/1000	15/30
GJXFH	2	$(2.1 \pm 0.1) \times (3.1 \pm 0.1)$	9	800/1800	200/1000	15/30
GJXFH	4	$(2.1 \pm 0.1) \times (3.1 \pm 0.1)$	11	800/1800	200/1000	15/30
GJYXCH	1	$(2.1 \pm 0.1) \times (5.1 \pm 0.1)$	21	1500/2500	500/1300	15/30
GJYXCH	2	$(2.1 \pm 0.1) \times (5.1 \pm 0.1)$	21	1500/2500	500/1300	15/30
GJYXCH	4	$(2.1 \pm 0.1) \times (5.1 \pm 0.1)$	21	1500/2500	500/1300	15/30
GJYXFCH	1	$(2.1 \pm 0.1) \times (5.1 \pm 0.1)$	20	1500/2500	500/1300	15/30
GJYXFCH	2	$(2.1 \pm 0.1) \times (5.1 \pm 0.1)$	20	1500/2500	500/1300	15/30
GJYXFCH	4	$(2.1 \pm 0.1) \times (5.1 \pm 0.1)$	20	1500/2500	500/1300	15/30

Fiber Optic Heat Shrinking Sleeve/Protection Box

Heat Shrinking Sleeve



drop cable double pin

drop cable single pin

fiber optic

Fiber Optic Protection Box



SNT-001



SNT-002



SNT-003



SNT-004



SNT-005

Description

Shrinkable sleeve is applied to the optical fiber closure to fix and protect the optical fiber when splicing. The sleeve can be divided into two types (single and mass) according to the function. The single type is used for the single-fiber, and the mass type is used for the ribbon fiber. It is different in the reinforcement between two types. The single one realizes the reinforcement by the stainless steel needles, the later one via the ceramic reinforcement member to realize the function. Mass means there are several cores for the fiber. So the mass sleeve includes 4cores, 6cores, 8cores, 12cores (for types).

Application

- ◆ Consist of a rod of reinforcing the splice, hot fusion tubing and cross-linked polyolefin.
- ◆ To rebuild the coating of fiber to provide mechanical strength at the fusion joint area and keep optical transmission properties.

Features

- ◆ Moisture resistant for environmental protection
- ◆ Clear sleeve make it easy to detect splice before shrinkage
- ◆ Easily use and avoid any damages to the optical fiber during installation
- ◆ Color optical fiber splice protector is very convenience for installation

Material

- ◆ The material for heat shrinkable tube is crosslinked polyolefin, shrinkable tube.
- ◆ Strengthen the stainless steel wire

Heat Shrinkable Sleeves Dimensions

Part NO.	OD after Recovery (mm)	Length (mm)	Fusion tube (D)		Steel rod (d)		Package (pcs/bag)
			ID (mm)	Length (mm)	OD (mm)	Length (mm)	
SNTSS-60	3.0±0.1	60	1.5	60	1.5	55	100
SNTSS-60	2.8±0.1	60	1.3	60	1.5	55	100
SNTSS-45	3.0±0.1	45	1.5	45	1.5	40	100
SNTSS-40	3.0±0.1	40	1.5	40	1.5	35	100
SNTSS-23	3.0±0.1	23	1.5	23	1.5	18	100
SNTSS-60	2.6±0.1	60	1.3	60	1.2	55	100
SNTSS-45	2.6±0.1	45	1.3	45	1.2	40	100
SNTSS-40	2.6±0.1	40	1.3	40	1.2	35	100
SNTSS-30	2.6±0.1	30	1.3	30	1.2	25	100
SNTSS-25	2.6±0.1	25	1.3	23	1.2	20	100