

SINO  **OPTIC**

Catalogue





Sino Optic Communication Limited

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Company Overview

Founded in 2003 in Shenzhen China, Sino Optic is a factory based fiber optic product and solution manufacturing company providing a vast array of connectivity solutions to the data storage, telecommunications, military, industrial, broadcast and networking industries. In addition to standard fiber optic patch cords and attenuated test cables, Sino Optic has pioneered proprietary products, many of which are now considered to be an industry benchmark.

Sino Optic is an industry leader in ruggedized fiber optic solutions for the defense/government, industrial, data storage, test & measurement, broadband, telecommunications, medical, and networking industries.

Sino Optic has over 400 employees with manufacturing, research and development, sales, and marketing activities based at the corporate headquarters.





We can supply fiber optic products to internationally recognised standards as well as to custom-made requirements, such as patch cord, pigtail, connector, adapter, attenuator, SFP(Transceiver-Small Form Pluggable), transceiver, media converter, couplers, splitters, loopback, and ceramic ferrules & sleeves. Our manufacturing technologies make products to sub-micron tolerance quality. Since our establishment, we have sold these products to corporations, government agencies, educational institutions and other dealers and distributors.

History

- January 2003
LHT Communication Equipment Founded
- August 2003
LHT headquarter relocation
- February 2005
LHT expanded product mix with complete line of specialty fiber products
- March 2008
HTD Communication Equipment Founded
- June 2008
HTD awarded one of the 100 fastest growing companies in Shenzhen for the last five years
- May 2009
HTD Releases the SFP+ Electrical Loopback
- September 2010
Sino Optic Communication Founded
- October 2010
Sino Optic Announces its new website for 2010
- Mar. 2011
Sino Optic Bought out Zhejiang YF Optical Component Limited, and set it as its New production base of fiber optic connectors and adaptors.



Contents

-  Zirconia Ceramic Ferrules
-  Fiber Optic Patch Cords
-  Fiber Optic Adapters
-  Fiber Optic Attenuators



Introduction:

Ferrule is the most important component of Fiber Connectors and Fiber Patch Cord. It could be made of different materials, such as plastics, stainless steel, and ceramic (zirconia). Most of the ferrules used in optical connectors are made of ceramic (Zirconia) material. Ceramic Ferrule include low insertion loss required for optical transmission, remarkable strength, small elasticity coefficient, easy control of product characteristics, and strong resistance to changes in environmental conditions.

The outer diameter (OD) Ceramic (Zirconia) Ferrule size for ST, FC and SC Fiber Connectors is $\phi 2.5\text{mm}$, The OD Ceramic (Zirconia) Ferrule size for the MU and LC Fiber Connector Versions is $\phi 1.25\text{mm}$.

The OD Ceramic (Zirconia) Ferrules size is precise with a tolerance level of $\pm 0.0005\text{mm}$. The inner diameter (ID) Ceramic Ferrules size has a precision of 0.001mm in concentricity and 0.0005mm in eccentricity for the single mode ferrules used for optical communication components. The OD Ceramic Ferrules size is precise with a tolerance level of $\pm 0.001\text{mm}$. The inner diameter (ID) Ceramic Ferrules size has a precision of 0.003mm in concentricity and 0.004mm in eccentricity for the multimode ferrules used for LAN or other Applications.

Ferrule Type



SC TYPE



APC (CONICAL TYPE)



APC (STEP TYPE)



LC TYPE



MU TYPE

TYPE	SC type	LC、MU type	APC type
O.D.Size(mm)	2.499 ± 0.0005	1.249 ± 0.0005	2.499 ± 0.0005
I.D.Size(mm)	$d_0^{+0.001}$	$d_0^{+0.001}$	$d_0^{+0.001}$
Concentricity(mm)	≤ 0.001	≤ 0.001	≤ 0.008



Ceramic Ferrule

Technical Data:

Type: SC type; APC (Step/Conical type); LC type; MU type

Surface: Spherical/Flat surface

Mode: Single/Multi mode

Flange: With flange or Without flange

Concentricity: $0.5\mu\text{m}$, $1.0\mu\text{m}$, $1.4\mu\text{m}$, $4.0\mu\text{m}$

Inside diameter: $125\mu\text{m}$, $125.5\mu\text{m}$, $126\mu\text{m}$, $127\mu\text{m}$



Sleeve

Technical Data:

Type: SC type、LC type、MU type

Split width: 0.5mm 、 1.0mm

Pull out force: $1.5-4.5\text{N}$ / $2.0-6.0\text{N}$ / $2.0-4.0\text{N}$ / $3.0-6.0\text{N}$

We provide wide variations of high precision singlemode and multimode standard Ceramic (Zirconia) ferrules with PC, UPC, APC, conical and step end-face for ST, SC, FC, LC, MU fiber connectors and patch cord, Standard ferrule assemblies with standard type SC, ST, MU flange are also available.



FC



MU



ST



MPO



LC



MTRJ



SC

• • •

others

Singlemode



Multimode



Specifications:

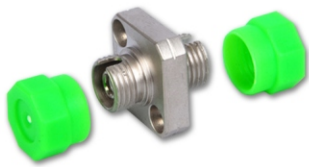
Wavelength	singlemode		1310/1550nm
	multimode		850/1300nm
Insertion loss	singlemode		<0.2dB
	multimode		<0.3dB
Return loss	singlemode	PC	>45dB
		UPC	>50dB
		APC	>60dB
	multimode	PC	>30dB
Durability	mating		>1000times
	I.L change		<0.2dB
Tension			>200N
Operating temperature			-10°C ~ 70°C
Storage temperature			-40°C ~ 85°C

Ordering Information:

- 1.Connector A&B Type: FC,SC,ST,LC,MU,MTRJ,.....(PC/UPC/APC)
- 2.Simplex or Duplex
- 3.Optical Fiber:
 - ①Singlemode/Multimode (9/125μm,50/125μm,62.5/125μm);
 - ②Cable Diameter: 0.9mm, 2.0mm, 3.0mm;
 - ③Riser Rated (OFNR), Plenum Rated (OFNP), Low Smoke Zero Halogen (LSZH);
 - ④Cable Length (meter): 1m,2m,3m,

Note:

The fiber patch cable and pigtail come with your choice of simplex or duplex cable configurations and various types of pigtail and connector terminations to meet your requirement, please contact us with your connector & performance specifications.



FC



LC



SC



ST



DIN



D4



MU



MTRJ

Applications:

Telecommunication networks
 Data communications networks
 Active device termination
 CATV networks
 LAN(Local Area Networks)

Features:

Compliant with:IEC,Telcordia
 Optical performance 100% factory tested
 Excellent Concentricity
 Ceramic sleeves
 Easy to handle

Specifications:

Characteristics	Condition	Value(dB)
Insertion Loss	/	<0.15
Mating Cycles	1000 times	<0.20
Operating Temperature	-40-75℃	<0.20
Storage Temperature	-55-85℃	<0.20
Humidity	75℃,95%/336hr	<0.20
Sleeve	Ceramic,Dust caps	<0.20

Technical Data:

1.Fiber Type: Singlemode/Multimode 2.Connector A Type: SC,FC,LC,ST,MU... 3.Connector B Type: SC,FC,LC,ST,MU... 4.Polishing Type: UPC,APC... 5.Port Type: Simplex/Duplex

Others:

Hybrid Adapters: FC-SC, LC-FC, ST-FC, SC-LC are available, please contact us with your performance specifications.



FC



LC



SC



ST

Features:

- Low back reflection
- High power endurance
- Precise control of attenuation range
- Easy installation
- Environmentally stable
- Customer design specification
- Readily panel mountable

Specifications:

Mode Type	SM,MM
Operating wavelength(nm)	1310,1550
MAX PDI(dB)	≤0.1
Attenuation Value	±0.5dB(<10dB) ±0.1dB(>10dB)
Return Loss(dB)	UPC>55dB,APC>60dB,PC>45dB
Operating Temperature	-30-75℃
Storage Temperature	-40-85℃
Connector Type	SC,FC,ST,LC

Ordering Information:

- | | | |
|-------------|-----------------|--------------------|
| 1. | 2. | 3. |
| Fiber Mode: | Connector Type: | Attenuation Value: |
| Single-mode | SC | 01-25dB |
| Multi-mode | FC | |
| | LC | |
| | | |

Sino Optic offers 1~20dB and standard attenuation values at 3,5,10,15 and 20dB,advantaging economy scale for mass productive supply and custom-made attenuation value meeting your specific requirement, please contact us with your performance specifications.

Professional



Reliable

Quality



Prompt



