



Yangtze Optical Fibre and Cable Joint Stock Limited Company

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Specialty Optical Fibre Components and Modules





Yangtze Optical Fibre and Cable Joint Stock Limited Company (also known as 'YOFC') is established in Wuhan, Hubei Province in May 1988. It's a technologically innovative enterprise specializing in optical fibre preforms, optical fibres, optical fibre cables and integrated solutions. It is also a global leading supplier of optical fibre preforms, optical fibres and optical fibre cables.

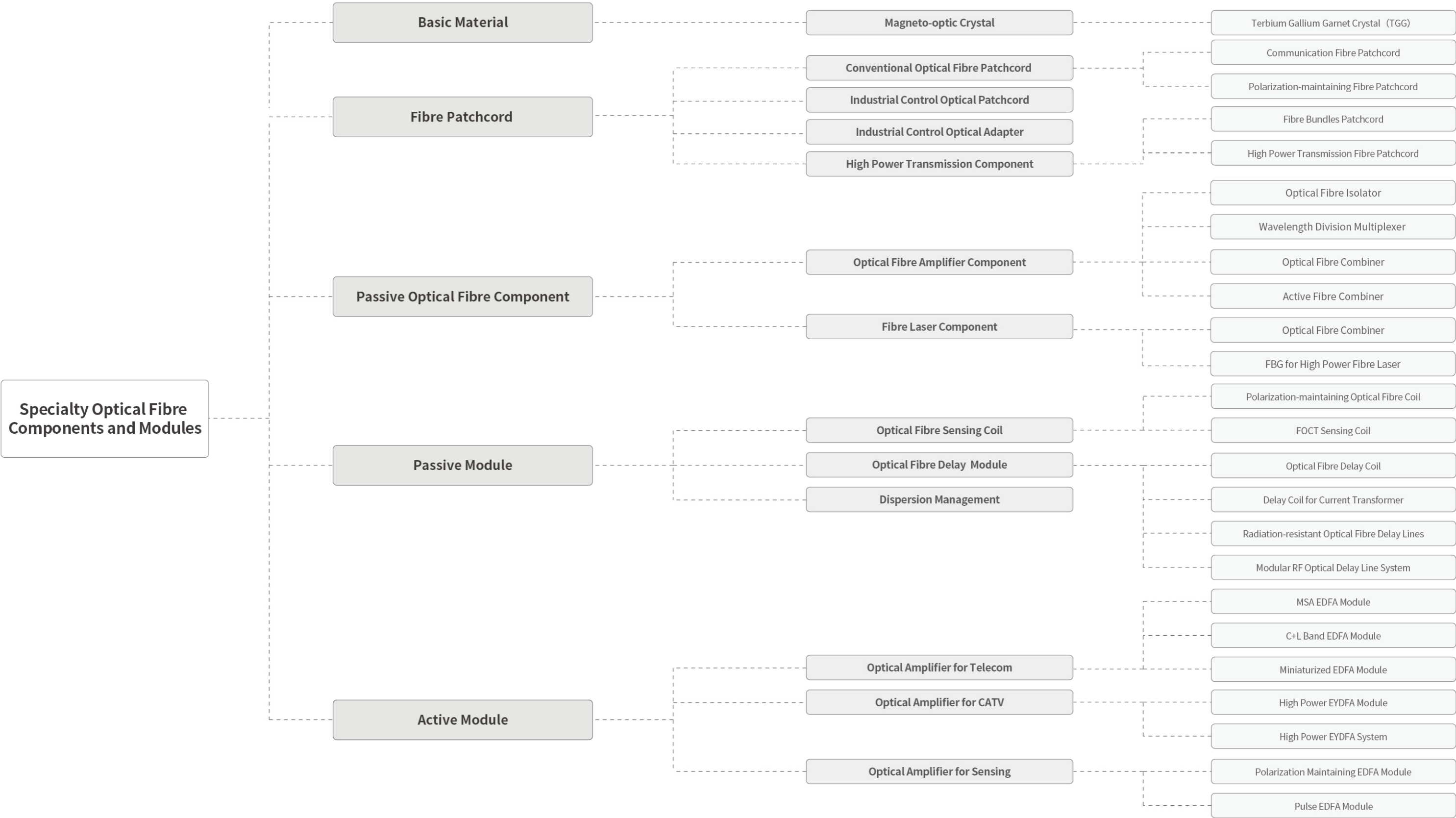
YOFC was listed on the Hong Kong Stock Exchange on December 10, 2014 (Stock Code: 06869.HK), and listed on the Shanghai Stock Exchange on July 20, 2018 (Stock Code: 601869.SH), and is the only A&H shares company in China's optical fibre and cable industry as well as the first one in Hubei Province.

YOFC mainly produces and sells different types of optical fibre preforms, optical fibres and optical fibre cables that widely installed in telecommunications industry, customized specialty optical fibres and optical fibre cables, RF coaxial cables and accessories. YOFC also provides the integrated systems, project design and services. In addition, YOFC is equipped with a full series of optical fibres , optical fibre cables and solutions, providing a variety of different products and solutions for world's telecommunications industry and other industries (e.g. Public utility, Transportation, Oil & Chemistry and Medication etc.) and offering its products and services to over 70 countries and regions around the world.

Through introduction, digestion, absorption and re-innovation since its establishment, YOFC has carried out a way to successfully revitalize national industry. YOFC has mastered 3 types of optical fibre preform manufacturing technology (PCVD/OVD/VAD), and honored many awards & reputations such as National Enterprise Technical Center, National First Batch Intelligent Manufacturing Pilot Enterprise, the Second Class National Science and Technology Progress Award(3 times), the China Quality Award, the European Quality Award, etc. In addition, YOFC has obtained over 400 national-granted patents and several foreign invention patents from Europe, US and Japan, and was nominated the support organization for State Key Laboratory in optical fibre and optical fibre cable manufaction technology. It's also one of the significant members in ITU-T and IEC in setting international standards.

Adhering to the mission of 'Smart Link Better Life' , YOFC devotes itself to becoming the leader in information transmission and smart links through its core value 'Client Focus Accountability Innovation Stakeholder Benefits' , and builds its strategies in the following 5 aspects: Organic growth strategy of the preform, optical fibre and cable business; Strategy for technological innovation and smart manufacturing; Strategy for internationalization and expansion of business scope; Related diversification strategy; Capital operation strategy for synergy in development.

Specialty Optical Fibre Components and Modules



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Basic Material

Magneto-optic Crystal

Terbium Gallium Garnet Crystal (TGG)

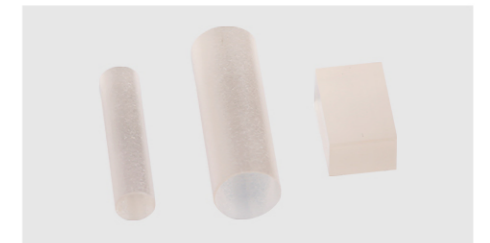
YOFC TGG crystal is manufactured by advanced crystal pulling (CZ) technology, with series of superior characteristics such as high magneto-optical merit value, low light absorption, good thermal conductivity, and high laser damage threshold. It is the best magneto-optical material used for Faraday rotators and isolators. The suitable wavelength is 400nm~1100 nm (not including 470nm~500 nm). The size of TGG product can be customized according to customer's special needs.

Characteristics

- High Verdet constant
- High laser damage threshold
- High extinction ratio

Applications

- Isolator
- Faraday rotator



Specifications

Basic Performance		Optical Performance	
Chemical Formula	Tb ₃ Ga ₅ O ₁₂	Refractive Index	1.954@1064 nm
Structure	Cubic Garnet	Laser Damage Threshold (W/cm ²)	>1G
Lattice Constant (Å)	a = 12.355	Verdet Constant (Rad/T·m)	35@1064 nm
Orientation	< 111 >	Extinction Ratio (dB)	≥ 35
Density (g /cm ³)	7.13	Optical Losses	<0.1%/cm
Moh's Hardness	8.0	Antireflection Coating	ARR<0.2%
Processing Quality			
Directional (')	±15	Diameter (mm)	+ 0.00/- 0.05
Length (mm)	± 0.1	Cleanliness	10/5
Flatness	< λ / 8@633 nm	Parallelism (")	<30
Verticality (')	<10	Chipping (mm)	<0.1

Fibre Patchcord



Conventional Optical Fibre Patchcord

Communication Fibre Patchcord

Optical fibre patchcord can connect the two ends of the optical fibre to achieve flexible optical path communication. It's mainly used to connect optical transceivers. YOFC can provide a full series of optical fibre patchcord for communication, which can be customized to fulfill widespread use in fibre communication system, fibre access network, local area network and so on.

Characteristics

- Low insertion loss and high return loss
- High reliability, high stability
- High repeatability and good interchangeability
- Three types of fibre end face: PC, UPC, APC
- Various connector forms
- Full series of communication fibres are available for selection
- Cable diameter: $\phi 0.9\text{mm}$, $\phi 2.0\text{ mm}$, and $\phi 3.0\text{mm}$ are optional and can be externally armored
- The length of optical cable can be customized according to customer's requirements and can meet customer's accuracy requirements.

Applications

- Local network, wide area network, cable TV
- FTTx
- DWDM system
- Test equipment and active device terminal

Specifications

Connector Type	FC/PC, FC/APC, LC/PC, LC/APC, SC/PC, SC/APC, ST/PC, SMA905, MT-RJ, MPO/MTP, E2000
Fiber Type	Singlemode (G.652, G.655, G.657, etc.) Multimode (50/125, 62.5/125, OM2/OM3/OM4/OM5, etc.) Special Wavelength Fibre, Coupling Fibre
Protective Layer	$\phi 0.9\text{mm}$, $\phi 2.0\text{mm}$, $\phi 3.0\text{mm}$ Loose Flange, $\phi 0.9\text{mm}$ Tight Tube, etc.

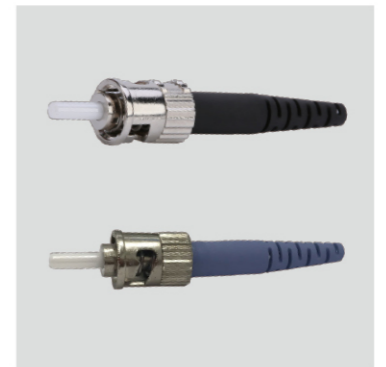
FC



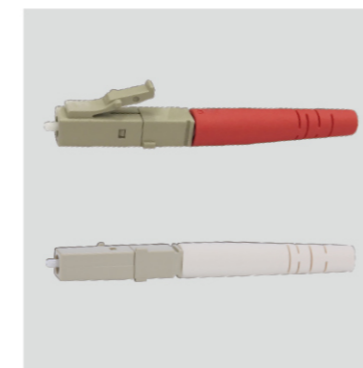
SC



ST



LC



MPO-MTP



E2000





Polarization-maintaining Fibre Patchcord

YOFC polarization maintaining fibre patchcord adopts the excellent self-produced polarization maintaining fibre. Relying on the mature production platform of the fibre patchcord, the grinding performance and optical axis control can be ensured, leading to high polarization extinction ratio and low insertion loss.

Applications

- Fibre laser
- Fibre amplifiers
- Testing instrument
- Fibre optic gyroscope

Characteristics

- High polarization extinction ratio
- Low insertion loss
- Small axis angle
- Good compatibility with standard connectors
- Optional FC/APC high return loss connector
- Axis angle can be customized according to customer requirements: fast axis, slow axis, adjustable, others can be customized according to requirements
- 850nm, 980nm, 1310nm, 1550nm and other types of polarization-maintaining fibres are optional

Polarization Axis

Name	Adjustable F (Free)	Fast Axis Alignment X	Slow Axis Alignment Y(Slow)	Customer Specified Angle O(Other)
End Face Diagram				
Description	The positioning key on the connector is not fixedly assembled, so it can rotate freely when it matches the equipment. It is especially suitable for laboratory or scientific research applications.	The connecting line formed by the centers of the two stress regions and the fiber core is perpendicular to the center line of the positioning key.	The connecting line formed by the centers of the two stress regions and the fiber core is parallel to the center line of the positioning key. The polarization direction of most polarized light source devices is also along this direction.	The angle between the connecting line formed by the center of the stress zone and the center of the fiber core and the center line of the positioning key is specified by the customer.

Specifications

Connector Type	FC/PC, FC/APC, LC/PC, LC/APC, SC/PC, SC/APC, ST/PC			
Fiber Parameters	Operating Wavelength (nm)	980	1310	1550
	Cladding Diameter (μm)	125.0±1.0	80.0±1.0, 125.0±1.0	80.0±1.0, 125.0±1.0
	Mode Field Diameter (μm)	6.5±1.0	6.0±1.0, 9.0±1.0	6.5±1.0, 10.5±1.0
Extinction Ratio (dB)	-22 ~ -35 (1m)			
Insert Loss (dB)	≤0.3 (Cladding 125μm), ≤1.5 (Cladding 80μm)			
Axis Deviation (°)	≤3			
Application Environment (°C)	-40 ~ +85			
Optical Cable (mm)	φ0.9, φ2.0, φ3.0 Loose Tube, φ0.9 Tight Tube, etc			

Industrial Control Optical Patchcord

YOFC can provide a series of industrial control fibre connectors, which are suitable for detachable connection between various industrial control fibres and optical fibres. The output optical energy can be coupled into the receiving fibre to the maximum extent to meet various application requirements.

Characteristics

- Good optical performance and low insertion loss
- Good interchangeability and repeatability
- Wide temperature range
- Frequent plugging and unplugging

Applications

- Optical fibre communication equipment, instruments, etc
- Cable TV network
- Local area network, wide area network

ST Connector



Model	P-ST-30-001	P-ST-20-001
Core/Cladding Diameter (μm)	9/125, 62.5/125, etc	9/125, 62.5/125, etc
Cable Diameter (mm)	3.0	2.2
Assembly Mode	Crimping/Bonding/Grinding	Crimping/Bonding/Grinding
Ferrule	Ceramics	Ceramics
Parts	Including crimping ring, tail pipe and dust cap	Including crimping ring, tail pipe and dust cap
Installation Mode	Insert push and twist	Insert Push and Twist

FC Connector



Model	P-FC-30-001	P-FC-20-001	P-FC-20-002
Core/Cladding Diameter (μm)	9/125, 62.5/125, etc	9/125, 62.5/125, etc	9/125, 62.5/125, etc
Cable Diameter (mm)	3.0	2.2	1.8
Assembly Mode	Crimping/Bonding/Grinding	Crimping/Bonding/Grinding	Crimping/Bonding/Grinding
Ferrule	Ceramics	Ceramics	Ceramics
Parts	Including crimping ring, tail pipe and dust cap	Including crimping ring, tail pipe and dust cap	Including crimping ring, tail pipe and dust cap
Installation Mode	Thread Rotation	Thread Rotation	Thread Rotation

SC Connector



Model	P-SC-30-001	P-SC-20-001
Core/Cladding Diameter (μm)	9/125, 62.5/125, etc	9/125, 62.5/125, etc
Cable Diameter (mm)	3.0	2.0
Assembly Mode	Crimping/Bonding/Grinding	Crimping/Bonding/Grinding
Ferrule	Ceramics	Ceramics
Parts	Including crimping ring, tail pipe and dust cap	Including crimping ring, tail pipe and dust cap
Installation Mode	Push and Pull	Push and Pull

LC Connector



Model	P-LC-30-001	P-LC-20-001
Core/Cladding Diameter (μm)	9/125, 62.5/125, etc	9/125, 62.5/125, etc
Cable Diameter (mm)	3.0	2.0
Assembly Mode	Crimping/Bonding/Grinding	Crimping/Bonding/Grinding
Ferrule	Ceramics	Ceramics
Parts	Including crimping ring, tail pipe and dust cap	Including crimping ring, tail pipe and dust cap
Installation Mode	Push and Pull	Push and Pull

SMA Series



Model	P-SMA-01-001	P-SMA-02-001
Fibre	Large Core Fibre	Large Core Fibre
Cable Diameter (mm)	3.0	2.0
Assembly Mode	Crimping/Bonding	Crimping/Bonding
Ferrule	Metal Groove	Metal
Parts	Including crimping ring, tail pipe and dust cap	Including crimping ring, tail pipe and dust cap
Installation Mode	Thread Rotation	Thread Rotation

Industrial Control Series

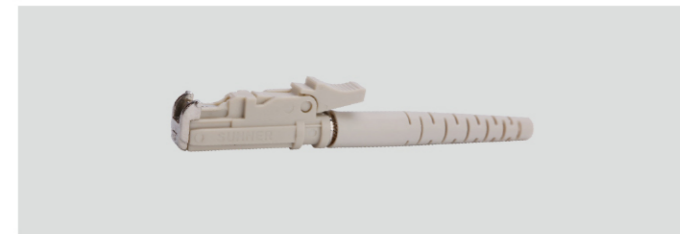


Model	P-TOCP-200-001	P-HP-4521-001
Core/Cladding Diameter (μm)	200/230	200/230
Cable Diameter (mm)	2.2	2.2
Assembly Mode	Bonding	Crimping/Bonding
Ferrule	Metal	Plastic
Parts	Including Tailpipe and Dust Cap	Including Crimp Ring, Tailpipe and Dust Cap
Installation Mode	Push and Pull	Push and Pull

HFBR Series



E2000 Connector

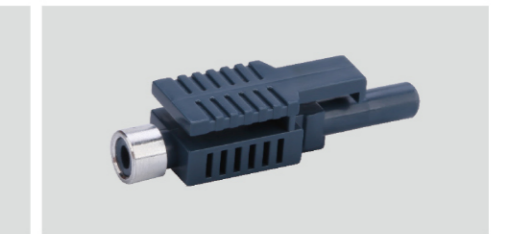
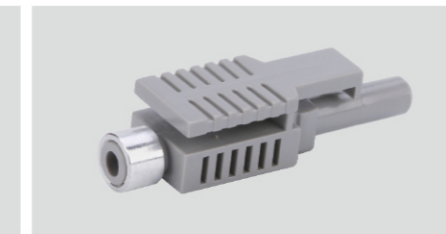


V-PIN



Model	P-E2000-30-001	P-V-PIN-75-001
Core/Cladding Diameter (μm)	9/125, 62.5/125, etc	200/230
Cable Diameter (mm)	3.0	7.5
Assembly Mode	Crimping/Bonding	Crimping/Bonding
Ferrule	Ceramics	Plastic
Parts	Tail Pipe	Full Metal Jacket
Installation Mode	Push and Pull	Push and Pull

HFBR Series



Model	P-HP-4533-002	P-HP-4503-003	P-HP-4513-004
Core/Cladding Diameter (μm)	POF1000	POF1000	POF1000
Cable Diameter (mm)	2.2	2.2	2.2
Assembly Mode	Crimping/Bonding	Crimping/Bonding	Crimping/Bonding
Ferrule	Plastic	Plastic	Plastic
Parts	Including tailpipe and dust cap	Including crimp ring, tailpipe and dust cap	Including crimp ring, tailpipe and dust cap
Installation Mode	Push and Pull	Push and Pull	Push and Pull

Mini-ST Connector

YLM- I Connector



Model	P-Mini-ST-22-001	P- YLM- I -22-001
Core/Cladding Diameter (μm)	200/230	200/230
Cable Diameter (mm)	2.2	2.2
Assembly Mode	Crimping/Bonding	Bonding
Ferrule	SUS303	SUS303
Installation Mode	Push and Pull	Push and Pull

YLM- II Connector

MPO-MTP Connector



Model	P- YLM- II -22-002	MPO/MTP
Core/Cladding Diameter (μm)	200/230	9/125, 62.5/125, etc
Cable Diameter (mm)	2.2	3.4*0.4, 3.0, 5.0*2.5
Assembly Mode	Bonding	Crimping/Bonding/Grinding
Ferrule	SUS303	PPS
Parts	Including Tail Pipe	Crimp Ring, Tail Sleeve, Dust Cap
Installation Mode	Push and Pull, Self-locking	Push and Pull

Industrial Control Optical Adapter

YOFC can provide a full series of industrial control optical adapters. Fibre optic connectors of different interface types can be plugged into both ends of fibre optic adapter to realize the conversion between different interfaces such as FC, SC, ST, LC, MTRJ, MPO, E2000, etc. With superior performance, stability and reliability, it can meet various application requirements.

Characteristics

- Low insertion loss
- Good interchangeability
- Good repeatability

Applications

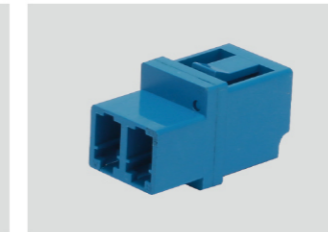
- Optical distribution frame (ODF)
- Optical communication equipment, instruments, etc
- Cable TV network
- Local area network, wide area network

FC-SC Adapter



Ceramic sleeve embedded in metal shell

LC Duplex Adapter



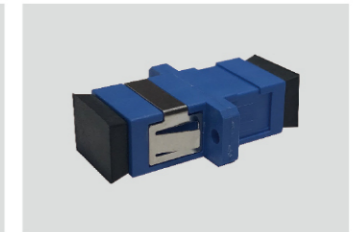
Ceramic sleeve embedded in plastic casing

ST-LC Adapter



Ceramic sleeve embedded in plastic and metal shell

SC-SC Adapter



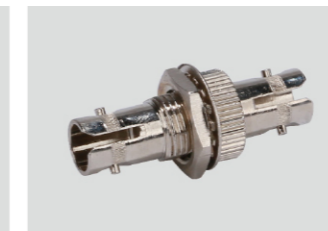
Ceramic sleeve embedded in plastic casing

FC Adapter



Ceramic sleeve embedded in metal shell

ST Adapter



Ceramic sleeve embedded in metal shell

SMA Adapter



Metal shell

HFBR Adapter



Plastic shell



High Power Transmission Component

Fibre Bundles Patchcord

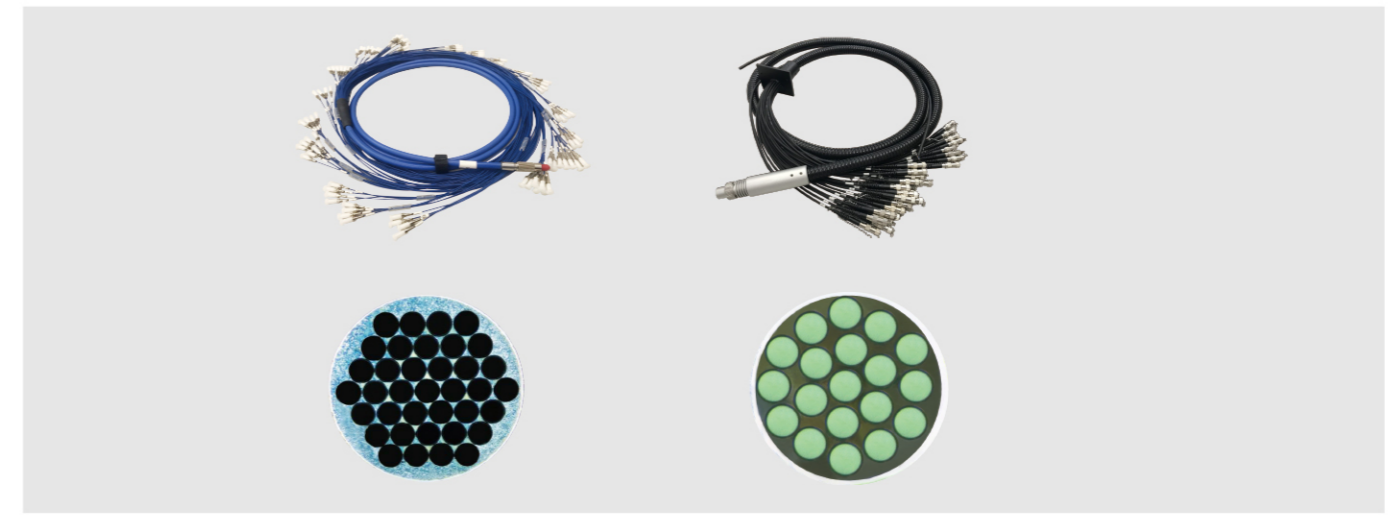
Fibre bundles patchcord is fabricated with specially designed optical fibres in visible band. With high geometric accuracy, low loss and high reliability, it's suitable for medical, premium laser projection and ultraviolet printing. The high quality laser transmission can be realized by precise design of the patchcord as well as excellent energy delivery fibre from YOFC. In order to meet customer's expectation, we optimize the product from many aspects such as fibre diameter, numerical aperture, core-cladding structure, optical transmission efficiency, connector packaging, optical fibre end polishing and so on. The design of fibre bundles patchcord is flexible: the branch can be SMA905 or SC ferrule, and the combiner end can be FC or SMA905 ferrule, or customized.

Characteristics

- Multiple cores in one, 2~200cores
- Splitter connector type: SMA905 or SC ferrule
- Customized combiner connector

Applications

- Laser projection
- Laser printing
- Laser lighting
- Spectroscopy
- Photolithography
- Fluorescence excitation
- Photodynamic therapy



Specification

Product Type	FB-UV-Nx1		FB-VS-Nx1			
Fibre Type	UV Fibre		Step Index Fibre			
Wavelength (nm)	300 ~ 1200		450 ~ 2200			
Core Diameter (μm)	105±3.0	200±3.0	200±5.0	400±8.0	600±10.0	800±10.0
Cladding Diameter (μm)	124.7±1.0	220±5.0	220±5.0	420±8.0	660±10.0	840±10.0
Coating Diameter (μm)	242±5.0	500±25.0	500±20.0	730±30.0	960±30.0	1100±50.0
Numerical Aperture	0.22±0.02					
Proof Test Level (Kpsi)	100					
Transmission Efficiency (%)	>95@405nm, 3.5m		>95@450nm, 4m			
Temperature Resistance at The Combiner End (°C)	>200		>1000			

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This datasheet can only be a reference, but not a supplement to the contract. Please contact our sales people for more detailed information

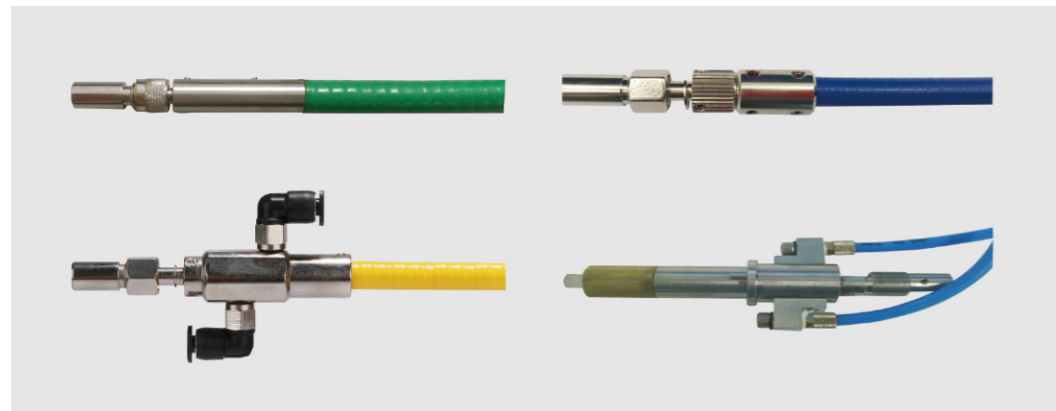
High Power Transmission Fibre Patchcord

YOFC high power transmission fibre patchcord is manufactured with special cladding and large-core power delivery fibre. By optimizing the diameter of fibre core and cladding, combining with the connection process of connector and energy transmission cable, as well as precision polishing process of optical fibre end face, the characteristics of high-efficiency coupling and high power transmission are achieved.

Based on standard applications of various industry, YOFC can provide high power components which have high concentricity, high-quality stainless steel hose protective layer and excellent characteristics of YLD80/SMA905 connector. And the product can support different power levels and has stable transmission efficiency. To satisfy customer demand to the most extent, a series of fibres can be customized with different fibre designs.

Products

- SI600D: SI-600/750-0.22 YLD80
- SI600S: SI-600/750-0.22 SMA905
- SI400D: SI-400/500-0.22 YLD80
- SI400S: SI-400/500-0.22 SMA905
- SI200D: SI-200/500-0.22 YLD80
- SI200S: SI-200/500-0.22 SMA905
- SI600DW: SI-600/750-0.22 YLD80W
- SI600SW: SI-600/750-0.22 SMA905W
- SI400DW: SI-400/500-0.22 YLD80W
- SI400SW: SI-400/500-0.22 SMA905W
- SI200DW: SI-200/500-0.22 YLD80W
- SI200SW: SI-200/500-0.22 SMA905W



Characteristics

- Clamping in the center of fibre, good concentricity
- Excellent soft stainless steel tube for protection
- Excellent large core power delivery fibre SI200/SI400/SI600 for selection
- High core NA 0.22
- High laser damage threshold
- Stable and larger than 90% transmission efficiency @ 1064 nm
- Adhesive-free product available for option
- YLD80/SMA905 connector for option
- Water-cooling for option

Applications

- High power transmission
- Laser precision machining
- Atmospheric spectral measurement
- Laser lithotripsy

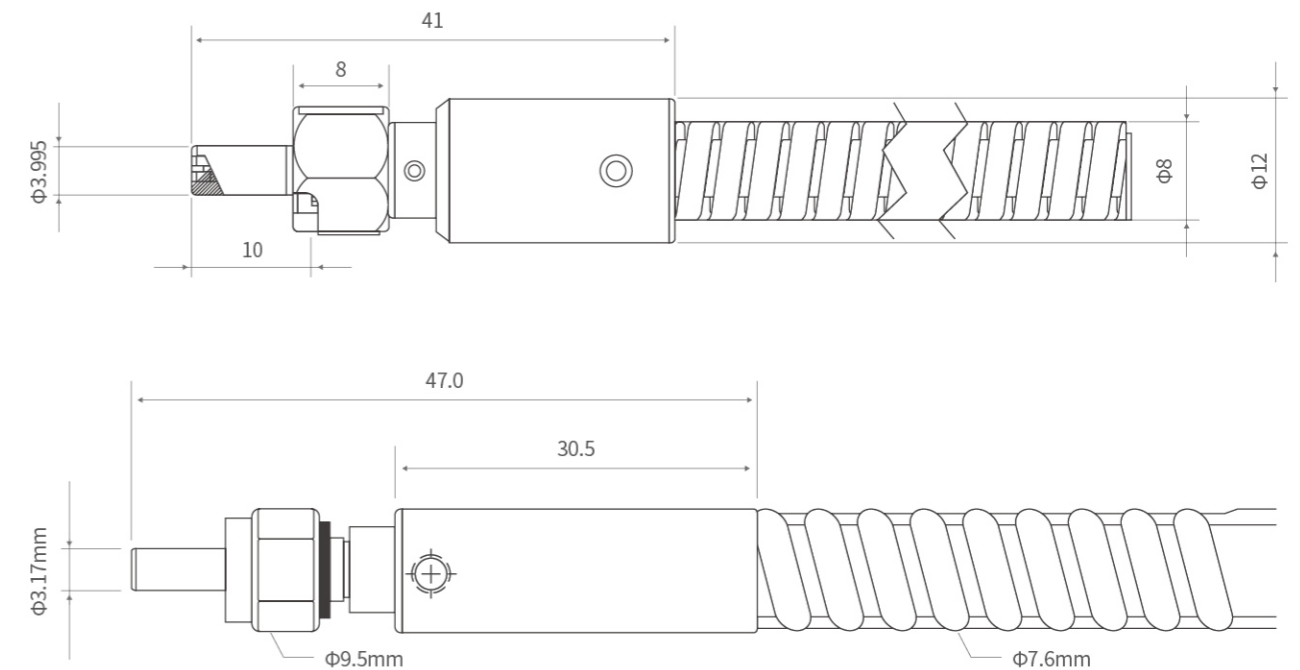
Fibre Parameters

Fibre Type	Core Diameter (μm)	Cladding Diameter (μm)	Fibre Diameter (μm)	Coating Diameter (μm)	Minimum Bending Radius in the Long Term (mm)	Minimum Bending Radius in the Short Term (mm)	Strength Screening (kpsi)
SI600	600	750	960	1700	150	75	≥50
SI400	400	500	780	1300	100	50	≥50
SI200	200	500	780	1300	100	50	≥50

Specifications

Connector Type	YLD80(YLD80W)	SMA905(SMA905W)
Parameters		
Inner Diameter (mm)	3.990 ~ 3.999	3.166 ~ 3.172
Outer Diameter (mm)	10	9.5
Metal Protection Tube Diameter (mm)	Armoured/Plastic coated armoured tube; Φ4, Φ5, Φ6, Φ8, Φ10	
Fibre Patch Cable Length (m)	2 ± 0.1, 3 ± 0.1, 5 ± 0.1 (customized)	
Numerical Aperture (NA)	0.22 ± 0.02	
Core Diameter (μm)	SI200, SI400, SI600	
Concentricity (μm)	<6	
Operating Power (W)	SI200: 150W(D80) Supportable	
	SI400: 400W(D80) Supportable	
	SI600: 600W(D80) Supportable	

Dimension Drawing for Connector Structure



Passive Optical Fibre Component

Optical Fibre Amplifier Component

Optical Fibre Isolator

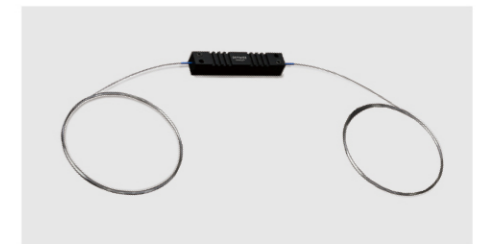
The optical fibre isolator is a passive optical device that only allows unidirectional light to pass through. Its working principle is based on the non-reciprocity of the Faraday rotating crystal, and the echo can be well isolated by the fibre isolator. YOFC's fibre isolator has the characteristics of high isolation, low loss, and high reliability.

Characteristics

- Low insertion loss
- High isolation
- High stability and reliability
- High return loss

Applications

- CATV system
- Communication system
- Optical fibre sensing system
- Test system



Specifications

Parameters	Index	
	HPISO-S-1-1-3-1	HPISO-D-1-1-3-1
Product Type	HPISO-S-1-1-3-1	HPISO-D-1-1-3-1
Operating Wavelength (nm)	1550	
Operating Bandwidth (nm)	±20	
Optical Properties		
Power Handling(W)	5	
Isolation (dB)	≥29.00	≥46.00
Insertion Loss (dB)	≤0.45	≤0.60
Polarization Dependent Loss (dB)	≤0.10	≤0.15
Return Loss (dB)	≥55.00	≥55.00
Polarization Mode Dispersion (ps)	≤0.25	≤0.05
Environmental Properties		
Operating Temperature (°C)	-5 to +70	
Storage Temperature (°C)	-40 to +85	
Operating Relative Humidity (%)	5 ~ 95	
Appearance		
Package Size (mm)	Ø5.5×35, Ø5.5×30, 8×12×70	
Fibre Length (m)	1.00±0.10 or Customized	

· The parameters do not include a connector, and the fibre connector insertion loss is 0.33dB.

Wavelength Division Multiplexer

The wavelength division multiplexer (WDM) is a device that multiplexes different optical signals into a beam which transmits along a single optical fibre. At the receiving end, demultiplexing is used to separate optical signals from different wavelengths. YOFC's WDM adopts the parallel fusion tapering method and has high isolation and high reliability.

Characteristics

- Low excess loss
- Small volume
- High stability and reliability

Applications

- Fibre amplifier system
- Wavelength division multiplexer system
- Test system



Specifications

Parameters	Index
Product Type	WDM-1-2-3-4
Operating Wavelength (nm)	980/1550
Operating Bandwidth (nm)	±20
Optical Properties	
Insertion Loss (dB)	≤0.15
Polarization Dependent Loss (dB)	≤0.10
Isolation (dB)	≥20.0
Return Loss (dB)	≥55.0
Directional (dB)	≥55.0
Environmental Properties	
Operating Temperature (°C)	-5 to +75
Storage Temperature (°C)	-40 to +85
Operating Relative Humidity (%)	5 ~ 95
Appearance	
Package Size (mm)	∅3×35, ∅3×45, ∅3×54
Fibre Length (m)	1.0±0.1 or Customized

Optical Fibre Combiner

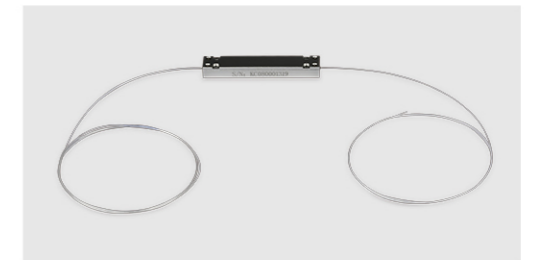
The multi-mode pump combiner is designed for high power EDFA. Excellent optical properties are obtained by the use of unique fusion tapering process. The input port includes two pump channels, and one signal channel, and the output port is double cladding fibre. The fibre type can be customized.

Characteristics

- High efficiency
- Low insertion loss
- Customized

Applications

- CATV system
- Communication system



Specifications

Parameters	Index	
Product Type	MPC1-P12-S476	MPC2-P12-S476
Product Description	(1+1) × 1 Optical Fibre Combiner	(2+1) × 1 Optical Fibre Combiner
Signal Operating wavelength (nm)	1500 ~ 1600, Typical 1550	
Pump Operating wavelength (nm)	800 ~ 1000	
Fibre Type		
Input Pump Fiber	SI 105/125 (0.22)	
Input Signal Fiber	G.652.D or DCF 11/125 (0.12/0.46)	
Output Fibre	DCF 11/125 (0.12/0.46)	
Optical Properties		
Pump Efficiency (%)	>90 (Typical 93%)	
Insertion Loss (dB)	<0.5 (Typical 0.3)	
Isolator (dB)	≥25(Typical 30)	
Max Pump Power per Port (W)	Typical 10	
Environmental Properties		
Operating Temperature (°C)	-5 to +70	
Operating Relative Humidity (%)	5 ~ 95	
Storage Temperature (°C)	-40 to +85	
Appearance		
Dimensions (mm)	5×5×50, 8×12×70	
Fibre Length (m)	1.0	

Active Fibre Combiner

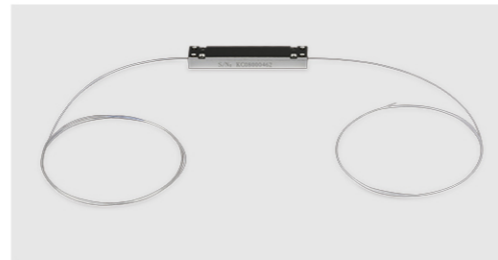
The active fibre combiner is designed for high power EDFA. Excellent optical properties are obtained by the use of unique fusion tapering process. The input port includes two pump channels and one signal channel, and the output port is an active fibre. The fibre type can be customized.

Characteristics

- High conversion efficiency
- Low distortion
- High pump efficiency
- Customized

Applications

- Optical fibre amplifier power coupling



Specifications

Product Type	AMPC-P12-S46X
Product Discription	(2+1)×1 Active Fibre Combiner
Signal Operating wavelength (nm)	1500 ~ 1600, Typical 1550
Pump Operating wavelength (nm)	800 ~ 1000
Fibre Type	
Input Pump Fibre	SI 105/125 (0.22)
Input Signal Fibre	DCF 11/125 (0.12/0.46)
Output Fibre	TC1500Y 11/125(0.12/0.46)
Optical Properties	
Light Conversion Efficiency (%)	>30
Insertion Loss (dB)	<0.5 (Typical 0.3)
Return Loss (dB)	≥40.0
Max Pump Power per Port (W)	Typical 25
Environmental Properties	
Operating Temperature (°C)	-5 to +70
Operating Relative Humidity (%)	5 ~ 95
Storage Temperature (°C)	-40 to +85
Appearance	
Dimensions (mm)	8×12×70
Fibre Length (m)	1.0
Active Fibre Length (m)	3.8 or Customized

Fibre Laser Component Optical Fibre Combiner

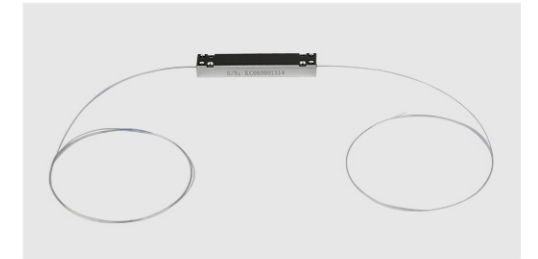
The product is designed for high power fibre laser. Unique tapering process is adopted to acquire good optical properties. The input port includes two pump channels and one signal channel, and the output port is double cladding fibre. The fibre type can be customized.

Characteristics

- High transmission efficiency
- High pump efficiency
- Small mode distortion
- Low insertion loss
- Can be customized

Applications

- Optical fibre amplifier power coupling



Specifications

Parameters	Index			
	MPC2-P12-S322	MPC2-P12-S333	MPC2-P12-S344	MPC2-P12-S355
Product Type	MPC2-P12-S322	MPC2-P12-S333	MPC2-P12-S344	MPC2-P12-S355
Signal Operating Wavelength (nm)	1000 ~ 1100, Typical 1064			
Pump Operating Wavelength (nm)	800 ~ 1000			
Input Pump Port				
Core/Cladding Diameter (μm)	105/125		200/220	
Numerical Aperture	0.22		0.22	
Input Signal Port				
Fibre Type	DCF			
Core/Cladding Diameter (μm)	10/130	20/130	20/400	30/250
Output Port				
Fibre Type	DCF			
Core/Cladding Diameter (μm)	10/130	20/130	20/400	30/250
Optical Properties				
Pump Efficiency (%)	>90 (Typical 93)			
M ²	≤1.3			
Insertion Loss (dB)	<0.5 (Typical 0.3)			
Optical Isolation (dB)	≥25 (Typical 30)			
Max Pump Power (W)	Typical 10			
Environmental Properties				
Operating Temperature (°C)	-5 ~ +70			
Operating Relative Humidity (%)	5 ~ 95			
Storage Temperature (°C)	-40 ~ +85			
Appearance				
Dimensions (mm)	5×5×50, φ3.5×54, 8×12×75			
Active Fibre Length (m)	1.0			

FBG for High Power Fibre Laser

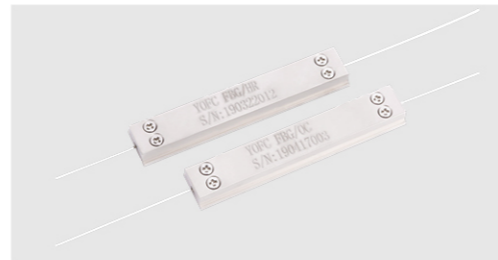
FBG(Fibre Bragg Grating) produced by YOFC is a periodic refractive index modulation in optical fibre core through UV exposure which can achieve the modulation of signal light in optical fibre. It is an indispensable part of a high power fibre laser.

Characteristics

- Up to 2kW pump power tolerance
- Central wavelength 1064nm or 1080nm
- Bandwidth operational 0.1nm~3.2nm
- Wavelength mismatch within 0.2nm
- Fibre type can be customized

Applications

- High power fibre laser



Specifications

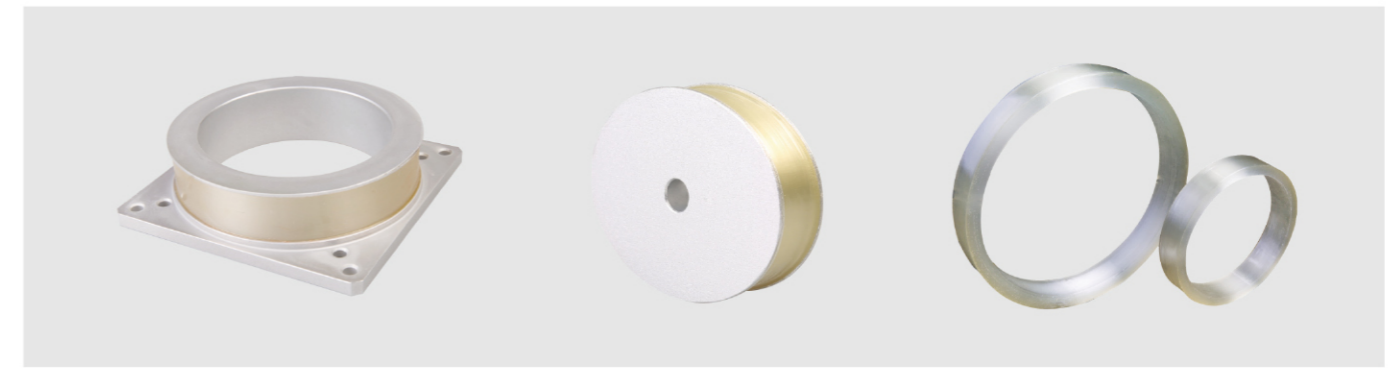
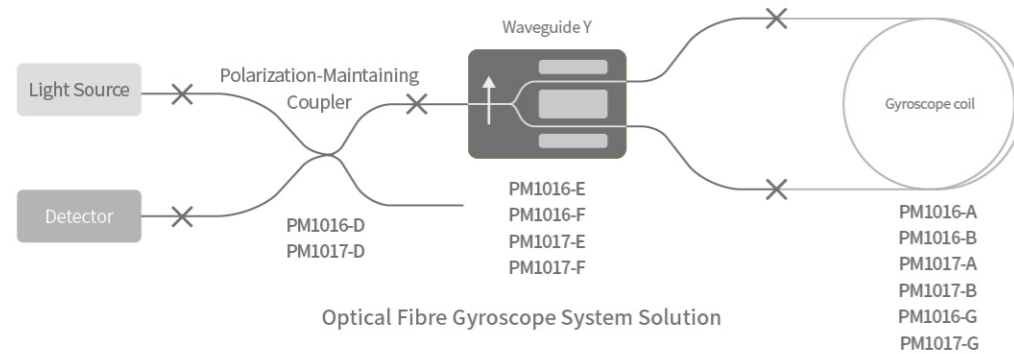
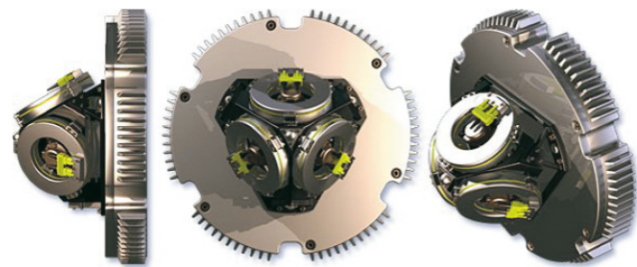
Product Type	FBG1080-2-3-025/010	
FBG Attribute	HR	OC
Center Wavelength (nm)	1080±1	1080±1
Peak Reflectivity (%)	≥99.5	10±2
Bandwidth (FWHM) (nm)	3±0.3	1±0.2
Wavelength Match (nm)	0.2	
Fiber Type	YOFC GDF20/400 or Customized	
Pump Power Handling (W)	2000	
Package Type	YOFC Heat Dissipation Package	
FBG Pigtail Length	Each side>1.2m	

Passive Module

Optical Fibre Sensing Coil

Polarization-maintaining Optical Fibre Coil

The optical fibre gyroscope is an all-solid-state gyroscope that uses the Sagnac effect to test the angular velocity of rotation. With the feature of simple and reliable structure and wide dynamic range, the optical fibre gyroscope has become one of the leading instrument in inertia measurement and guidance technology. The core sensing cell is a polarization-maintaining fibre coil, the basic elements of which includes a polarization-maintaining optical fibre and cure adhesive. YOFC polarization-maintaining optical fibre gyroscope mainly adopts multipole (Monopole, Quadrupole, Octupole, Hexadecapole)symmetric winding to form an all-solid-state fibre loop, which has the characteristics of high symmetry, high extinction ratio and low loss.



Characteristics

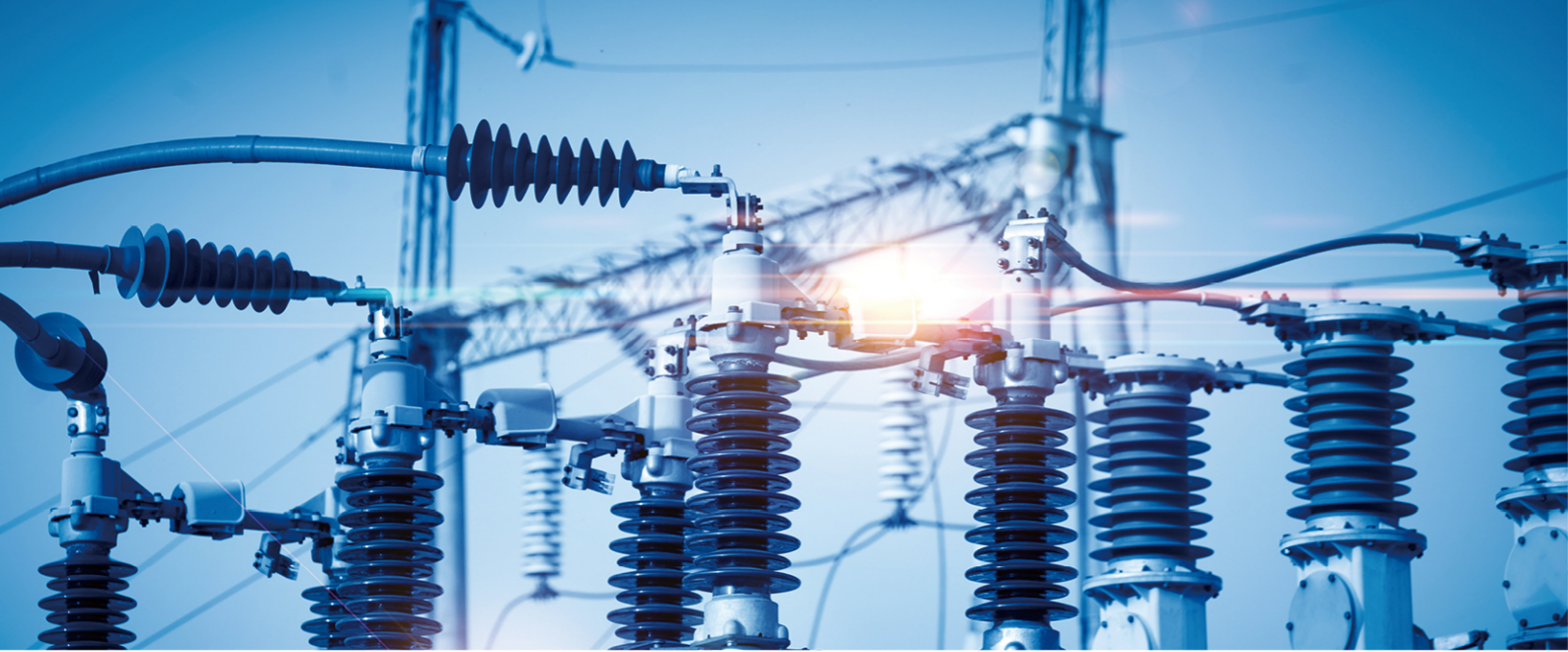
- Customized size
- High symmetry
- High extinction ratio
- Minimum Shupe effect
- Low vibration sensitivity
- Low temperature sensitivity
- Low loss
- Low crosstalk variation at full temperature

Applications

- Optical fibre gyroscope
- Current transformer
- Optical signal delay

Specifications

Item	Specification
Fibre Length (m)	50 ~ 5000
Operating Wavelength (nm)	1310 or 1550
Additional Loss (dB/km)	≤1.0
Polarization Crosstalk (dB)	≤-25@100m
Fibre Diameter (μm)	100, 135, 165, 250
Crosstalk Variation at Full Temperature (dB)	≤3.0
Additional Loss at Full Temperature (dB)	≤0.2
Inner Diameter of Fibre Loop (mm)	15 ~ 120
Height of Fibre Loop (mm)	10 ~ 50
Winding Techniques	Monopole, Quadrupole (Standard), Octupole, Hexadecapole
Operating Temperature (°C)	-40 to +70
Storage Temperature (°C)	-55 to +70



Optical Fibre Delay Module

Optical Fibre Delay Coil

Optical signal can not only transmit signal through optical fibre delay coil, but also obtain optical signal with delay. The delay of optical fibre delay line is determined by the length of the optical fibre and the propagation speed of the light in the optical fibre. Optical fibre delay coil of YOFC is wound by precision winding machine, which has high delay precision, compact structure, anti-seismic and anti-radiation design. We can customize different types and lengths of optical fibre delay coil according to customers' requirements.

FOCT Sensing Coil

FOCT sensing coil is composed of quarter wave plate, spun Hi-Bi fibre and fibre mirror, Excellent environmental immunity are obtained by temperature error compensation and encapsulation process to meet the requirement of applications, such as fibre optic current transformer (FOCT) .

Characteristics

- Customizable size
- Reduced sensitivity to vibration
- Low temperature sensitivity
- High stability

Applications

- All fibre optic current transformer
- High precision current sensor
- Faraday effect sensor



Specifications

Product No.	FSH-01
Installation	Fixed Installation
Operating Wavelength (nm)	1310 ±20
Additional Loss (dB)	≤3.8
Ratio Error at Full Temperature (%)	<0.5
Pigtail Mode Field Diameter @1310nm (μm)	6.0±1.0
Operating Temperature (°C)	-40 to +70

Characteristics

- Customized delay length
- Various models of optical fibre
- Broad-spectrum respond
- Low vibration sensitivity
- Low additional loss

Applications

- Optical buffer in photosystems
- Time delay of photoelectric oscilloscope
- Phased array radar
- Switching, buffering and routing of optical packets



Specifications

Optical Properties	Index
Wavelength (nm)	850, 1310, 1550
Delay Time Range (μs)	0.1 ~300
Delay Time Accuracy (μs)	±1.0%@0.1~10 ±0.1@0.1~300
Insertion Loss (dB)	0.1 (dB/μs) × Delay(μs)+1.0
Relative Variation of Delay with Temperature (ppm/°C)	≤6.5
Return Loss (dB)	≤55.0
Extinction Ratio (PMF)(dB)	≤ -30 @0.1 μs
Operating Temperature Range (°C)	-40 to +85
Storage Temperature Range (°C)	-60 to +85

Delay Coil for Current Transformer

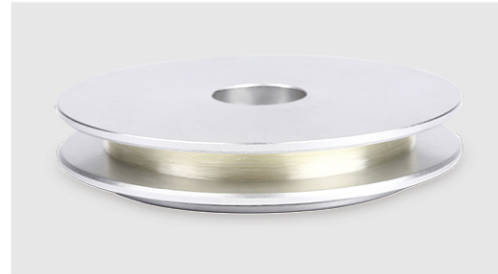
High birefringence polarization-maintaining fibre is selected as the delay coils for YOFC current transformer. The whole winding process is controlled by low tension and special solidified adhesive to ensure the overall polarization-maintaining performance of the delay coil. The full-temperature crosstalk has less fluctuation, and it has excellent temperature characteristics and environmental stability. It can be used in optical fibre current sensor and other fields. The size of this series of delay coils can be customized according to the special needs of customers.

Characteristics

- Low polarization crosstalk
- Small temperature error
- High long reliability
- Customized size

Applications

- All-fibre-optical current transducer
- Current transformers for high accuracy



Specifications

Parameter	Index
Geometric Parameter	
Optical Fibre Length (m)	80 ~ 500
Optical Fibre Coil I.D. (mm)	15 ~ 250
Optical Fibre Coil O.D. (mm)	25 ~ 260
Optical Fibre O.D. (μm)	135, 165, 250
Optical Parameter	
Wavelength (nm)	1310 or 1550
Polarization Crosstalk (dB)	≤ -30
Full-temperature Crosstalk Change (dB)	≤ 1.0
Loss (dB/km)	≤ 1.0
Operating Temperature Range (°C)	-45 to +85

Radiation-resistant Optical Fibre Delay Lines

Taking advantage of optical fibre and fibre process technology, YOFC's radiation-resistant optical fibre delay lines feature high-precision true time delay, and different levels of radiation resistant can be achieved. The experienced design have been proved with a high mechanical performance and environmental reliability. Small diameter fibre can be selected to reduce the volume for special application. Optical fibre and connector is customized.

Characteristics

- Large delay range
- Smooth phase change
- Compact structure
- High stability
- Strong vibration resistance

Applications

- Radar monitoring/calibration
- Signal processing
- Phased array antenna
- Phase noise processing



Specifications

Parameters	Requirements
Fibre Type	Radiation-resistant Fibre
Delay Range (μs)	0.1 ~ 280
Delay Accuracy (μs)	±1%@0 ~ 10
	±0.1@10 ~ 280
Insertion Loss (dB)	0.1 (dB/μs) × Delay(μs) + 1.0
Relative Delay Time with Temperature (ppm/°C)	≤ 6.5
Dimensions (mm)	Typ. 152.4 × 152.4 × 100 or can be customized
Operating Temperature (°C)	-40 to +85
Storage Temperature (°C)	-60 to +85

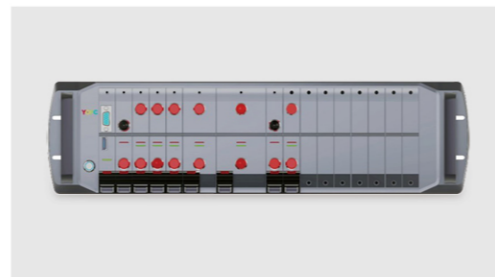


Modular RF Optical Delay Line System

YOFC modular RF optical delay line system is capable of achieving true-time delay of broadband microwave signals with high precision, tunability, and scalability. Comparing with the conventional microwave coaxial or waveguide based solutions, the system possesses multiple advantages, such as wide frequency range, high consistency over frequency, good repeatability, low loss dependence on delay values, and flexible scalability. The system adopts pluggable blade modular design, which mainly consists of a 3U 19" rack chassis, RF optical transceiver module, multiple fibre-optic delay module, optical amplifier module (optional), and control module. The true-time delay figures can be configured onsite or remotely.

Characteristics

- High accuracy progressive delay
- Blade modular design
- Easy scalability of rf frequency range and delay
- Optional optical amplifier
- External auxiliary delay options
- Standard 19" rack-mount
- Remote status monitor and control



Applications

- Radar system testing
- Phased array antennas
- Phase noise testing
- Signal processing
- Test & calibration labs

Specifications

Parameter	Specifications	Note
Operational Frequency (Hz)	100M~18G	
Delay Range (μ s)	2~128	Customizable
Delay Step (μ s)	2.0	Customizable
Delay Accuracy (%)	1.0	
Progressive Delay Number (Blade Module Number)	6	Customizable
Switching Time (ms)	<2.0	
RF Gain (at 128 μ s delay) (dB)	\geq -20	Higher gain is available
Dynamic Range (dB · Hz ^{2/3})	98	
Amplitude Flatness (dB)	\leq \pm 3.0	
Noise Figure (dB)	\leq 48	Lower is available
1dB Input Compression (P1dB) (dBm)	\geq 15	
Optical Wavelength (nm)	1310 Band	1550nm Optional
Communication	RS232	Ethernet is available
Auxiliary Delay Connectors	FC/APC	Customizable
RF Connectors	SMA	RF Frequency Dependent
Dimensions	3U Standard	
Power Supply (V AC)	220	

Dispersion Management

In the applications of optical fibre communication and fibre laser, dispersion management is an important means to control optical parameters such as pulse and nonlinear. Taking advantage of PCVD and grating writing technology, YOFC can provide various dispersion management optical fibres, including dispersion displacement fibre, dispersion compensational fibre, dispersion flat fibre, band-gap fibre, and chirped fibre grating, as well as corresponding components. Our outstanding winding and packaging technology ensures good practicability of the products.

Characteristics

- Low insertion loss
- Good wavelength consistency
- Low polarization mode dispersion
- Miniaturized design

Applications

- Telecommunication transmission system
- Data communication system
- CATV system
- Pulsed laser



Optical Performance

Parameter	ADCM-20	ADCM-40	ADCM-60	ADCM-80	ADCM-100	ADCM-120
Dispersion at 1545nm (ps/nm)	-340±10	-670±20	-1000±30	-1340±40	-1680±50	-2010±60
Relative dispersion slope at 1545nm (nm ⁻¹)	0.0036±10%					
Insertion Loss (dB)	≤2.8	≤4.2	≤5.5	≤6.8	≤8.0	≤9.1
Insertion Loss (Typical value)(dB)	2.5	3.8	5.1	6.3	7.4	8.4
Polarization mode dispersion (ps)	≤0.5	≤0.7	≤0.9	≤1.0	≤1.1	≤1.1
Polarization mode dispersion (Typical value)(ps)	0.2	0.3	0.4	0.5	0.6	0.7
Polarization-dependent loss(dB)	≤0.1	≤0.1	≤0.1	≤0.1	≤0.1	≤0.1

- Note:**
1. The insertion loss is the maximum in the application band (1525nm-1565nm).
 2. Polarization mode dispersion (PMD) is the average differential group delay measured by Jones matrix method in the band.
 3. Other compensation length modules can be provided as required.

Nonlinear Characteristics

Parameter	Minimum value	Maximum value
Brillouin Scattering Domain Value (dBm)	6	-
Nonlinear Coefficient (n^2/A_{eff}) (W ⁻¹)	-	1.4×10^9
Effective Area (A_{eff}) (µm ²)	20	-

Environmental Characteristics

Parameter	Minimum value	Maximum value
Usage Temperature Range (°C)	-5	70
Storage Temperature Range (°C)	-40	85
Environmental Reliability Testing	Conform to Telcordia GR-2854 and GR-1221 Standards	

Packaging Style

Packaging style	Size	Connector	Jumper
Standard (mm)	235×235×40	LC/UPC or Upon Request	Upon Request
Customization (mm)		Upon Request	

Active Module



Optical Amplifier for Telecom

MSA EDFA Module

YOFC's MSA high power EDFA module has been widely used in the fields of optical fibre sensing, wind detecting LIDAR, and hydrophone system. This product can keep complete waveform during amplification of the optical signal. The product can be configured in AGC, APC or ACC operating mode. The high- reliability temperature-controlling technology ensures the product excellent thermal performance under a wide temperature range.

Characteristics

- Keep the complete waveform
- ACC/APC/ AGC operating mode
- Low noise figure and power consumption
- High stability and reliability
- Customized

Applications

- DWDM
- Hydrophone system
- Universities and institutes



Specifications

Parameters	Minimum	Typical	Maximum
Wavelength (nm)	1528.77	—	1565.05
Input Power (dBm)	-30	—	5
Output Power (dBm)	0	—	20
Gain(dB)	0	—	30
Gain Flatness(dB)	—	1	1.5
Noise Figure (dB)	—	5.5 (P _{in} =0dBm)	6
Return Loss (dB)	—	≤-45	—
Operating Temperature(°C)	0	—	75
Storage Temperature(°C)	-40	—	85
Power Supply(V)	11.4	12	12.6
Power Consumption (W)	—	—	30
Communication Interface	RS232/485		
Electrical Connector	TEM-115-02-03.0-FG-D-L1		
Optical Fibre Connector	LC/SC/FC		
Pigtail Length (cm)	100±2		
Dimensions (mm)	130(L)x100(W)x15(H)		

C+L Band EDFA Module

YOFC's C+L band EDFA module has been widely used in the fields of optical fibre sensing, quantum communication, and special applications. The C+L band EDFA uses 980 nm pump laser to provide energy. It can amplify the C-band signal and L-band signal simultaneously. The product can be configured in AGC, APC, or ACC operating mode. The high-reliability temperature-controlling technology makes the product have outstanding thermal performance under a wide temperature range.

Characteristics

- Amplify C-band signal and L-band signal
- ACC/APC/AGC operating mode
- Low noise figure and power consumption
- High stability and reliability
- Customized

Applications

- DWDM
- FTTH
- Universities and institutes



Specifications

Parameters	Minimum	Typical	Maximum
Wavelength (nm)	1528 ~ 1567&1575 ~ 1605		
Input Power (dBm)	-35	-30	0
Output Power (dBm)	—	-10	20
Gain (dB)	—	20	—
Gain Flatness (dB)	—	3.5	—
Noise Figure (dB)	—	5.5 (P _{in} =0dBm)	6.5
Return Loss (dB)	—	≤-45	—
Operating Temperature(°C)	0	—	50
Storage Temperature(°C)	-40	—	85
Power Supply(V)	4.75	5	5.25
Power Consumption (W)	—	—	20
Communication Interface	RS232/485		
Electrical Connector	TEM-115-02-03.0-FG-D-L1		
Optical Fibre Connector	LC/SC/FC		
Pigtail Length (cm)	100±2		
Dimensions (mm)	90(L)x70(W)x15(H)		

Miniaturized EDFA Module

The miniaturized EDFA module is a single-channel or narrow-band signal amplifier module specially designed for the telecom market. We can provide XFP or QSFP package form, which supports up to 21dB gain and 15dBm output power, as well as ACC and APC control modes.

Characteristics

- ACC/APC operating mode
- Ultra compact structure, ultra low loss
- High stability and reliability
- Customized

Applications

- Telecom or datacom
- CATV or SDH system



Specifications

Parameters	Minimum	Typical	Maximum
Wavelength (nm)	1530	—	1560
Input Power (dBm)	-6	—	6
Output Power (dBm)	—	12	15
Gain (dB)	—	20	—
Gain Flatness (dB)	—	—	—
Noise Figure (dB)	0	5 (P _{in} =0dBm)	6
Return Loss (dB)	—	≤-45	—
Operating Temperature(°C)	0	—	70
Storage Temperature(°C)	-40	—	85
Power Supply(V)	3.14	3.3	3.47
Power Consumption (W)	—	2.5	3.5
Communication Interface	RS232/485		
Electrical Connector	QSFP, XFP Standard Electric Connector		
Optical Fibre Connector	LC		
Pigtail Length (cm)	—		
Dimensions (mm)	QSFP, XFP Standard Package		

Optical Amplifier for CATV

High Power EYDFA Module

The high power EYDFA module adopts single-mode laser or multi-mode pump laser as an energy source. Erbium-ytterbium co-doped fibre is used to convert pump light into signal light, and the maximum output power can approach 40 dBm. The module works in the mode of ACC/APC/AGC. Taking advantage of high precision temperature control technology, it has good thermal properties in a broad range.

Characteristics

- High power output
- ACC/APC/AGC control mode
- High stability and high reliability
- Customized

Applications

- CATV
- FTTH
- Doppler radar system



Specifications

Parameters	Minimum	Typical	Maximum
Wavelength (nm)	1535	1550	1565
Input Power (dBm)	-3	—	10
Output Power (dBm)	30	—	40
Output Power Stability (dBm)	±0.1		
Gain (dB)	—	40	—
Gain Flatness (dB)	—		
Noise Figure (dB)	≤5.5 (P _{in} =0dBm)		
Return Loss (dB)	≤-45		
Gain Slope Accuracy (dBm)	0.6	0.8	1
Operating Temperature(°C)	-15	—	50
Storage Temperature(°C)	-30	—	80
Power Supply(V)	11.4	12	12.6
Power Consumption (W)	—	—	50
Communication Interface	RS232/485		
Electrical Connector	TEM-115-02-03.0-FG-D-L1		
Optical Fibre Connector	LC/SC/FC		
Pigtail Length (cm)	100±2		
Dimensions (mm)	200(L)x142(W)x30(H)		

High Power EYDFA System

YOFC-50EYA Series 1U High Power EYDFA

The YOFC-50EYA series EYDFA has high output power. Operating wavelength ranging from 1535 nm to 1565 nm on this amplifier is designed for CATV and applications of 1-8 continuous band channel. This equipment is very important in CATV backbone net building. It can operate at a single wavelength in CATV and three wavelengths in WDM systems and realize flat transmission in DWDM. It supplies a flexible and low-cost solution for large-area FTTH coverage of the CATV system in big and medium cities.

Characteristics

- Low NF pre-amplification, no cascade required, reduced CNR and MER
- Output power adjustable from 23 dBm to 37 dBm
- Perfect net management interface, compatible with SNMP protocol
- Double power supply, automatic temperature control with high reliability
- LCD, on-site parameter monitoring
- Flexible number of output interfaces for replacement

Applications

- CATV
- FTTH



Specifications

Part No.	EYA-S-C-1U-xx/xx		
Parameters	Minimum	Typical	Maximum
Wavelength (nm)	1535	1550	1565
Input Power (dBm)	-5	3	10
Output Power (dBm)	26	—	37
Number of output port	SC:16/32; LC:32/64		
Output Power of Single Port (dB)	10	—	23
Output Power Stability (dBm)	±0.1		
Gain (dB)	—	40	—
Gain Flatness (dB)	—		
Noise Figure (dB)	≤5.0 (P _{in} =0dBm)		
Return Loss (dB)	≤-45		
PDL (dB)	<0.3		
PDG (dB)	<0.4		
PMD (dB)	<0.3		
Pump Power Leakage (dBm)	<-30		
Operating Temperature(°C)	-15	—	50
Storage Temperature(°C)	-30	—	80
Power Supply(V)	AC220(160 ~ 265) /AC110 (90 ~ 130) /DC48 (38 ~ 58)		
Power Consumption (W)	—	—	50
Communication Interface	RS232/485		
Electrical Connector	TEM-115-02-03.0-FG-D-L1		
Optical Fibre Connector	LC/SC		
Pigtail Length (cm)	100±2		
Dimensions (mm)	482(L)x357(W)x44(H)		

YOFC-50EYA Series 2U High Power EYDFA

The YOFC-50EYA series EYDFA has high output power. Operating wavelength ranging from 1535 nm to 1565 nm on this amplifier is designed for CATV and applications of 1-8 continuous band channel. This equipment is very important in CATV backbone net building. It can operate at a single wavelength in CATV and three wavelengths in WDM systems and realize flat transmission in DWDM. It supplies a flexible and low-cost solution for large-area FTTH coverage of the CATV system in big and medium cities.

Characteristics

- Output power from 33 dBm to 40 dBm
- APC/ACC/AGC control
- Low NF pre-amplification, no cascade required, reduced CNR and MER
- Output power adjustable from 0.5 dBm to 4 dBm
- Completed net management interface, compatible with SNMP protocol

- Double power supplies, automatic temperature control with high reliability
- LCD , on-site parameter monitoring
- Flexible number of output interfaces for replacement

Applications

- CATV
- FTTH
- Doppler lidar system

Specifications

Part No.	EYA-S-C-2U-xx/xx		
Parameters	Minimum	Typical	Maximum
Wavelength (nm)	1535	1550	1565
Input Power (dBm)	-5	3	10
Output Power (dBm)	33	—	40
Number of output port	SC:16/32/64; LC:32/64		
Output Power of Single Port (dB)	10	—	23
Output Power Stability (dBm)	±0.1		
Gain (dB)	—	40	—
Gain Flatness (dB)	—		
Noise Figure (dB)	≤5.0 (P _{in} =0dBm)		
Return Loss (dB)	≤-45		
PDL (dB)	<0.3		
PDG (dB)	<0.4		
PMD (dB)	<0.3		
Pump Power Leakage (dBm)	<-30		
Operating Temperature(°C)	-15	—	50
Storage Temperature(°C)	-30	—	80
Power Supply(V)	AC220(160 ~ 265) /AC110 (90 ~ 130) /DC48 (38 ~ 72)		
Power Consumption (W)	—	—	100
Communication Interface	RS232/485		
Electrical Connector	TEM-115-02-03.0-FG-D-L1		
Optical Fibre Connector	SC/LC		
Pigtail Length (cm)	100±2		
Dimensions (mm)	482(L)x450(W)x89(H)		

YOFC-50EYA Series 3U High Power EYDFA

The YOFC-50EYA series EYDFA has high output power. Operating wavelength ranging from 1535 nm to 1565 nm on this amplifier is designed for CATV and applications of 1-8 continuous band channel. This equipment is very important in CATV backbone net building. It can operate at a single wavelength in CATV and three wavelengths in WDM systems and realize flat transmission in DWDM. It supplies a flexible and low-cost solution for large-area FTTH coverage of the CATV system in big and medium cities.

Characteristics

- Max output power 43 dBm
- Low NF pre-amplification, no cascade required, reduced CNR and MER
- Parameters can be set to fulfill the different net design
- The internal optical switch can be added to expand device capability
- Output port channels from 32 to 128, WDM available
- Low noise figure: 5 dB@3 dBm input
- Completed net management interface, compatible SNMP protocol
- Double power supplies, automatic temperature control with high reliability
- Output power adjustable from 0.5 dBm to 4 dBm
- True color LCD

Applications

- CATV
- FTTH
- Doppler lidar system

Specifications

Part No.	EYA-S-C-3U-xx/xx		
Parameters	Minimum	Typical	Maximum
Wavelength (nm)	1535	1550	1565
Input Power (dBm)	-5	3	10
Output Power (dBm)	—	—	43
Number of output port	SC:16/32/64; LC:32/64/128		
Output Power of Single Port (dB)	10	—	23
Output Power Stability (dBm)	±0.1		
Gain (dB)	—	43	—
Gain Flatness (dB)	—		
Noise Figure (dB)	≤5.0 (P _{in} =0dBm)		
Return Loss (dB)	≤-45		
PDL (dB)	<0.3		
PDG (dB)	<0.4		
PMD (dB)	<0.3		
Pump Power Leakage (dBm)	<-30		
Operating Temperature(°C)	-15	—	50
Storage Temperature(°C)	-30	—	80
Power Supply(V)	AC160 ~ 250/ AC100 ~ 130/ DC38 ~ 58		
Power Consumption (W)	—	—	150
Communication Interface	RS232/485		
Electrical Connector	TEM-115-02-03.0-FG-D-L1		
Optical Fibre Connector	SC/LC		
Pigtail Length (cm)	100±2		
Dimensions (mm)	482(L)x482(W)x132.5(H)		

Optical Amplifier for Sensing

Polarization Maintaining EDFA Module

YOFC's PM EDFA product has been widely used in the fields of optical fibre sensing and optical fibre communication. PM EDFA uses 980 nm pump laser to provide energy. Among all polarization maintaining passive components, it has a high output extinction ratio. The product can be configured in AGC, APC or ACC operating mode. The high-reliability temperature-controlling technology ensures the product excellent thermal performance under a wide temperature range.

Characteristics

- Up to 23 dBm output power
- ACC/APC/AGC operating mode
- Low noise figure and power consumption
- High stability and reliability
- Customized

Applications

- Optical fibre sensing
- PM optical communication system
- Universities and institutes



Specifications

Parameters	Minimum	Typical	Maximum
Wavelength (nm)	1528.77	—	1565.05
Bandwidth (nm)	—	100	—
Input Power (dBm)	-16	-12	-10
Output Power (dBm)	—	23	23.5
Extinction Ratio (dB)	—	20	—
Gain (dB)	—		
Gain Flatness (dB)	—		
Noise Figure (dB)	—	5.5 (P _{in} =0dBm)	6
Return Loss (dB)	≤-45		
Operating Temperature(°C)	-40	—	65
Storage Temperature(°C)	-40	—	85
Power Supply(V)	4.75	5	5.25
Power Consumption (W)	—	—	20
Communication Interface	RS232/485		
Electrical Connector	TEM-115-02-03.0-FG-D-L1		
Optical Fibre Connector	LC/SC/FC		
Pigtail Length (cm)	100±2		
Dimensions (mm)	90(L)x70(W)x25(H)		

Pulse EDFA Module

YOFC's pulse EDFA product has been widely used in the fields of optical fibre sensing, wind detecting LIDAR, and hydrophone system. This product can keep complete waveform during amplification of the optical signal. The product can be configured in AGC, APC or ACC operating mode. The high-reliability temperature-controlling technology makes the product have excellent thermal performance under a wide temperature range.

Characteristics

- Keep the complete waveform
- ACC/APC/AGC operating mode
- Low noise figure and power consumption
- High stability and reliability
- Customized

Applications

- Optical fibre sensing
- Wind detecting LIDAR
- Hydrophone system
- Universities and institutes



Specifications

Parameters	Minimum	Typical	Maximum
Wavelength (nm)	1528.77	—	1565.05
Pulse Width (ns)	1	100	1000
Repetition Frequency (Hz)	1	200K	—
Input Average Power (dBm)	-35	—	-10
Output Average Power (dBm)	—	0	—
Gain (dB)	—	—	—
Gain Flatness (dB)	—	—	—
Noise Figure (dB)	—	5.5 (P _{in} =0dBm)	6
Return Loss (dB)	—	≤-45	—
Operating Temperature(°C)	-40	—	65
Storage Temperature(°C)	-40	—	85
Power Supply(V)	4.75	5	5.25
Power Consumption (W)	—	—	20
Communication Interface	RS232/485		
Electrical Connector	TEM-115-02-03.0-FG-D-L1		
Optical Fibre Connector	LC/SC/FC		
Pigtail Length (cm)	100±2		
Dimensions (mm)	90(L)x70(W)x25(H)		