

Actuating Optical Advances



About us

AOA Technology Co. Ltd provides high-quality fiber optic products related to fiber network projects. Founded in the year 2000 in Shenzhen, China, we have been continually dedicated to providing high-quality at a competitive price.

We continually improve the quality of our products: Fiber Passive Components, Active Device, Cable Management, FTTH products.

All of our products are used in various fields (and are widely accepted in many countries); they include: traffic, telecommunication, broadcast television, and electrical power.

The products are all tested and guaranteed to comply with: ISO 9001:2008 standards, the FCC, CE and ROSH standards.

We warrant our products; Our warranty includes:

- 1) within one-year we will replace a defective product with a new one,
- 2) within three (3) years we will repair the product for free,
- 3) We give life-time maintenance of our products.















Exhibitions

AOA Technology

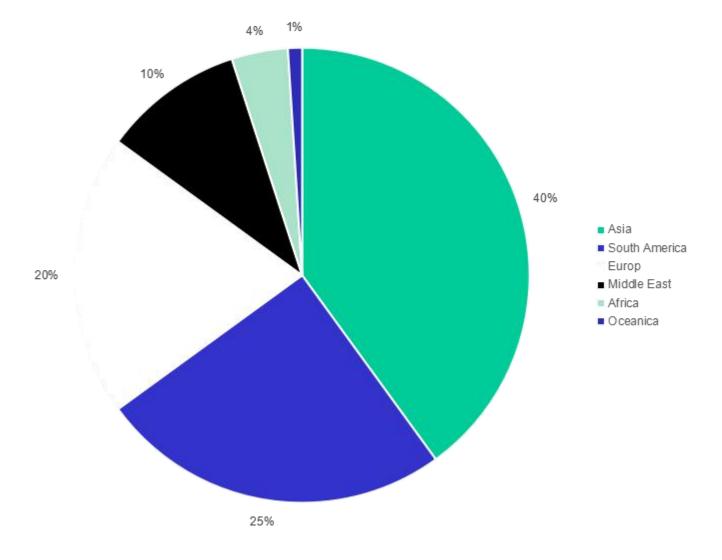






2017 Main Markets

AOA Technology







AOA Technology

Why us

- Strong R&D ability: AOA keep launched R&D to make the new products. Recently we are researching the 16/24 ports manageable switch.
- Volume production capacity: media converter 1,000pcs per day;
 industrial switch 500pcs per day; SFP 5,000pcs per day
- Reliable products: 100% of items are test before shipping
- Prompt delivery: 2~3 days for regular items
- Experience and Expertise: Our products are used in world wide Telecom companies, such as: Vietnam-Viettel, Thailand-TOT CAT, Russia-Rostelecom, Spain-Telefonica Movistar, Latin America-Claro





















Production Process of Media Converter

- Components inspect and test
- 48 hours Power supply aging test
- Semi-manufactured goods test
- 48 hours manufactured goods dynamic aging test
- Manufactured goods Smartbit test about Packet Loss and **Throughput**

User Manual

QA random inspection

Production







Device









Step.1 Cable Cutting

Use the cable cutting machine to cut the cable into specific length according to the customers' needs. The cable cutting machine can automatically calculate the cable length and cut in a precise way.

Production Process of Fiber Optic Patch Cord

Step.2 Cable Cleaning & Pre-handling

Need to clean the cable after cutting to make sure the fiber inside without any dust before inserting connector. Put the cable in good sequence so that it would be very easy to insert connector.

Step.3 Cable Stripping & Indentifying

Use the jacket stripper to strip the outer and inner jacket of the cable and use the pastes to indentify the cable for producing the duplex or multi patch cord.

Step.4 Glue Injection & Fiber Inserting

Inject some glue on the surface of the fiber and then inserting the fiber into the connector. Usually it is professional glue called 353 epoxy.

Step.5 Fiber Solidifying

Use vertical solidification furnace or horizontal solidification furnace to solidify the fiber on the connector.











Production Process of Fiber Optic Patch Cord

Step.6 Ultrasonic Cleaning & Polishing

After solidifying, the half-finished patch cords need to be cleaned with ultrasonic cleaning machine. The interface of the connector needs to be polished to make sure the fiber would be one the same line as the ferrule.

Step.7 Microscope Inspection

Use 400 times or 600 times microscope to inspect the interface of the connector to make sure it clean. If there is any dust on the interface, we need to reclean the connector again

Step.8 Kits Assembly & FQC

Assembly the other parts of connectors to the patch cords and use the inspection machines to do the FQC.

Step.9 R.L & I.L Test

It is important to test the patch cord for insertion and return loss value since they are the key factors affecting the function of patch cords.

Step.10 Packaging

After all the testing, the patch cords would be packed according to customers' needs. Usually, each patch cord would be packed in one bag in order to keep it safer.





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AOA Tech Certificate

AOA Technology







Media Converter CE



Video Converter CE





AOA Technology

AOA Tech Certificate









10/100M Industrial Media Converter CE IMC1100

10/100/1000M Industrial Media Converter CE IMC3100

10/100M Industrial Fiber Switch CE IFS1400

10/100/1000M Industrial Fiber Switch CE IFS3400





AOA Technology

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SFP Module CE





Product line

AOA Technology

Industrial Switch



Video Optical Converter



Ethernet Switch



SFP Transceiver



Media Converter



FTTH Network







Industrial POE Media Converter/Switch

Features

- UTP with POE to fiber media converter
- IEEE 802.3af/at complaint
- Built-in LFP (Link-fault-pass-through) function
- Jumbo frame: 9kbytes
- Wide-range redundant power design (12~56VDC)
- Support wide operating temperature (-40°C ~ +85°C)
- IP-40 protection
- DIN-Rail and Wall- Mounted Installation



High tempreture test

Applications:



IEEE 802.3at/at PSE





Ethernet Switch

Overview

The 10/100/1000M Ethernet Optical Fiber Ethernet Switch with multi 10/100/1000M UTP ports and two 1000M SFP sockets. The end users can use different SFP module according to his requirement, for example: 1000Base-T, 1000Base-SX, 1000Base-LX etc.





Applications:







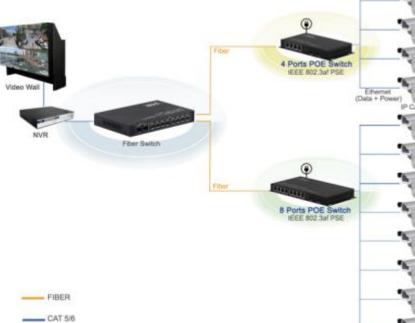
POE Switch

Overview

The PoE Fast Ethernet Fiber Switch provide 4/8 Port PoE (Power over Ethernet) which compliance with IEEE802.3af & IEEE802.3at standard; Let you simply connect IP camera / IP phone / Wireless AP at remote site where AC or DC power un-available

Applications:

POWER.











Fiber Switch



Overview

This Giga 8GX2GE switch provides a network point for data transmission. It has 8 10/100/1000Mbps fiber optic SFP ports, and 2 gigabit RJ45 Ethernet Uplink ports. The switch features simple and reliable design, automatic identification Ethernet requirements, duplex and high-speed.



Applications:







Media Converter- DIP Switch

Overview

AOM-1100D is a 10/100Base-TX to 100Base-FX media converter, which features LFP (Link Fault Pass-through) function for easily tracing the network link failure. LFP function can enhance the integrity and conformity of the TP-Fiber linking to improve the maintainability of the network.

Five LEDs are provided to monitor the operation status of the converter and the DIP Switch on the side panel is used to set the required working configurations to meet various applications.

Features

- LFP (Link Fault Pass-through) Function with dip-switch
- External Power Adapter or from USB port
- DIP Switch to set configurations
- Built-in Lightning protection chipset



AOM-1100D





DIP Switch

TP port mode: Auto (default) or Force

TP port speed: 100 or 10 when TP at Force

TP port duplex: FDX or HDX when TP at Force

LFP: LFP enabled (default) or disabled

Fiber port duplex: 100 FDX (default) or 100 HDX





Overview

AOM-3100D-SFP is 10/1001000M SFP slot fiber media converter, Giga Media Converter which supports LFP (Link Fault Pass-through) function for easily tracing the network link failure.

Giga Media converter-DIP switch

LFP Fiber Media Converter can enhance the integrity and conformity of the TP-Fiber linking to improve the maintainability of the network. It is powered through external power adapter or uses power from USB port on the hosting device such as PC or NB.



- LFP (Link Fault Pass-through) Function
- External Power Adapter or from USB port
- DIP Switch to set configurations
- Supporting 9K Jumbo frame



AOM-3100D-SFP



AOM-3100D-S20

DIP Switch

- 1: LFP enabled (default) or disabled
- 2: Switch mode or Pass through mode
- 3: Store-and-forward mode or Modified cut through mode





Why choose fiber optic in CCTV or Security?

	Coaxial Cable	Twisted Pair	Fiber optic
Integrate Cable	Hard	Easy	Easy
Cost	High	Low	High
Distance	100meter	1.5km	20~120km
Anti-jamming	Poor	Good	Very good
Data transmission	No	Yes	Yes

Advantage of Fiber optic in CCTV/Security/Surveillance:

- Big bandwidth, Capacity
- No easy be affected by electromagnetism interfere
- No easy be affected by environment
- Long distance (Coaxial cable is 100 meter, fiber optic is 20~120km)
- No need software supportive
- Easy construction
- Transfer different type signals: Video, Audio, Data, Ethernet







1/2/4/8-ch AHD/TVI/CVI to Fiber

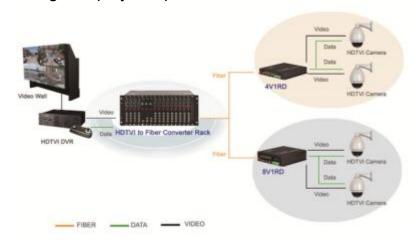
Overview

HD Video to fiber converters adopt the advanced uncompressed HD composite video and high velocity digital optical transmission technologies which convert the HD video composite signals to optical signals to achieve long distance(as far as 80Km) transmission through fibers.



Features:

- Non-compression coding technology
- Automatically identify formats of input videos.
- Support transmission of 1/2/4/8 channel HD video signal and controlling data simultaneously though coaxial cable
- DC 5V power supply
- Support 720p/25,720p/30,720p/50,720p/60,1080p/25,1080p/30 videos etc.
- Plug and play, simple installation.







HD-SDI/3G-SDI video to Fiber Converter





Overview

HD-SDI/3G-SDI video digital optical converter adopts international advanced all-digital gigabit optical fiber transmission technology, the HD-SDI/3G-SDI video signal can be transmitted through 1 fiber with non- Distortion, high-quality, long-distance transmission. This series of video to fiber converter has Stable performance, clear picture quality., and high Stability with LED Status Indication on the body of device. The working status of devices can be visually observed. At the same time, the switch value, voltage, working status and other reverse useful signal information can be controlled by RS485 or RS232. This makes our devices more flexible when different customers's request comes.





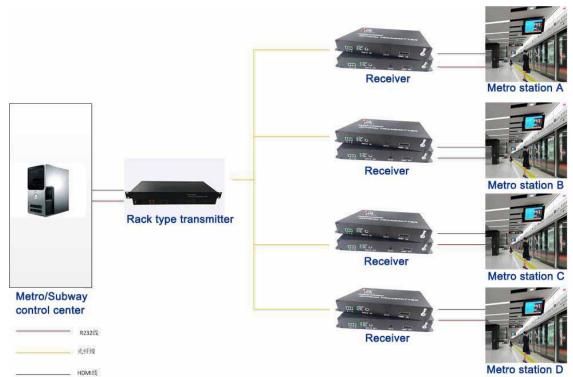
HDMI video to Fiber Converter





Overview

HDMI Optical transmitter and receiver adopts the uncompressed digital HD video and high-speed digital optical fiber transmission technology advanced, It can transfer signal source(computer signal source, VGA signal source high digital DVD/DVR and various resolution HDMI signal...) to long distance terminal easily.

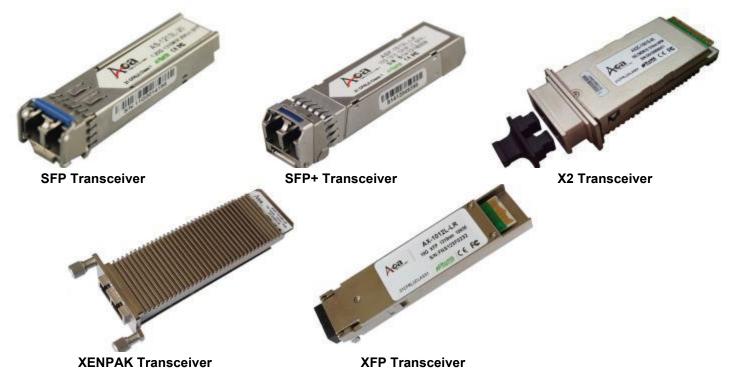








Fiber Optic Transceivers



Overview

AOA SFP transceivers are high performance, cost effective modules supporting 155M, 622M, 1.25G, 2.125G/2.5G 4.25G data-rate and 550m~120km transmission distance. It is designed for Fast Ethernet, Gigabit Ethernet and SONET OC-3/SDH STM-1 applications. All modules satisfy class I laser safety requirements.







Patch Cord

Overview

AOA offers a variety of custom Simplex, Duplex and Mini Zip, single mode (SM) and multi mode (MM) patch cords and fiber pigtail assemblies that could be built to your specification. The AOA optical fiber patch cord and pigtail range consist of FC,SC,ST,LC,MTRJ,MU,E2000 and SMA single mode and multimode connectors. Please contact AOA for any custom specification patch cords or pigtails.



Features:

- Superior qualified standard PC/UPC/APC polishing
- 100% optic test (Insertion Loss & Return Loss)
- 0.9mm, 2.0mm and 3.0mm cable optional
- Comply to IEC Standard





Туре	Single mode (UPC)	Single mode (APC)	Multi-mode (PC)
Insertion loss	≤0.3 dB	≤0.3 dB	≤0.3dB
Return Loss	≥50 dB	≥60 dB	≥35 dB
Repeatability	≤0.1dB		
Durability	≥1000matings		
Operating Temperature	-40°Cto +80°C		
Tensile Strength (N)	≥90N (φ3), ≥70N (φ2)		





Fast Connector

Overview

SC Fiber Optic Fast Connector designed for FTTH is a new generation of fiber connector used in assembly. It can provide Open flow and Pre-cast type of products, whose optical and mechanical specification meets the standard optical fiber connector. It is designed for high quality and high efficiency for installation the structure of crimping position is a unique design, and need not gluing, polishing neither any consumables. Adopting fiber pre-installed structure, and convenient for field installation.

Features

- Precise mechanical dimensions
- Low insertion loss, high return loss
- Comply standard of IEC61754-4
- Repeatable times is no less than 50 times;
- Long life span design, more than 30 years.

Туре	Parameters
Insertion loss	≤ 0.3dB(1310nm & 1550nm)
Return loss	≤ -40dB
Bare fiber strength	>5N
Clad strength	>10N
Tension	>50N
Mechanical durability(500times)	IL ≤ 0.2dB & RL ≤ 5dB
Operating Temperature	5 °C to +70 °C





Optical Adapter

Overview

The optical Fiber Adapter is the connection part in the active optical connectors. AOA offers the full range of adapters including FC,SC,ST and hybrid adapters. These adapters are widely used in ODF, optic-fiber communications equipment, optical fiber instruments etc. The combination of a ceramic / phosphor bronze alignment sleeves and a precision moulded polymer housing provides consistent long-term mechanical and optical performance.



Features:

- Excellent changeability and directivity
- 100% optic test (insertion loss)
- Ceramic and phosphor bronze sleeve tube optional
- Accurate external size
- Individually packaged



Adapter with Shutter

Parameters	Zirconia	
Operating Temperature	-40 to +85	
Connection Durability	1000 Matings	
Repeatability	<0.2dB	
Insertion Loss	<0.2dB	



Optical Attenuator

Overview

To ensure proper performance and to maximize the life of optical receivers, the power received by these photodetectors must fall within their dynamic or operating range. For this reason, fiber optic transmission systems often use Attenuators to reduce or balance the power in the passive optical network.



Features:

- Low cost
- Compact size, light weight
- Available with FC/PC, SC/PC, ST, LC/PC format

Parameter	Specifications		
Bulkhead Adaptor Type	FC/PC (Square Type)		
	SC/PC (Flange Type)		
	ST (Thread Type)		
	LC/PC (Flange Type)		
Attenuation (dB)	5,10,15,20		
Accuracy (dB)	5,10	±1.5	
	15,20	±10%	
Operation Wavelength (nm)	850, 1310, 1550		
Operating Temperature(°C)	-40~ 75		
Humidity	75°C,RH 95%		



Overview

The PLC Splitter devices have high performance in terms of low insertion loss, low PDL, high return loss and excellent uniformity over a wide wavelength range from 1260nm to 1620nm and working in temperature from -40° C to +80° C. The PLC Optical Splitters have standard configurations of 1x4, 1x8, 1x16 and 1x32 configurations, as well as customized structures of 2x8, 2x16, 2x32.

Features

- Compact design
- Low insertion loss and low PDL
- High reliability
- High channel counts
- Wide wavelength range
- Large operatiing temperature range
- Customized packaging and configuration

PLC Splitter/CWDM/DWDM

Application

- FTTx Systems
- LAN, WAN and Metro Networks
- Analog/Digital Passive Optical Networks
- CATV Networks
- Other applications in fiber optic systems





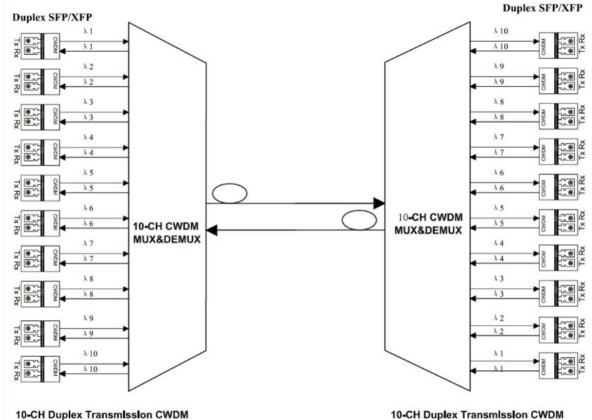


PLC Splitter/CWDM/DWDM

MUX&DEMUX



Passive Components

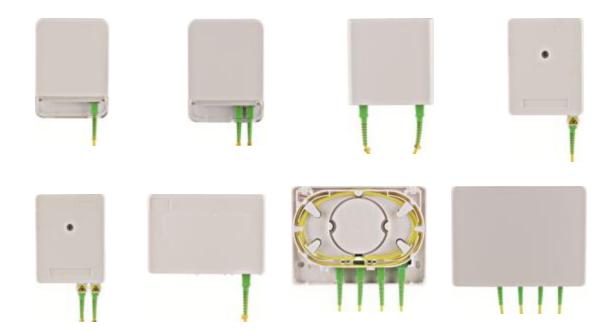


MUX&DEMUX





FTTH Terminal box



Features:

- Excellent ergonomics design, graceful appearance and convenience operation
- Plug fiber without having to open the shell, easily accessible fiber operation
- Vertically downward port to avoid causing personal injury
- White color, graceful style and good adaptability to environment.
- Fiber cable inlets in every direction, supports the cable inlets for different scenarios.
- Friendly operation interface, high reliability
- Introductions clear, effectively prevent the miss-operation.
- Low construction cost







FTTH Distribution Box



Features:

- small size, light weight, pleasing in appearance
- wall mounted with mechanical protection function
- max fiber capacity 4-16 fibers,4-16 adapter output
- available for FC,SC,ST,LC adatpers
- hinge and convenient press-pull button lock design

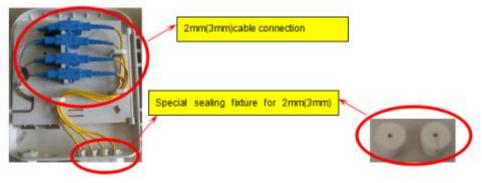


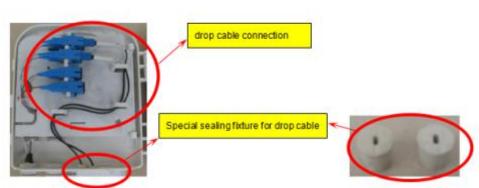


Asa

Quality comparing of the FTTH box











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Fiber Termination Box





Features:

- small size, light weight, pleasing in appearance
- 19" Rack, cabinet mountable
- One cabinet design provides OSP cable fibers and pigtail splicing, patch cord termination and storage.
- Slide out features and Modular Adaptor Panel for ease of Installation, Inspection and Testing.
- Fiber panel are designed for FC,SC,ST three types adapters



Optical Cable

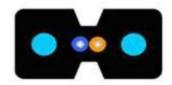
FTTH Drop Cable

Overview

The AOA optical drop cable has simple strusture, lower weight and high practicablity. The design make the cable is to stip and splice which simplify the installation and maintenance. To ensure good performance of crush and tension resistance, two parallel members of FRP or Stell Wires strength the cable.

Features:

- Good mechanical and environmental characteristics
- Flame retardant characteristics meet the requirements of relevant standards
- Mechanical characteristics meet the requirements of relevant standards
- Soft, flexible, easy to lay and splice, support large-capacity data transmission







Drop cable packing





FTTH Solution

Solution

