ZTT GROUP

Established in 1992, ZTT started from optical fiber communications and was listed on Shanghai Stock Exchange (SSE) in 2002 (Stock Code in SSE: 600522). ZTT has pictured a diversified industrial portfolio for marine equipment, renewable energy, new materials, smart grid, optical communications and other diversified industrial products. ZTT Group is now hosting 80 subsidiary companies and over 16,000 employees，operating 5 overseas plants located in India, Brazil, Indonesia, Morocco and Turkey . ZTT owns more than 2500 patents with independent intellectual property rights, presided over or participated in more than 500 international and national industry standards. The products of ZTT are exported to 160 countries and regions .The company has ranked among the top 500 Chinese enterprises for consecutive years and broke through $ 12.5 billion in sales revenue in 2021. ZTT follows the new economic model of fostering cleaner production and accelerating green and low-carbon development, works hard to serve as the pioneer of persistent endeavor to achieve national goal involving carbon dioxide emissions peaking by 2030 and carbon neutrality by 2060, emerging as a green manufacturing technology group assuming regional economy.

FTTx ODN Solution Provider

COMPANY PROFILE

Zhongtian Broadband Technology Co., Ltd is a wholly-owned subsidiary by Jiangsu Zhongtian Technology Co., Ltd (ZTT)—a public company in China's telecommunication industry. The company keeps pace with research and participates in various FTTx projects in domestic and overseas. From 2003, company specializes in producing a full range of ODN products and providing comprehensive PON solutions. The products and solutions have been widely applied by China Telecom, China Mobile, China Unicom, and other overseas communication operators. The products have been sold to more than 50 countries and regions including Taiwan, Southeast Asia, Middle East and Africa.

Zhongtian Broadband Technology Co., Ltd commits to continuously reducing network deployment costs, and promoting development and wide application of optical communication technologies. Company has an excellent product quality with a number of certifications, such as ISO9001 quality management system certification, TL certification, radio and television certification etc. The company will make unremitting efforts to become the best FTTx network supplier in China.
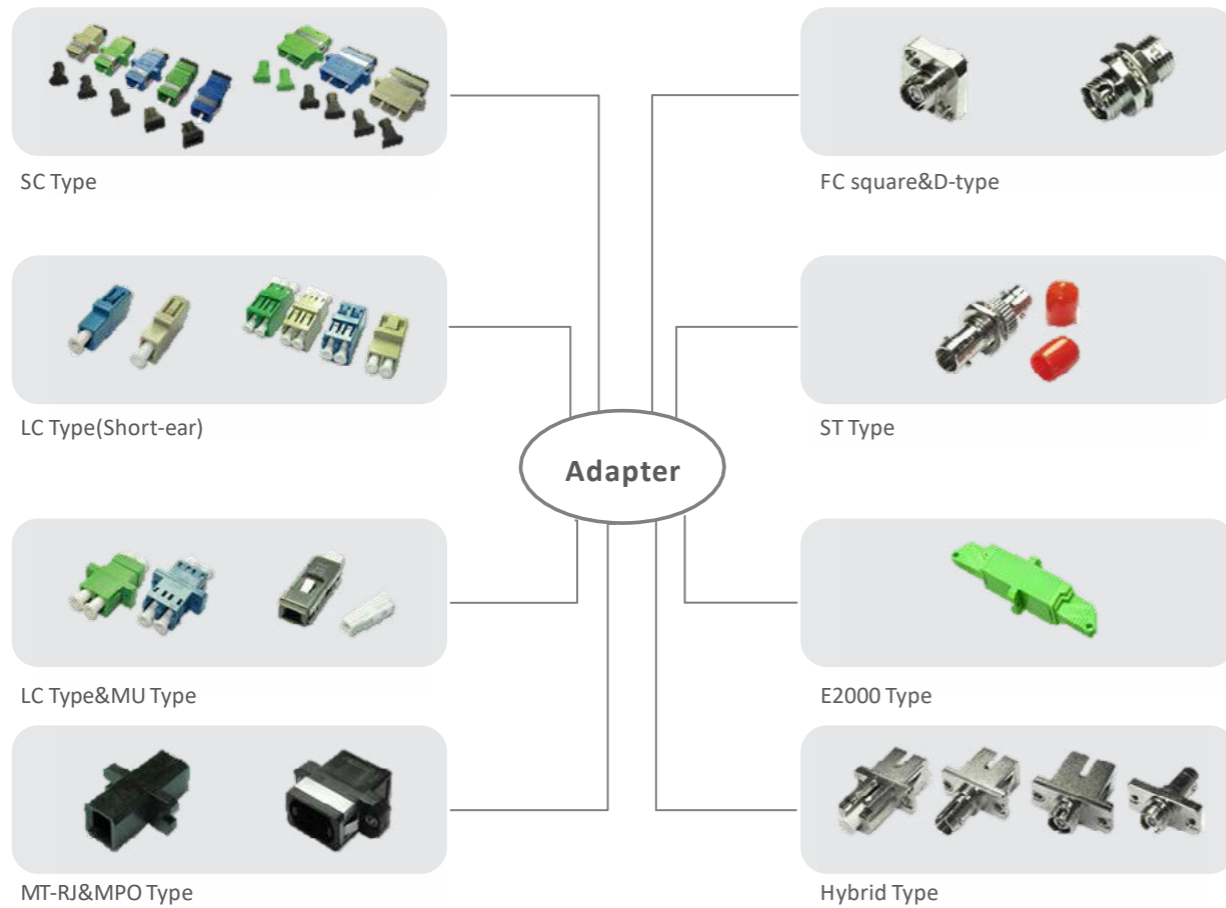
Optical Accessories

Adapter

Description:

Accomplish accurate and optical connection between connectors.

SC Type

LC Type(Short-ear)

LC Type&MU Type

MT-RJ&MPO Type

Adapter

FC square&D-type

ST Type

E2000 Type

Hybrid Type

Technical Specification:

ITEM	Unit	Parameter
Type	--	FC , SC , ST , MU , E2000 , Hybrid
Polishing face	--	PC & UPC & APC
Material of sleeve	--	Ceramic
Insertion loss	(dB)	≤ 0.2
Interchangeability	(dB)	≤ 0.2(Connector Randomly)
Repeatability	(dB)	≤ 0.2
Operating Temperature	(℃)	-40 ~ 80℃
Industrial standard	--	IEC 61754

Optical Accessories

Pigtail and Patch Cord

Description:

Used in the fiber distribution system of communication network, accomplishes cable's termination, mutual connection between the optical interface.

FC/PC   SC/PC   ST/PC   LC/PC

E2000/APC   Simplex Patch Cord   Duplex Patch Cord   Simplex Pigtail   Tight buffer Pigtail   Bunchy cable Pigtail

Water-proof Pigtail   Ribbon cable Pigtail   Flat Drop Cable Patch Cord   Armored Patch Cord   Fan-out Patch Cord   Super Flexible Patch Cord

Technical Specification:

Technical data				
Fiber type	SM			MM
Connector type	FC/SC/ST/LC			
Grinding type	PC	UPC	APC	≤0.2
Insertion loss(dB)	≤0.3	≤0.3	≤0.3	
Return loss(dB)	≥45	≥50	≥60	/
Operation temperature(℃)	-25℃ to +70℃(for SC,ST,LC); -40℃ to +80℃(for FC)			
Longevity	＞500 times			
Standard	IEC61754-13,4,2,20			

Optical Accessories

MPO/MTP

Description:

MPO connector is a kind of pluggable connector with multi-core and multi-channel, which is widely used in the high-density integrated fiber line environment during wiring.

Features:

• High density, saving space: The 12-core MPO fast connector with high density is only equivalent to the size of an RJ45 connector, which is incomparable with the traditional wiring.With this connector, 1U and 4U optical fiber distribution frames combined with MPO modules achieve the highest installation density of 72 cores and 288 cores (LC) respectively, saving a lot of space to deploy as many devices as possible.
• Stable and reliable performance: Precision MT guide pin and guide hole ensure the accuracy of optical fiber alignment.
• Easy to deploy and upgrade: All connections are plug-and-play, and the number of cables is much smaller than the traditional wiring, so the construction efficiency is greatly im-

proved. The amount of wiring used in a week can be completed in a few hours.
• Support for future network applications: Perfect support for 40G/100G network applications, avoiding the need for rewiring due to network equipment upgrades.
• The wiring is beautiful and the management is convenient: Shortening the space taken up by cables can reduce cable space under a bridge or floor by more than 40%, facilitating ventilation in the data center.It got rid of the phenomenon of numerous and disorderly cables brought by common optical fiber products before, which reduced the management difficulty of customers and beautified the space.

Technical Data:

Optical Performance				
Item	Parameter			
MTP/MPO Connector	SM		MM	
	Standard	Low Loss	Standard	Low Loss
Insertion Loss Typical	0.50dB	0.20dB	0.50dB	0.20dB
Insertion Loss Maximum	0.70dB	0.35dB	0.60dB	0.35dB
Return Loss	≥60dB for APC		≥20dB for PC	
	≥40dB for PC		/	
Male/Female	Male: With Pins, Female: Without Pins			
Tensile Strength	≤0.3dB (Max 66N)			
Vibration	≤0.3dB (10 ~ 55Hz)			
Thermal Cycle	≤0.3dB (-40 ~ 75ºC, 21 Cycles)			

Optical Accessories

Fiber Outlet

Description:

Used to terminate the optical fiber, accomplishes the real FTTH.

ZTT-ATB-1W

Type	ZTT-ATB-1W
Capacity	1 core
Size（L*W*H）	116*86*23mm
Installation method	Wall mount（indoor）
Configuration	Simplex SC or duplex LC adapter

ZTT-ATB-2H

Type	ZTT-ATB-2H
Capacity	2 core
Size（L*W*H）	130*84*24mm
Installation method	Wall mount（indoor）
Configuration	2 simplex SC or 2 duplex LC adapter

ZTT-ATB-2Q
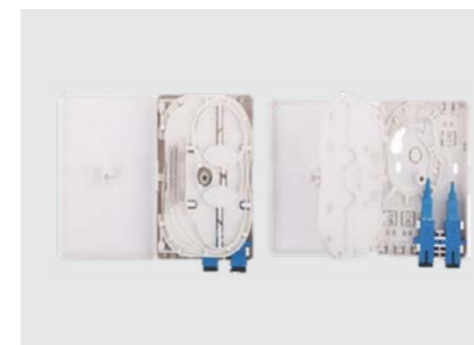
|	
Type	ZTT-ATB-2Q
Capacity	2 core
Size（L*W*H）	102*80*25mm
Installation method	Wall mount（indoor）
Configuration	2 simplex SC or 2 duplex LC adapter

Optical Accessories

ZTT-ATB-2A

Type	ZTT-ATB-2A
Capacity	2 core
Size（L*W*H）	86*86*24mm
Installation method	Wall mount（indoor）
Configuration	2 simplex SC or 2 duplex LC adapter

ZTT-ATB-4F
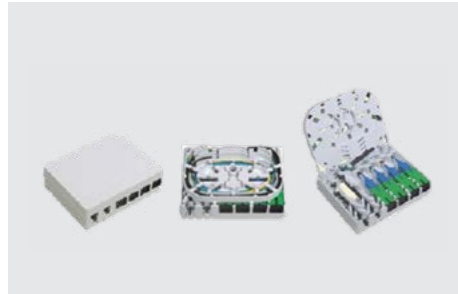
Type	ZTT-ATB-4F
Capacity	4 core
Size（L*W*H）	100.5*80.5*28.8mm
Installation method	Wall mount（indoor）
Configuration	4 simplex SC or 4 duplex LC adapter

ZTT-ATB-1C
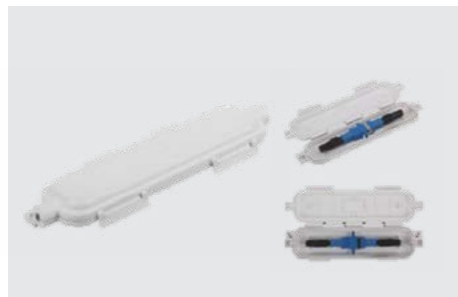
Type	ZTT-ATB-1C
Capacity	1core
Size（L*W*H）	160*45*17mm
Installation method	Wall mount or Aerial (outdoor/indoor)
Configuration	1 simplex SC adapter

ZTT-ATB-4D-DIN
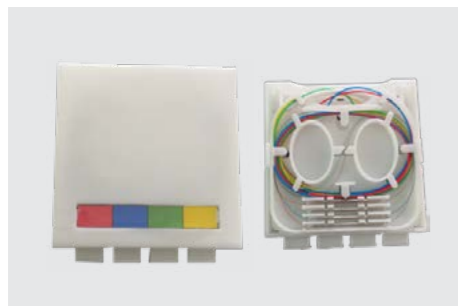
Type	ZTT-ATB-4D-DIN
Capacity	4 core
Size（L*W*H）	80*80*25mm
Installation method	DIN rail
Configuration	4 simplex SC or 4 duplex LC adapter

Optical Accessories

Fast Connector

Description:

Fast connector provides another type detachable connection.It could be assembled on side,no need to polish the end face.The embedded technology ensures a good optical performance.

ZTT-FSC-SC/UPC

Type	ZTT-FSC-SC/UPC
Application scope	2.0x3.0mm drop cable
Size	51.5mm
Fiber Diameter	125μm
Coating Diameter	250μm
Insertion Loss	≤ 0.4dB (1310nm & 1550nm)
Return Loss	≥45dB for UPC

ZTT-FSC-SC/APC

Type	ZTT-FSC-SC/APC
Application scope	2.0x3.0mm drop cable
Size	51.5mm
Fiber Diameter	125μm
Coating Diameter	250μm
Insertion Loss	≤ 0.4dB (1310nm & 1550nm)
Return Loss	≥50dB for APC

ZTT-FSC-LC/UPC

Type	ZTT-FSC-LC/UPC
Application scope	2.0x3.0mm drop cable
Size	45mm
Fiber Diameter	125μm
Coating Diameter	250μm
Insertion Loss	≤ 0.4dB (1310nm & 1550nm)
Return Loss	≥45dB for UPC

ZTT-FSC-LC/APC
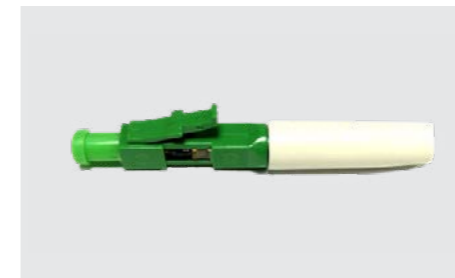
Type	ZTT-FSC-LC/APC
Application scope	2.0x3.0mm drop cable
Size	45mm
Fiber Diameter	125μm
Coating Diameter	250μm
Insertion Loss	≤ 0.4dB (1310nm & 1550nm)
Return Loss	≥50dB for APC

Optical Accessories

Outdoor Waterproof Pre-Connectorized Connector

Product Features:
• Low Insertion loss and High Return Loss
• Plug and play
• Good Abrasion Resistance
• Good Interchangeability
• Excellent Temperature Performance
• Good Repeatability

Application:
• Wired TV Internet
• Local Area Network
• Optical Transmission System
• Test and Measurement System
• Optical Fiber Distribution Frame, Pre-Connectorized FAT, Joint Closure

Product Description:

Design is suitable for critical industrial environments and outdoor environments. The adapter is assembled on the box and the joint closure, and the connector is inserted into the adapter to achieve quick connection. The seal between the adapter and the connector can reach the standard of IP68.

ZTKD-EJ-01:

Technical Data:

Items	Parameter	
	SC\UPC	SC\APC
Fiber Type	657A2 or Customized	
Cable Diameter	5.0±0.2mm	
Insert Loss (dB)	0.3	0.3
Return Loss (dB)	55	60
Application Temperature(℃)	-40～85	
Tensile Strength (N)	300	
Protection Level	IP68	

Optical Accessories

PLC Splitter

Description:

Suitable for products where space is relatively tight, such as optical cable Joint Closure, optical fiber splitting boxes, and can also be installed in tray-type and frame-type optical splitter assembly boxes.

Cassette type   Blade package type   Micro-modular type   Rack mount type   Tray assembly type
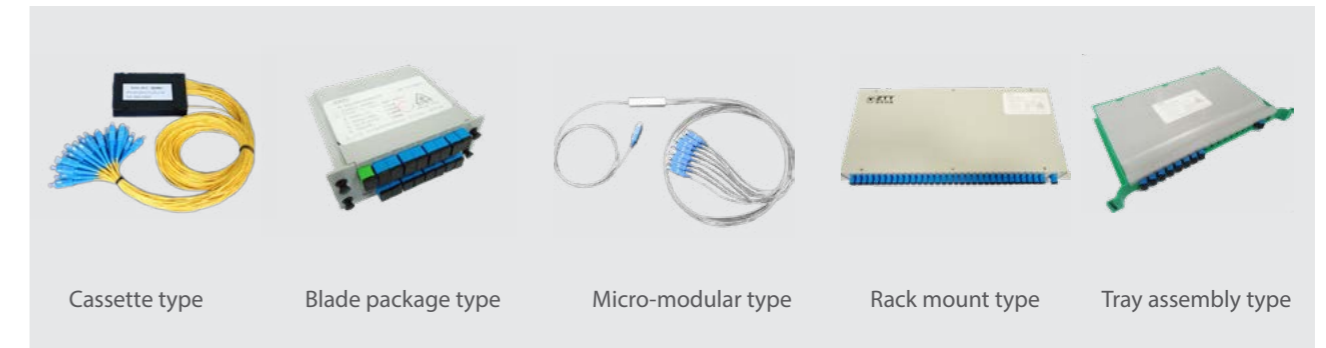
Characteristic:

• Small size and aesthetic appearance.
• Installation quick, reliable performance, stability.
• Good uniformity, in particular the application of PON.
• Wide operating wavelength range.Low insertion loss, low polarization loss.
• Compact structure, easy installation; easy for wiring.

Specification :

Type	1x2	2x2	1x4	2x4	1x8	2x8	1x16	2x16	1x32	2x32	1x64	2x64
Channel wavelength(nm)	1260~1650nm											
Fiber type	G657 customized											
Max Insertion loss(dB)	4.1	4.4	7.4	7.7	10.5	10.8	13.8	14.1	17.1	17.4	20.4	20.7
Maximum channel uniformity(dB)	0.8	0.8	0.8	1.0	0.8	1.0	1.0	1.5	1.5	1.5	2.0	2.0
Return loss(dB)	≥50(UPC);≥60(APC)											
PDL(dB)	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.5
Directivity(dB)	≥55											
Operating temperature(℃)	-40~+85℃											
Storage temperature(℃)	-40~+85℃											

Optical Accessories

Splitter Closure

GJS1035-8P

Dimension	272*182*72 mm
Main Cable	4 Ports for 6.8-11.5 mm cable
Drop Cable	8 Ports for 2.0*3.0 mm drop cable
Splitter	1:2,1:4 or1:8 cassette type splitter
Mounting Method	Aerial

GJS1035-16P

Dimension	380*182*72 mm
Main Cable	4 Ports for 6.8-11.5 mm cable
Drop Cable	16 Ports for 2.0*3.0 mm drop cable
Splitter	1:16 cassette type splitter
Mounting Method	Aerial

GJS1036-16C

Dimension	306*203*85 mm
Main Cable	4 Ports for 7-11 mm cable
Drop Cable	16 Ports for 2.0*3.0 mm drop cable
Splitter	1pc 1×16 cassette type Splitter or 2 pcs 1x8/1x4/1x2
Mounting Method	Aerial

Joint Closure

Description:

The joint closure is applied to aerial, duct, direct buried, straight through or branched jointing, protecting the fusion joints. Made in different materials to suit various environments, the boxes are designed to joint most types of fiber cables.

Inline type:

GJS1011   GJS1020   GJS1029

Optical Accessories

Dome type:

GJS3010   GJS3045   GJS2046   GJS3005   GJS3008   GJS-8202

GJS-8203   GJS-8205   GJS-8206   GJS-8207   GJS-8208

Ordering information:

Type	Cable Ports	Entry&Exit	Max.Capacity	Dimension H*W*D(mm)
GJS1011	4	2 in 2 out	96 fibers(single fiber)	489*200*122
GJS1020	20	4 port for main cable 16 ports for drop cable	48 fibers(single fiber)	450*202*123
GJS1029	4	2 in 2 out	144 fibers(single fiber) 432 fibers(ribbon fiber)	452*221*136
GJS3010	6	3 in 3 out	144 fibers(single fiber) 288 fibers(ribbon fiber)	500*φ195
GJS3045	7	1 in 6 out	240 fibers(single fiber)	465*φ260
GJS2046	19	1 port for mid-span 2 port for branch 16 ports for drop cable	48 fibers(single fiber)	380*245*130
GJS3005	8	2in 6 out	384 fibers(single fiber)	284*507
GJS3008	8	2in 6 out	672 fibers(single fiber)	284*677
GJS8202	25	1 port uncut 24port out	96 fibers(single fiber)	380*245*130
GJS8203	9	1 port uncut 2ports for branch 6ports out	144 fibers(single fiber)	380*245*130
GJS8205	19	1 port uncut 2ports for branch 16ports out	96fibers(single fiber)	380*245*130
GJS-8206	27	1 port uncut 2ports for branch 24ports out	144 fibers(single fiber)	380*245*154
GJS-8207	18	1 port uncut 1port for branch 16ports out	96 fibers(single fiber)	370*210*124
GJS-8208	3	1 port uncut 2ports for branch	144 fibers(single fiber)	380*245*130

Optical Accessories

Pigtail and Patch Cord

Description:

Used in the fiber distribution system of communication network,accomplishes cable's termination, mutual connection between the optical interface.

Pigtail:

LC/UPC　　　　　　　　SC/UPC　　　　　　　　FC/UPC

Bunchy Cable Pigtail　　　　Water-proof Pigtail　　　　Pre-terminated micro cable

Ordering information:

OD	0.9mm	2.0mm		Customization			
Type	SC	LC	FC	ST	E2000		
Grinding	UPC	APC		PC			
Fiber type	SM			MM			
	G652D	G657A1	G657A2	OM1	OM2	OM3	OM4

Optical Accessories

Patch Cord:

Ordering information:

OD	2.0mm	3.0mm		Customization			
Type	SC	LC	FC	ST	E2000		
Grinding	UPC	APC		PC			
Fiber type	SM			MM			
	G652D	G657A1	G657A2	OM1	OM2	OM3	OM4
Type	Simplex			Duplex(with clip)			
				Duplex(without clip)			

Outdoor Installation Accessories

Clip Wedge Clamp

Function:
To connect the figure-8 drop cable and the anchor.

Suspension Hang

Function:
To form a strong point on suspension wires.

Wall mounting Hang

Function:
To set up strong points outside the wall of buildings.

Adjustable Diameter Hold Hoop

Function:
To form a fixture on the pole to make installation easy.

Arc Clip I Type Riveting Pieces

Function:
To connect one or two flat drop cable with anchoring point.

Centre pole Cable Clamp

Function:
It is applied for self-supporting drop cable and fixed in the middle of the rod line.

Multiple card slot fixture

Function:
To fix less than 4 cables on the wall when the span does not exceed 15 meters.

Indoor Auxiliary Installation Accessories

Groove for Holding Drop Cable

Function:
To fasten the drop cable in the groove.

Plastic Fastener

Function:
To lay drop cables indoor with direct percussive nailed way.

The Line Groove

Function:
To lay drop cables in straight line.

Screw Fastener

Function:
To lay the figure-8 drop cable outside in screwing fasten way.

Flexible Pipe

Function:
Using when the cable lines go across the power line or the uneven wall surface.

External Corner

Function:
Using when the cable lines turn 90 degree externally.

Ending Groove

Function:
To protect the drop cable at the end of cable line.

Wall bushing

Function:
To protect drop cable when pass through the hole in the wall.

Turning Groove

Function:
Using when the cable line needs to turn a corner.

Optical Cable Distribution Box

Cable distribution box series include optical distribution box, optical splitting box and optical termination box which are used for cables' splicing, storage, distribution, splitting and termination.

Main parameters:

• Environment temperature: −25℃～＋55℃(indoor),
−40℃～＋60℃(outdoor);
• Relative humidity: ≤85%(＋30℃);

• Air pressure: 70KPa～106Kpa ;
• Voltage Proof: ≥3000V(DC);
• Insulating resistance between the metal parts of the body and grounding fitting:≥2×10³MΩ/500V(DC).

## Optical distribution & splitting box series

GF01-BJ12/24L (Indoor & Outdoor, splitter for option)

• Cold-rolled steel material, good appearance;
• Special fixture for butterfly cable;
• IP55 (Outdoor), IP53 (Indoor);
• 450*300*100mm.

GF03-BJ(16/32F) (Indoor & Outdoor, splitter for option)

• Cold-rolled steel material, good appearance;
• 4pcs1*8 or 2pcs1*16 blade package type splitter can be installed;
• IP55 (Outdoor), IP53 (Indoor);
• 460*340*105mm(Max size).
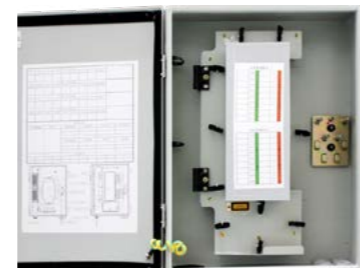
GFS03-GS24SC(Indoor & Outdoor,splitter for option)

• ABS+PC alloy material;
• Maximum Capacity:24 Cores;
• IP55 (Outdoor), IP53 (Indoor);
• 320*235*100mm.

Optical Cable Distribution Box

Optical Distribution Box(Plastic Material)

Description:

This box is used as a termination point for the feeder cable to connect with drop cable in FTTx communication network system. It integrates fiber splicing, splitting, distribution, storage and cable connection in one unit. Meanwhile, it provides solid protection and management for the FTTx network building.

ZTT-1312-2A

Type	ZTT-1312-2A
Inlet/Outlet ports	1/2
Max inlet cable diameter	10mm
Adaptor capacity	2
PLC Installation	support
Size（L*W*H）	168*102*32mm

ZTT-1314-4A
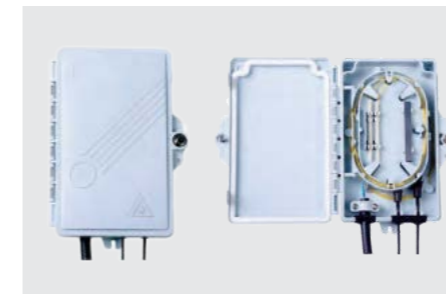
Type	ZTT-1314-4A
Inlet/Outlet ports	1/4
Max inlet cable diameter	10mm
Adaptor capacity	4
PLC Installation	support
Size（L*W*H）	186*116*41mm

ZTT-1314-6J
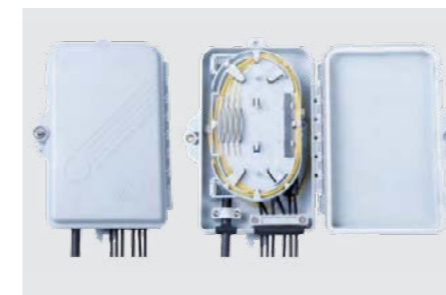
Type	ZTT-1314-6J
Inlet/Outlet ports	1/6
Max inlet cable diameter	10mm
Adaptor capacity	6
PLC Installation	support
Size（L*W*H）	186*116*41mm

Optical Cable Distribution Box

ZTT-1316-8E

Type	ZTT-1316-8E
Inlet/Outlet ports	3/8
Max inlet cable diameter	14mm
Adaptor capacity	8
PLC Installation	support
Size（L*W*H）	223*180*48mm

ZTT-1311-12C
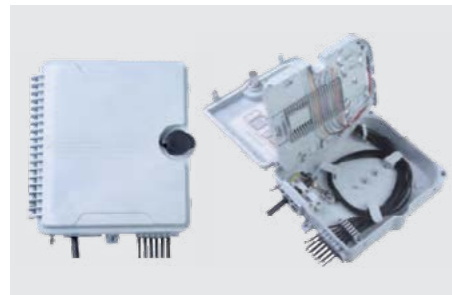
Type	ZTT-1311-12C
Inlet/Outlet ports	2/12
Max inlet cable diameter	12
Adaptor capacity	Mid-span assess
PLC Installation	support
Size（L*W*H）	233*214*71mm

ZTT-1306-16J

Type	ZTT-1306-16J
Inlet/Outlet ports	2/16
Max inlet cable diameter	16
Adaptor capacity	Mid-span assess/gland
PLC Installation	support
Size（L*W*H）	301*224*73mm

ZTT-1361-16F

Type	ZTT-1361-16F
Inlet/Outlet ports	4/16
Max inlet cable diameter	16
Adaptor capacity	Mid-span assess + cable gland
PLC Installation	support
Size（L*W*H）	287*172*102mm

Optical Cable Distribution Box

ZTT-1309-24A

Type	ZTT-1309-24A
Inlet/Outlet ports	2/24
Max inlet cable diameter	24
Adaptor capacity	Mid-span assess/gland
PLC Installation	support
Size（L*W*H）	317*237*101mm

ZTT-1366-24F

Type	ZTT-1366-24F
Inlet/Outlet ports	4/24
Max inlet cable diameter	Mid-span +cable gland
Adaptor capacity	Mid-span:16mm cable gland:12mm
PLC Installation	support
Size（L*W*H）	353*212*106mm

ZTT-1343-32K

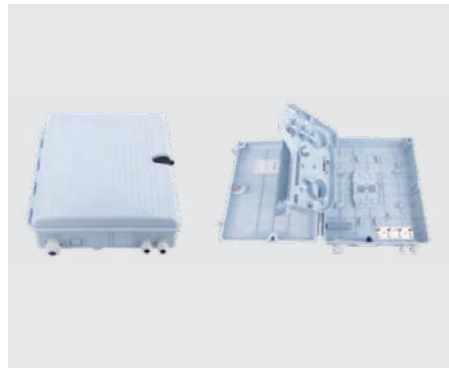| Type	ZTT-1343-32K
Inlet/Outlet ports	4/2
Max inlet cable diameter	15/28mm
Adaptor capacity	36
PLC Installation	380*320*115mm
Size（L*W*H）	287*172*102mm

Optical Cable Distribution Box

ZTT-1341-48K

Type	ZTT-1341-48K
Inlet/Outlet ports	4/2
Max inlet cable diameter	15/28mm
Adaptor capacity	48
PLC Installation	380*320*115mm
Size（L∗W∗H）	287*172*102mm

ZTT-1375-72C/96C

Type	ZTT-1375-72C/96C
Inlet/Outlet ports	30mm
Max inlet cable diameter	72/96
Adaptor capacity	3
PLC Installation	485*415*145mm
Size（L∗W∗H）	287*172*102mm

Floor box

Description:

For Indoor floor installation inside the building with fiber's splicing, distributing and protection.
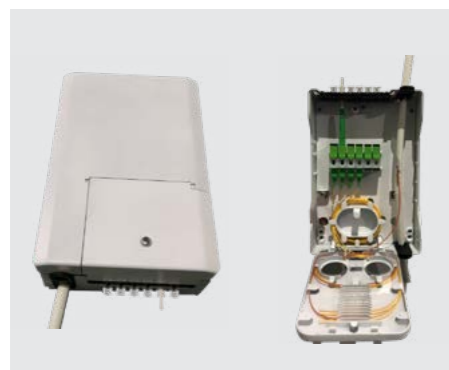
Type	ZTT-1450-6D
Capacity	6 core
Size（L*W*H）	207*135*59mm
Installation method	Wall-mounted
Configuration	6 simplex SC
Applicable cable	Up to 6 pcs drop cable

Outdoor Waterproof Pre-Connectorized FAT

Product Code: ZTKD-EJ-02

Product Features

- Factory pre-installed, quality assurance
- To solve the shortage of professional and technical personnel.
- It can be flexibly configured according to users, and the initial investment is small.

Application

- Used for FTTH access in single-family community, suburb and rural area.
- Outdoor Wall hanging, pole mounting, hanging line, manhole.
- Improved Design for inner fiber routine of Easy maintenance.

Product Description

This product design is used to connect the OCC with the full pre-connectorized FAT.It needs to support ordinary optical cable access into the box body, after splicing through the pre-connectorized connector, and connecting the full pre-connectorized FAT.At the same time, it also needs to support mid-span or splicing function of ordinary optical cable.

Technical Data

Items	Parameter
Size	240mm*330mm*120mm （W*H*D）
Splice capacity	Maximum 80 cores (splice trays 16 cores *5)
Pre-installed Adapter	16 ports
Splitter capacity	Supports 1x 1:16 or 2x1:8 micro/bare fiber optical splitters
Cable port	Supports four optical cable enter in and out(6.5 mm to 16mm),including one oval port, support mid-span function.
Protection Level	IP65,IK10

Indoor Waterproof Pre-Connectorized FAT

Product Code: ZTKD-EJ-03

Product Features

- Factory pre-installed, quality assurance
- To solve the shortage of professional and technical personnel
- It can be flexibly configured according to users, and the initial investment is small

Application

- Machine room.
- Indoor, and corridor environment.
- ndoor wall mounting.

Product Description

It can be used in shelters with certain protective capabilities, such as the machine room, indoor, and corridor, to realize optical distribution and relay action from optical connecting cabinet or the machine room to the user end.At the same time, it also needs to support splicing function of ordinary optical cable.

Technical Data

Items	Parameter
Size	230mm*150mm*55mm（W*H*D）
Splice capacity	16 cores
Mid-span	Yes
Adapter capacity	10 pcs
Drop Cable port	10 pcs
Pre-installed splitter	2 pcs（1:2/1:8）
Protection Level	IP43

Optical Cable Distribution Box

Optical Termination Box Series (Wall Mount Series)

GPF02-6/12R

- Cold-rolled steel material, compact structure;
- Direct fuse function;
- Special outlet for drop cable;
- 285*130*42mm.

GPF02-8/12/24R-2

- Cold-rolled steel material, compact structure;
- Special outlet for drop cable;
- Outlets are design on both sides, easy to operate;
- 300*130*45mm.

GPF02-12/24ZR

- Cold-rolled steel material, compact structure;
- Special outlet for drop cable;
- FC, SC, ST and LC adaptor are available;
- 300*130*88mm.

Optical Termination Box Series (Rack Type Series)

GPF01-12/24ZR

- Cold-rolled steel material, compact structure;
- 19" rack installation;
- FC, SC, ST and LC adaptor are available;
- 483*250*44mm and 483*200*44mm
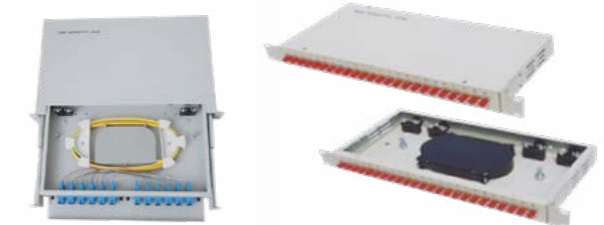
Note: above box size just for reference, and capacity and appearance could be customized.
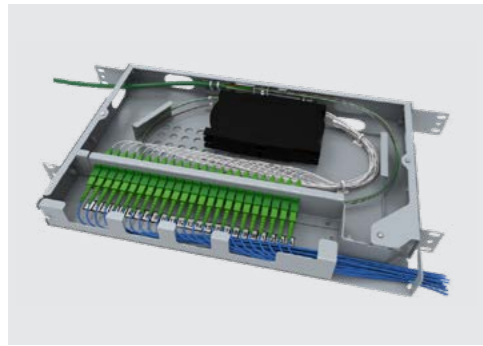
Optical Cable Distribution Box

Optical Termination Box （Patch Panel）

Description:

This product is applied to joint the optical cable and pigtails. It can realize the functions of optical fiber's welding, storage and line dispatching, etc.

ZTT-GPF-X01

Type	Cold-rolled steel
Material	12/24/48
Capacity	12/24/48/72/96
Size（W*D*H）	480*270*44mm
Operation method	Swing type
Installation method	Rack-mounted
Configuration	Up to 48pcs Simplex SC adapter

ZTT-GPF-C01

Type	ZTT-GPF-C01
Material	Cold-rolled steel
Capacity	Can be customized
Size（W*D*H）	Can be customized Normally 1U: 483*280*44mm
Operation method	Sliding type
Installation method	Rack-mounted
Configuration	SC/LC/FC/ST adapter

ZTT-GPF-X02

Type	ZTT-GPF-X02
Material	PC+GF
Capacity	48/144
Size（W*D*H）	482*256*44mm(48F) 482*256*132mm(144F)
Operation method	Swing type
Installation method	Rack-mounted
Configuration	Simplex SC adapter

Optical Cross Connecting Cabinet(OCC Cabinet)

Description:

Operator basic network, FTTx transmission and other construction transformation, used for outdoor environment.

Characteristic:

• The distribution and scheduling of optical fibers are carried out on the front.
• The box body is made of SMC or double-layer stainless steel or Aluminium, and protection grade reaches IP65.
• Adopt 12-core fusion and integration module, each connecting module can be pulled out separately, easy to operate.
• A variety of adapters such as FC, SC and LC are installed inside. The adapters are inclined to the front of the chassis, which not only ensures the radius of curvature of the jumper, but also avoids arc burning eyes.

Specification:

Product Name	Product Size H×W×D （mm）	No. Of trays	Maximum Capacity （core）	Remark
144 SMC	760×560×308 (Not including base)	12	144	Traditional single side operation
144 SMC	1025×560×308 (including base)	12	144	Traditional single side operation
288 SMC	1450×750×320 (including base)	24	288	Traditional single side operation
576 SMC	1460×750×540 (including base)	48	576	Traditional double side operation
576 SMC	1550×1460×360 (including base)	48	576	Traditional single side operation
1152 SMC	1550×1460×620 (including base)	96	1152	Traditional single side operation
144 Stainless Steel	770×580×320 (Not including base)	12	144	Traditional single side operation
144 Stainless Steel	1050×580×320 (including base)	12	144	Traditional single side operation
288 Stainless Steel	1460×750×320 (including base)	24	288	Traditional single side operation
576 Stainless Steel	1460×750×540 (including base)	48	576	Traditional double side operation
576 Stainless Steel	1490×1460×360 (including base)	48	576	Traditional single side operation
1152 Stainless Steel	1490×1460×600 (including base)	96	1152	Traditional single side operation

Optical Distribution Frame

Description:

It is suitable for all optical access points in central office, optical junction and user optical fiber access network engineering, to provide secure and reliable routing for connection, distribution and scheduling of optical network devices.

Characteristic:

• Fully enclosed structure, single side operation.
• The frame is made of high-quality cold-rolled steel plate, with a whole welded structure, high strength and good rigidity;
• Surface coating using electrostatic spraying process, corrosion resistance, elegant appearance;

• Adopt modular structure, which can be flexibly configured and installed according to different requirements;
• Adopt 12-core fusion wiring integration module, each connecting module can be pulled out separately, easy to operate.

Specification:

Model	H×W×D(mm)	Distribution capacity(core)	Storage Unit（pcs）	Remark
GPX02-600Y1	2000×600×300	360	3	Max 30 pcs 12 core integrated trays
GPX02-600Y2	2200×600×300	504	3	Max 42 pcs 12 core integrated trays
GPX02-600Y3	2600×600×300	576	4	Max 48 pcs 12 core integrated trays
GPX02-840Y1	2000×840×300	576	/	Max 48 pcs 12 core integrated trays
GPX02-840Y2	2200×840×300	720	/	Max 60 pcs 12 core integrated trays
GPX02-840Y3	2600×840×300	864	/	Max 72 pcs 12 core integrated trays
GPX03-840Y1	2000×840×300	504	2	Max 7 pcs 72 core ODF module
GPX03-840Y2	2200×840×300	576	2	Max 8 pcs 72 core ODF module
GPX03-840Y3	2600×840×300	720	2	Max 10 pcs 72 core ODF module

Outdoor Cabinet

Description:

Its internal can be installed communication system equipment, power supply, battery, temperature control equipment and other supporting equipment, can provide reliable mechanical and environmental protection for the normal operation of internal equipment.
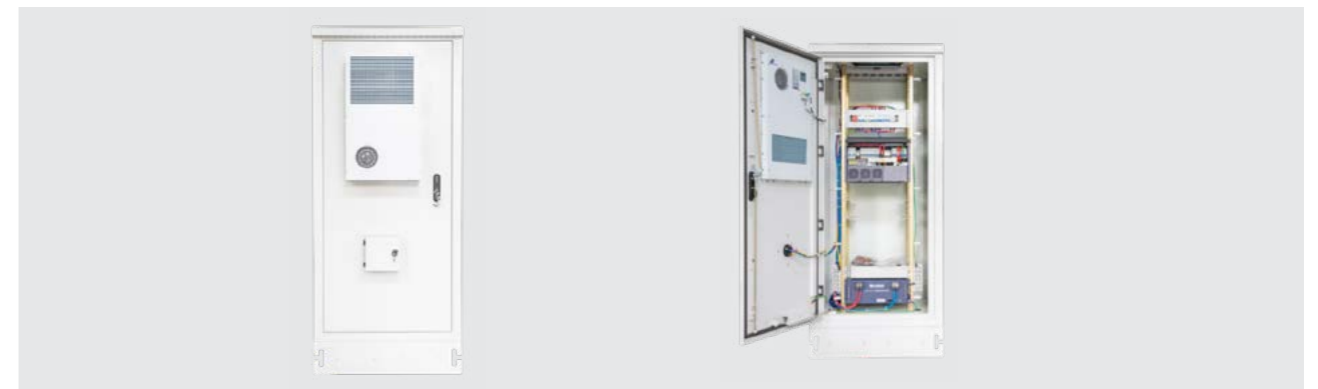
Characteristic:

• High strength and corrosion resistance -- steel frame + composite sandwich wall panel cabin structure, good heat insulation and heat preservation performance;
• Subdivision temperature control, flexible choice, more convenient, more energy saving;

• Side or back two-way expansion to meet the requirements of upgrading and capacity expansion;
• The unique modular and assembled structure design facilitates production and is flexible and suitable for various complex and harsh environments.

Specification:

No.	Product Name
1	Outdoor integrated cabinet - fixed configuration - integrated cabinet（1800,1500W Ac air conditioners）
2	Outdoor integrated cabinet - fixed configuration - integrated cabinet（1800,1500W Ac air conditioners×2）
3	Outdoor integrated cabinet - fixed configuration - battery cabinet（1800,300W Dc air conditioners）
4	Outdoor integrated cabinet - fixed configuration - battery cabinet（1800,direct ventilation）
5	Outdoor integrated cabinet - fixed configuration - integrated cabinet（1400,1500W Ac air conditioners）
6	Outdoor integrated cabinet - fixed configuration - battery cabinet（1400,300W Dc air conditioners）
7	Outdoor integrated cabinet - fixed configuration - battery cabinet（1400,direct ventilation）
8	Outdoor integrated cabinet - fixed configuration - integrated cabinet（800,No heat preservation, direct ventilation）
9	Outdoor integrated cabinet-Optional configuration-1500W Ac compressor air conditioner
10	Outdoor integrated cabinet-Optional configuration-heater（500W）
11	Outdoor integrated cabinet-Optional configuration-heater（1000W）
12	Outdoor integrated cabinet-Optional configuration-Emergency ventilation assembly
13	Outdoor integrated cabinet-Optional configuration-Oil machine outlet
14	Outdoor integrated cabinet-Optional configuration-Outdoor earthing rack
15	Outdoor integrated cabinet-Optional configuration-Equipment bracket（50kg）
16	Outdoor integrated cabinet-Optional configuration-Battery bracket（100kg）

ETC Integrated Cabinet

Description:

The ETC integrated cabinet mainly provides integrated storage for the gantry lane control machine, industrial switchboard, toll system PC and other equipment, and provides reliable power supply and standby for the gantry equipment to ensure the reliable operation of the key production equipment at the roadside.It is mainly used in smart cities and highways.

Characteristic:

• Adopt integration of outdoor cabinet design, including but not limited to, cabinet put oneself in another's position, industrial monitoring system of air conditioning, ring, UPS host, backup batteries, industrial switches, optical terminal box, automatic reclosing, lightning protection device), diesel generator interface, etc.;
• To reserve enough space to place the ETC related server and the controller;satisfy standardization, prefabricated flexible, rapid deployment, safe and reliable, high efficiency and energy saving, maintenance requirements such as real-time management;
• Through intelligent comprehensive outdoor cabinet for outdoor front-end mains, communication link detection, as well as the temperature and humidity, flooding, open closed ring detection, such as the external power supply and current/voltage detection equipment, peripheral business communication interface detection;
• Through the platform of center core switching equipment, core routing equipment, storage equipment, server, database, and the key application of testing;
• Through the platform to the summary of the information, monitor, display, alarm, operations, such as single, forming a one-stop iot intelligence operations solutions, implementation from the "end" to the "nuclear" layers of perception and monitoring, to help customers quickly and effectively the problem of positioning and efficient operations and maintenance.

Ordering guide:

• The whole size (external size) : 2160 * 910 * 910 mm / 1760 * 910 * 910 mm.
• The whole size (internal size) : 1800 * 800 * 800 mm / 1400 * 800 * 800 mm.
• Cabinet body structure: galvanized sheet/stainless steel.
• Protection level: IP55, compact structure, convenient installation, good sealed performance.
• Heat insulation performance is good, with foil PEF in flame retardant insulation cotton, coefficient of thermal conductivity <0.472W/(m2.k).
• Good anti-theft property: The door lock adopts the three-point structure of pull rod and lock piece, with the firm structure.
• Good heat dispersion property : the door half embedded 1500W industrial air conditioning+emergency ventilation fan.

ETC Integrated Cabinet

No.	Part Name	Specification	Unit	Qty
1	Integrated cabinet	（External size）: 2160*910*910mm/1760*910*910mm (Can be customized according to actual needs) （Internal size）: 1800*800*800mm/1400*800*800mm the door half embedded 1500W industrial air conditioning + emergency ventilation fan.	pc	1
2	Lithium-iron battery	48V/100Ah	pc	4
3	UPS	XMI30R-48V	pc	1
4	Switching power supply	E4860R∣1U	pc	1
5	Electronic lock	Support access control IC card unlock, network management remote unlock, key unlock	pc	1
6	Power distribution system	AC air switch 4P/63A*2, mechanical interlock, AC output 2P16A*5, 5-hole socket 3	pc	1
7	Dynamic environmental monitoring	/	pc	1
8	Temperature and humidity sensor	/	pc	1
9	Smoke detector	/	pc	1
10	Water sensor	/	pc	1
11	Door magnetic sensor	/	pc	1
12	Accessory	/	set	1

5G BBU Energy Saving Cabinet

Description:

5G BBU energy-saving cabinets (hereinafter referred to as energy-saving cabinets) are used to install multiple 5G BBU cabinets in the centralized construction mode of 5G BBU.The 5G BBU energy-saving cabinet is made of metal or non-metal materials, and it can be equipped with 5G BBU equipment, power supply, battery, temperature control equipment and other supporting equipment, which can provide reliable mechanical and environmental protection for the normal work of internal equipment.

The energy-saving cabinet is suitable for the newly built station room or the room with poor resource conditions：1. The cold source and supply and standby power are insufficient and it is not suitable to add precision air conditioning, switching power supply and battery;2. There is sufficient power supply and standby, but the air conditioning is insufficient and not suitable for adding precision air conditioning, or the BBU installation area has poor refrigeration conditions.

Characteristic:

• High efficiency and energy saving, efficiency more than 98% of acme energy-saving effect module, rectifier module have dormancy energy-saving function, improve the operation efficiency;
• Precision refrigeration: adopt variable frequency air cooling rack level air conditioning.Fully closed cold and hot channel isolation, to solve the BBU centralized deployment of hot issues, the emergency exhaust system has a self-sealing function, heat dissipation time to meet more than 3 hours;
• Rich power supply support HVDC / - 48 vi ac power supply a variety of ways, compatible computer room construction, expansion application such as scene;
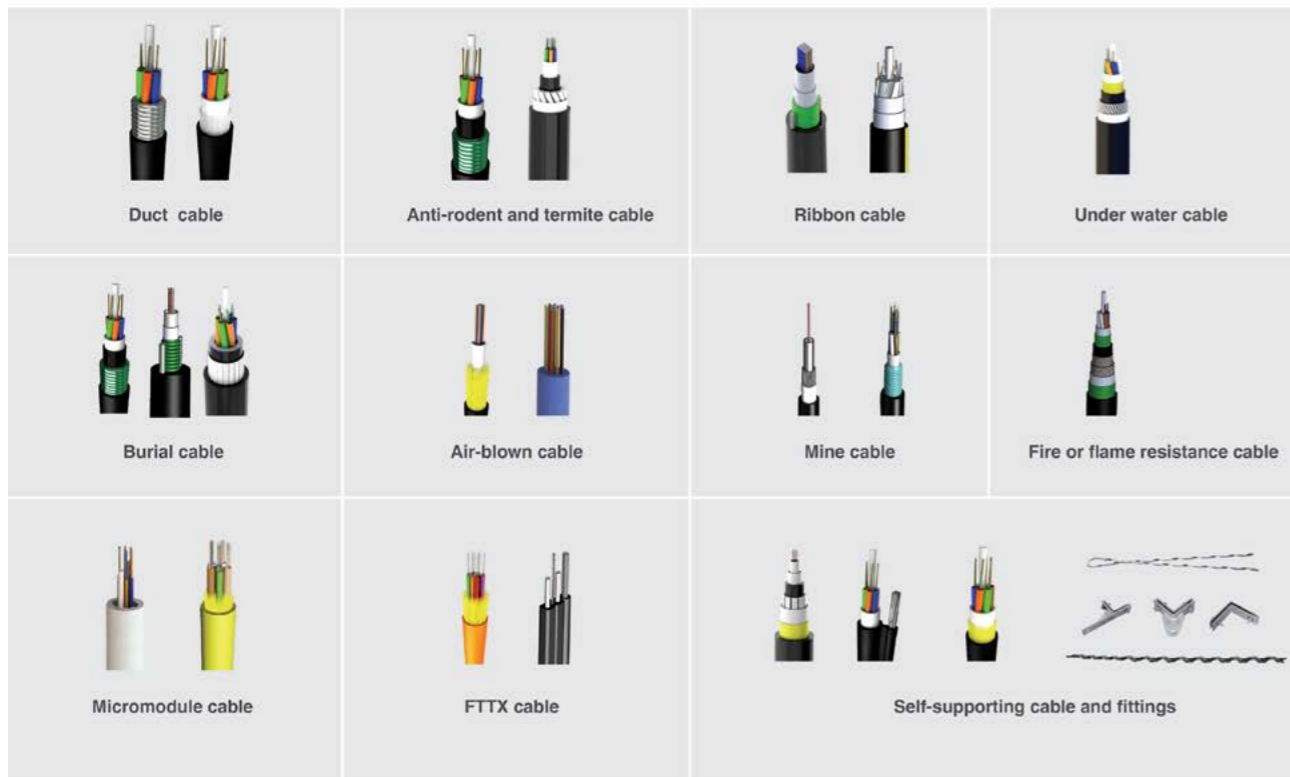
• Intelligent monitoring: integrated smoke temperature, environment humidity, water entrance guard vibration, etc.;Support switching power supply, air conditioning and other equipment communication serial port interconnection, support data transparent transmission and forwarding;
• Highly integrated, prefabricated modular design, hoist house space utilization;high level of appearance: IT style design in the system, glass, metal door options;high protection: protection grade IP5X, adapt to the complex computer room environment.

5G BBU Energy Saving Cabinet

Ordering guide:

No	Part Name	Parameter	Unit	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
				Quantity					
1	Cabinet	H2200*W800*D1000	pc	1	1	1			
		H2200*W800*D600					1	1	1
1.1	Cabinet body	H2200*W800*D1000	pc	1	1	2			
		H2200*W800*D600					1	1	2
1.2	Emergency exhaust system	Energy saving cabinets（48VDC）	pc	1	1	2	1	1	2
1.3	LED light	48VDC	pc	1	1	2	1	1	2
1.4	Cabinet side panel	Fit with 1000 depth cabinet	pc	1	1	2			
		Fit with 600 depth cabinet					1	1	2
1.5	Blind flange	1U	pc	10	5	25	10	10	10
1.6	Horizontal cable management unit	1U	pc	3	5	10	10	4	9
1.7	Horizontal wizard wind assembly	1U	pc	10	5	10	10	5	10
1.8	L type plate	Fit with the cabinet	pc	2	5	1	2	4	1
2	Rack type air conditioning	Cooling Capacity 6.5kW	pc	1		1	1		1
		Cooling Capacity 3.5kW			1			1	
3	Copper pipes and cables for air conditioning(I)	Φ9.52/Φ12.7	pc			15		15	
	Copper pipes and cables for air conditioning(II)	Φ6.0/Φ9.52		15		15	15		15
4	Switching power supply	48V/200A	pc		1			1	
		48V/400A				1			1
4.1	Switching power system	48V/200A	pc		1			1	
	Switching power system	48V/400A				1			1
4.2	Rectifier module	48V/50A	pc		4	8		4	8
5	Lithium iron batteries	48V/100Ah	set		3	6		2	6

System Solutions for Backbone Network

Duct cable	Anti-rodent and termite cable	Ribbon cable	Under water cable
Burial cable	Air-blown cable	Mine cable	Fire or flame resistance cable
Micromodule cable	FTTX cable	Self-supporting cable and fittings	

FTTx Solution for Multi-storey Dwelling Block

Central office

MODF	ODF	Integrative gather frame	DDF

Product in building

Terminal box	Optical splitting box	Optical distribution box

User access point

Optical distribution & splitting box (Metallic)	Optical distribution & splitting box (ABS+PC)	Joint closure

Indoor product

Fiber outlet	Field assembly connector	Optical fiber mechanical connector	Broadband access box

Equipment room in community

OCC	PLC splitter	Patch cord/Pigtail	ODF	Terminal box

FTTx Solution for High-storey Dwelling Block

Central office
Ribbon cable
User control room
Duct drop cable
Drop cable
Indoor product
Network access point in building
Indoor bunchy cable

Indoor product

Fiber outlet
Field assembly connector
Optical fiber mechanical connector
Broadband access box

User control room

OCC
PLC splitter
Patch cord
Broadband access box
Joint closure

Central office

MODF
ODF
Integrative gather frame
DDF

Network access point in building

Optical distribution & splitting box (Metallic)
Optical distribution & splitting box (ABS+PC)
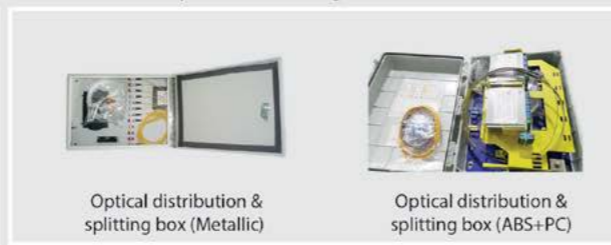
FTTx Solution for Villa Dwelling Block

Optical fiber distribution point
Indoor product
Duct drop cable
Equipment room in community
Directly buried cable
Ribbon cable
Central office

Equipment room in community

OCC
PLC splitter
Patch cord/Pigtail
ODF
Terminal box

Indoor product

Fiber outlet
Field assembly connector
Optical fiber mechanical connector
Broadband access box

Central office

MODF
ODF
Integrative gather frame
DDF

Optical fiber distribution point

Optical distribution & splitting box
Optical termination box
Optical fiber joint closure