

## ZTT GROUP

Established in 1992, ZTT started from optical fiber communications. ZTT was listed on Shanghai Stock Exchange (SSE) in 2002 (Stock Code in SSE: 600522), and issued the shares known as the "First Shares for Special Optical Fiber & Cable". Now ZTT has developed a diversified industries of telecom, power grid, marine system, renewable energy, new materials, etc.

Awarded for national innovative enterprise, Jiangsu province outstanding private enterprise, Top-500 Enterprise in China, China Quality Award, Gold-medal listed company, ZTT Group is now hosting 76 subsidiary companies and over 16,000 employees, with the deployment of Beijing Headquarters, Nantong New Headquarters, and Rudong Headquarters, as well as 54 offices and 10 marketing centers set up overseas, and 6 overseas plants operated in India, Brazil, Indonesia, Morocco, Turkey and Germany. ZTT has exported products to 160 countries and regions and has broken through the US\$10.82 billion marks in revenue in 2020.



## 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.





## FTTx Cable Series

### Simplex or Duplex Indoor Cable



#### Cable Application:

- Making for Simplex/Duplex pigtail or patch cord
- For indoor wiring
- For optical connection between equipments

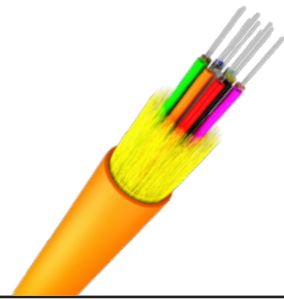
#### Product Characteristics:

- 0.9mm tight buffer structure, easy stripping
- Aramid yarns covered with high strength
- Outer sheath: PVC, LSZH
- Fiber type: SM (G.652, G.657); MM (62.5/125, 50/125)

#### Technical Characteristics:

Fiber No.	Cable size (mm)	Cable weight (kg/km)	Tension load (N)		Crush resistance (N/10cm)		Minimal bending radius (mm)		Operation temperature °C
			Long term	Short term	Long term	Short term	dynamic	static	
1	1.6	2.2	40	80	100	500	50	30	-20~+60
1	2.0	3.3	60	100	100	500	50	30	-20~+60
1	3.0	7.2	80	150	100	500	50	30	-20~+60
2	2.0*4.1	7.8	60	120	100	500	50	30	-20~+60
2	3.0*6.1	15.2	80	150	100	500	50	30	-20~+60

### Indoor Bunchy Cable



#### Cable Application:

- Making for Bunchy pigtail or patch cord
- For horizontal wiring inside the MDU building
- For optical connection between equipments

#### Product Characteristics:

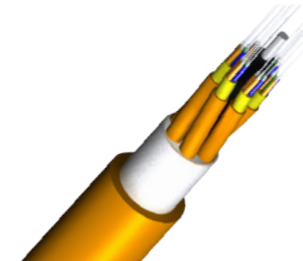
- 0.9mm tight buffer structure, easy stripping
- Aramid yarns covered with high strength
- Outer sheath: PVC, LSZH
- Fiber type: SM (G.652, G.657); MM (62.5/125, 50/125)

#### Technical Characteristics:

Fiber No.	Cable size (mm)	Cable weight (kg/km)	Tension load (N)		Crush resistance (N/10cm)		Minimal bending radius (mm)		Operation temperature °C
			Long term	Short term	Long term	Short term	dynamic	static	
2	4.0	12.5	130	440	200	1000	20D	10D	-20~+60
4	4.5	15.6	130	440	200	1000	20D	10D	-20~+60
6	5.0	19.5	130	440	200	1000	20D	10D	-20~+60
8	5.5	26.3	130	440	200	1000	20D	10D	-20~+60
12	6.0	30.4	130	440	200	1000	20D	10D	-20~+60
16	7.5	36.7	200	660	300	1000	20D	10D	-20~+60
24	8.5	46.2	200	660	300	1000	20D	10D	-20~+60

## FTTx Cable Series

### Indoor Branch Cable



#### Cable Application:

- Making for Branch pigtail or patch cord
- For vertical wiring inside the MDU building
- For optical connection between equipments

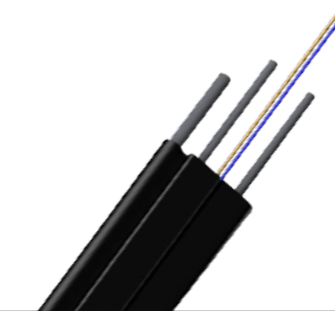
#### Product Characteristics:

- Several simplex/bunchy cables stranded around central strength member
- Aramid yarns covered with high strength
- Outer sheath: PVC, LSZH
- Fiber type: SM (G.652, G.657); MM (62.5/125, 50/125)

#### Technical Characteristics:

Fiber No.	Cable size (mm)	Cable weight (kg/km)	Tension load (N)		Crush resistance (N/10cm)		Minimal bending radius (mm)		Operation temperature °C
			Long term	Short term	Long term	Short term	dynamic	static	
4	7.0	40	200	660	300	1000	20D	10D	-20~+60
6	8.5	62	200	660	300	1000	20D	10D	-20~+60
8	9.8	87	200	660	300	1000	20D	10D	-20~+60
12	12.8	135	400	1320	300	1000	20D	10D	-20~+60
16	12	120	400	1320	300	1000	20D	10D	-20~+60
24	15	170	400	1320	300	1000	20D	10D	-20~+60

### Indoor Figure-8 Drop Cable



#### Cable Application:

- Making for pre-assembled pigtail or patch cord
- Outdoor or indoor wiring
- Can be terminated with field-assembly connector

#### Product Characteristics:

- Unique notch design, with good stripping performance
- With or without suspension wire
- Parallel strength member providing enough tension strength
- Strength member: Steel wire, KFRP, FRP
- Outer sheath: PVC, LSZH
- Fiber type: SM (G.652, G.657); MM (62.5/125, 50/125)

#### Technical Characteristics:

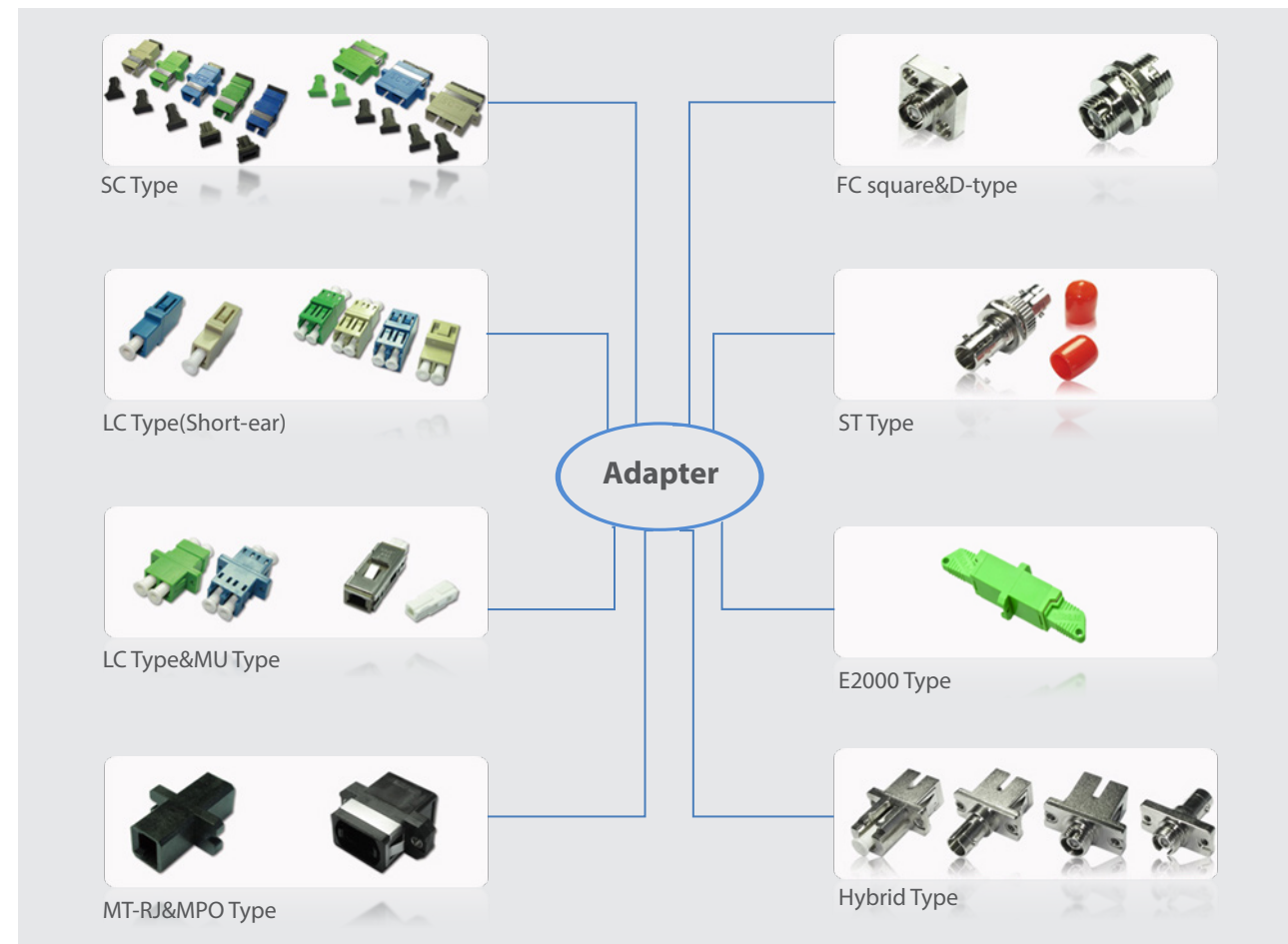
Fiber No.	Cable OD (mm)	Cable weight (kg/km)	Tension load (N)		Crush resistance (N/10cm)		Minimal bending radius (mm)		Operation temperature °C
			Long term	Short term	Long term	Short term	dynamic	static	
1/2	2.0*3.0	12	60/100	100/200	500	1000	40	20	-20~+60
4	2.0*4.0	14	60/100	100/200	500	1000	40	20	-20~+60
1/2	2.0*5.2	23	300	600	1000	2200	60	30	-20~+60
4	2.0*5.8	32	300	600	1000	2200	60	30	-20~+60

## Optical Accessories

### Adapter

#### Description:

Accomplish accurate and optical connection between connectors.



#### Technical Specification:

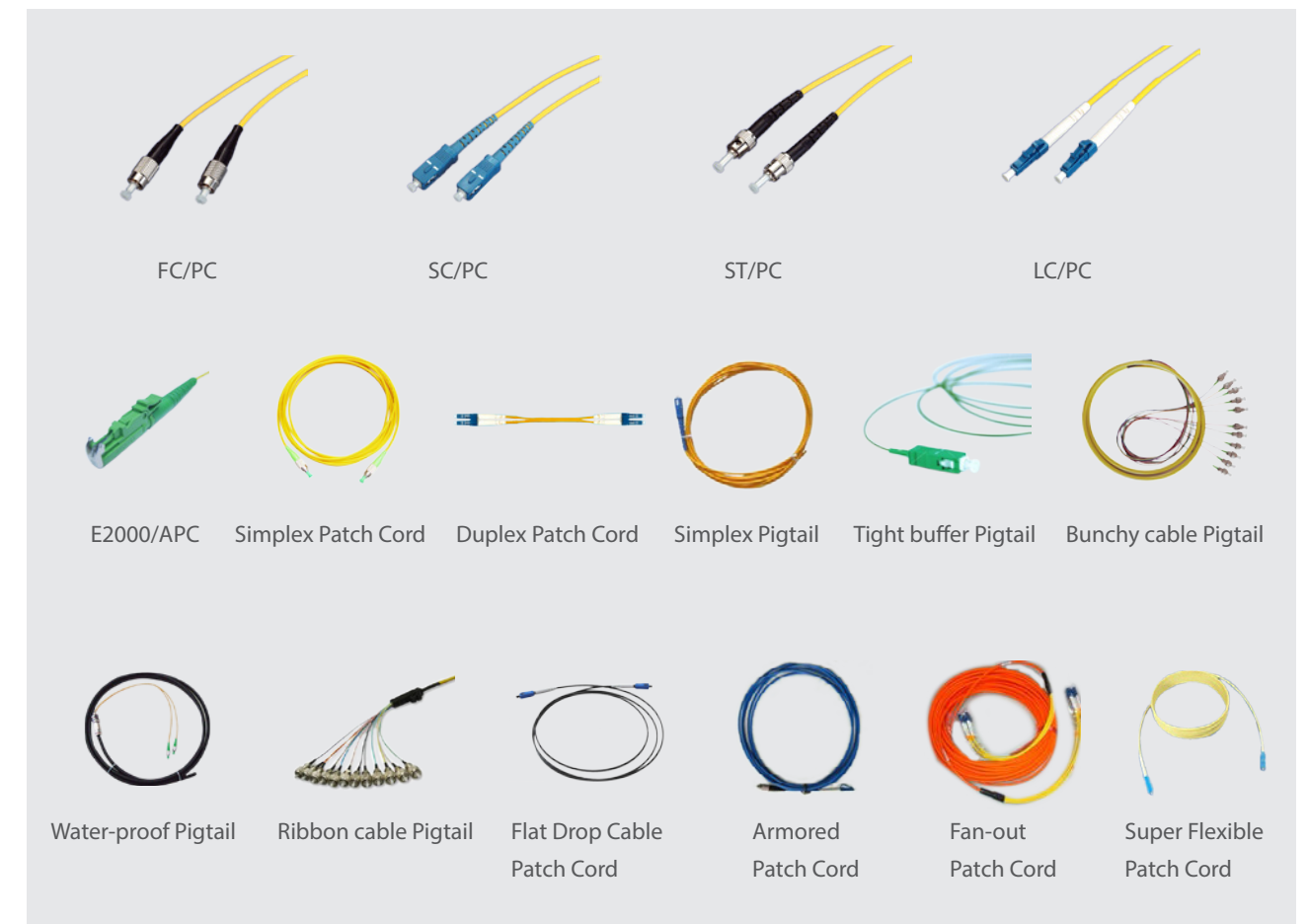
ITEM	Unit	Parameter
Type	--	FC , SC , ST , MU , E2000 , Hybrid
Polishing face	--	PC & UPC & APC
Material of sleeve	--	Ceramic
Insertion loss	(dB)	≤ 0.2
Interchangeability	(dB)	≤ 0.2( Connector Randomly )
Repeatability	(dB)	≤ 0.2
Operating Temperature	(°C)	-40 ~ 80°C
Industrial standard	--	IEC 61754

## 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.



#### 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(°C)	-25°C to +70°C(for SC,ST,LC); -40°C to +80°C(for FC)			
Longevity	>500 times			
Standard	IEC61754-13,4,2,20			



## Optical Accessories

1-MPO Rack (1URack); 2-MPO Rack (4U Rack); 3-MPO/MTP Module;  
4-Duplex Patch Cord LC-LC; 5-MPO/MTP Harness Cable; 6-MPOTrunk Cable; 7-MPO Patch Cord



### 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

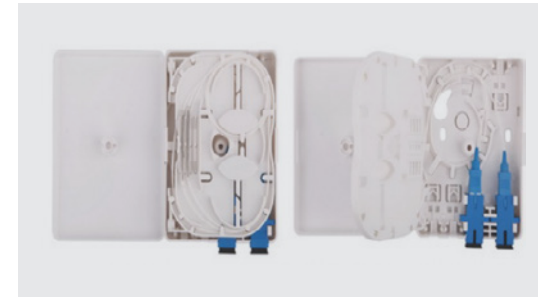
#### ZTT-ATB-2H



Type	ZTT-ATB-2H
Capacity	2 core
Size(L*W*H)	116*86*23mm
Installation method	Wall mount(indoor)
Configuration	2 simplex SC or 2 duplex LC adapter

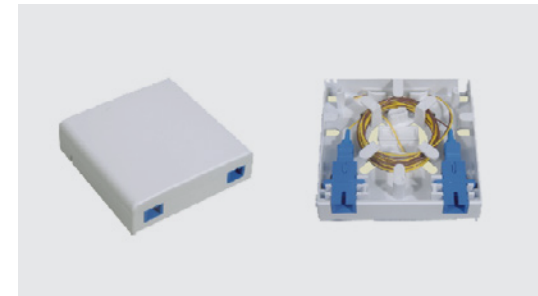
## Optical Accessories

#### ZTT-ATB-2Q



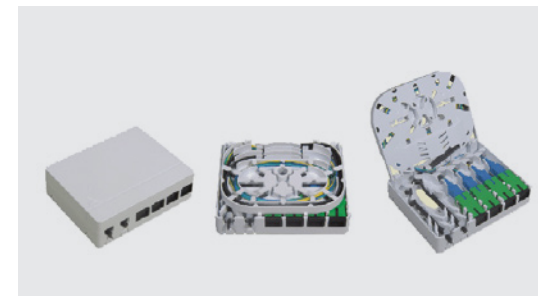
Type	ZTT-ATB-2Q
Capacity	2 core
Size(L*W*H)	102*80*25mm
Installation method	Wall mount(indoor)
Configuration	2 simplex SC or 2 duplex LC adapter

#### ZTT-ATB-2A



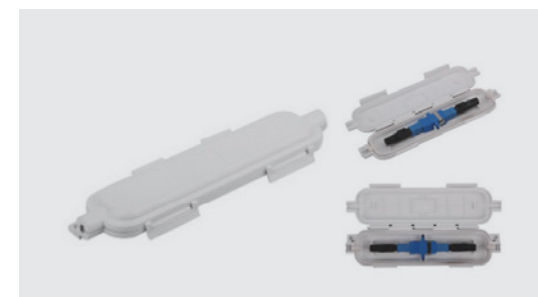
Type	ZTT-ATB-2A
Capacity	2 core
Size(L*W*H)	86*86*24mm
Installation method	Wall mount(indoor)
Configuration	2 simplex SC or 2 duplex LC adapter

#### 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	1 core
Size(L*W*H)	160*45*17mm
Installation method	Wall mount or Aerial (Outdoor/Indoor)
Configuration	1 simplex SC adapter



## Optical Accessories

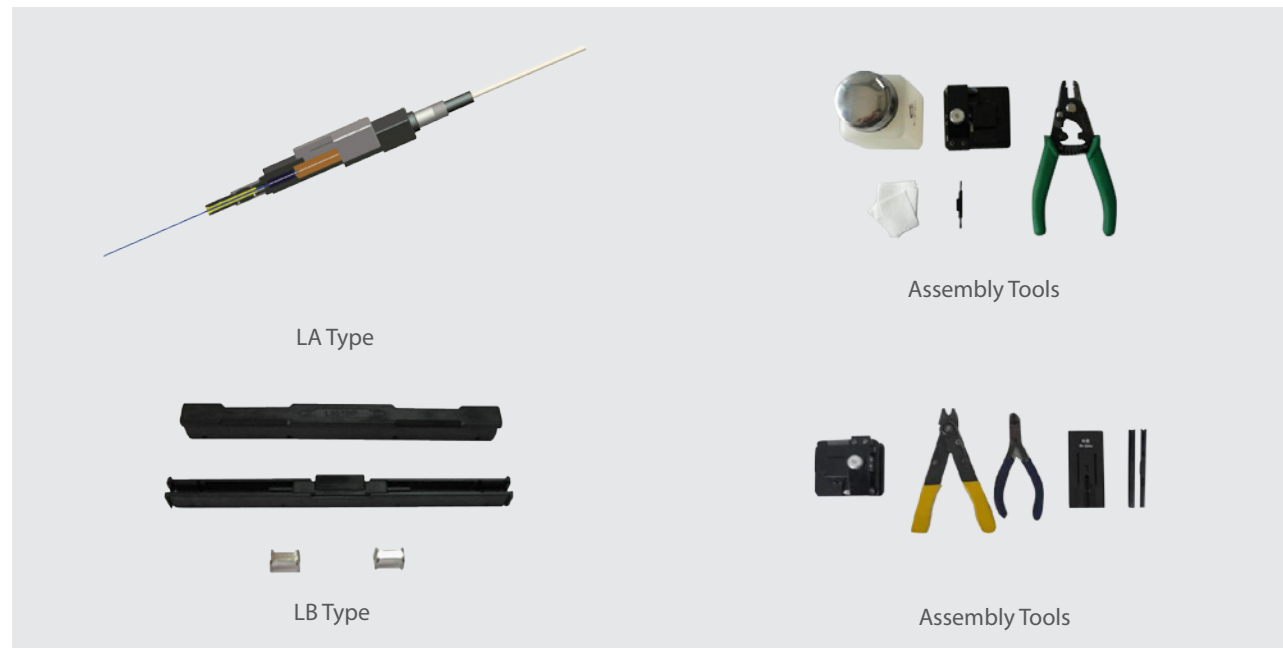
### Optical Fiber Mechanical Connector

#### Description:

Used for connecting optical fibers with no power.

#### Products category:

The product has two types, the LA type and LB type. LA type is for the 0.9/0.25mm general type; LB is for the flat drop cable 2.0\*3.0mm.



#### Technical Specification:

Item	Technical data
Application Situation	A type (Φ0.25mm & Φ0.90mm) B type(Φ2.0*3.0mm)
Fiber diameter	125±1.0μm
Tight cladding diameter	250μm & 900μm
Available mode	SM&MM
Operation time	10s excluding fiber treatment
Insertion loss	≤0.2dB
Return loss	≥45dB
Temperature	-40~+85℃
Repeatability (10 times)	ΔIL≤0.2dB ΔRL≤5dB

## Optical Accessories

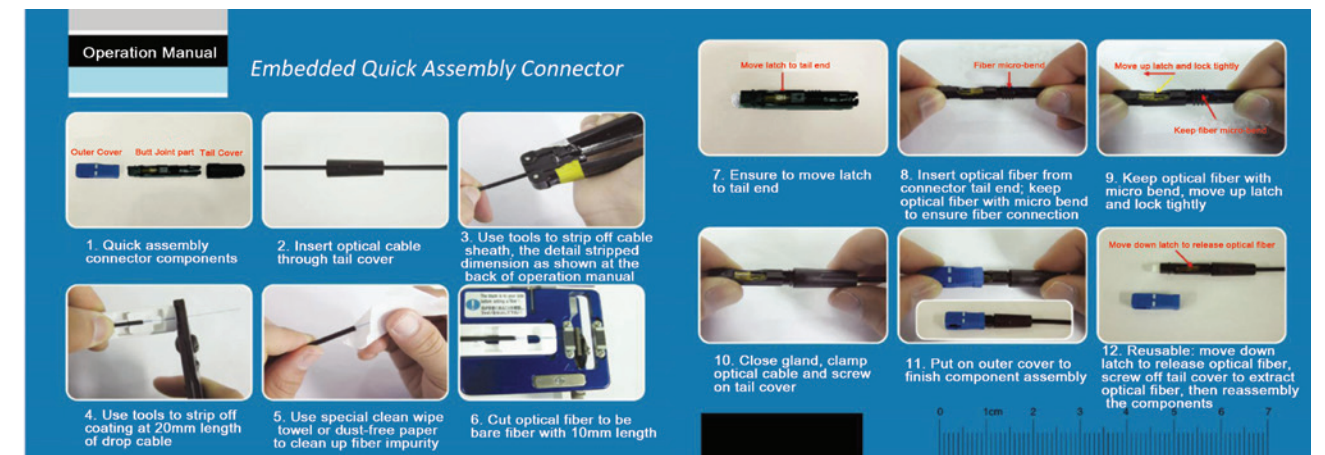
### Field Assembly Connector

#### Description:

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



#### Assembly Process:



#### Technical Specification:

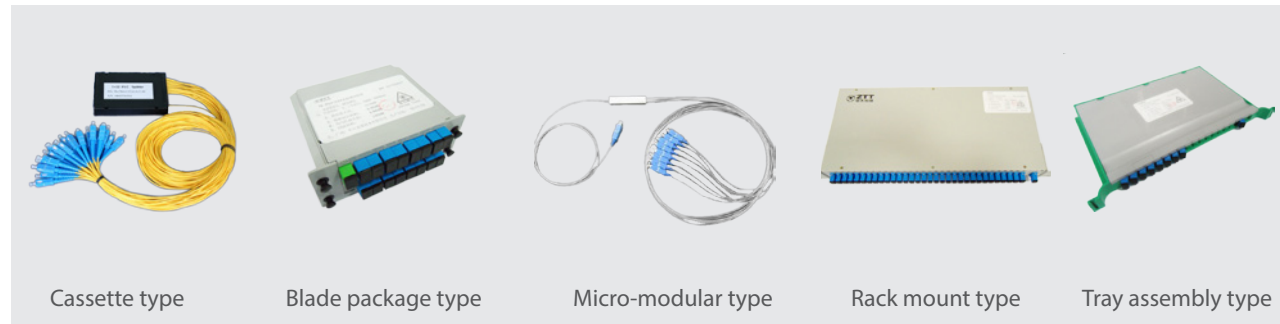
Item	Technical data
Applicable Cable	2.0*3.0mm
Fiber Cladding Diameter(μm)	125±1.0
Operating Time(sec)	< 90
Inserting Lose (dB)	≤0.5
Return Lose (dB)	> 40 (PC) ; > 50(APC)
Operation Temperature (°C)	-40 ~ +75 °C
Mechanical Endurance (500 times)	ΔIL≤0.3dB ΔRL≤5dB

## Optical Accessories

### PLC Splitter

#### Application:

- For the splitting function in Optical Communication Network, FTTx Access Network, LAN, CATV Network.
- Type: micro-modular type, cassette type, blade package type, tray assembly type, rack mount type.



#### Technical Parameter:

Item	Speciation (include the loss of connector)					
Working wavelength(nm)	1260~1650					
Type	1*2	1*4	1*8	1*16	1*32	1*64
Insertion loss (dB)	≤4.4	≤7.4	≤10.7	≤13.9	≤17.2	≤21.5
Uniformity (dB)	≤0.6	≤0.8	≤1.0	≤1.4	≤1.6	≤2.0
PDL (dB)	≤0.2	≤0.3	≤0.3	≤0.3	≤0.3	≤0.5
Return Loss (dB)	≥50(UPC), ≥55(APC)					
Directivity	≥55					
Operating temperature (°C)	-40~+85					

Item	Speciation (include the loss of connector)					
Working wavelength(nm)	1260~1650					
Type	2*2	2*4	2*8	2*16	2*32	2*64
Insertion loss (dB)	≤4.5	≤7.7	≤11.0	≤14.8	≤17.9	≤21.5
Uniformity (dB)	≤0.8	≤1.0	≤1.2	≤1.5	≤1.8	≤2.0
PDL (dB)	≤0.2	≤0.3	≤0.3	≤0.3	≤0.3	≤0.5
Return Loss (dB)	≥50(UPC), ≥55(APC)					
Directivity	≥55					
Operating temperature (°C)	-40~+85					

Note: 1、 Power distributed by the splitter is uniform. 2、 The fiber applied in the splitter is single mode.

## Optical Accessories

### Joint Closure

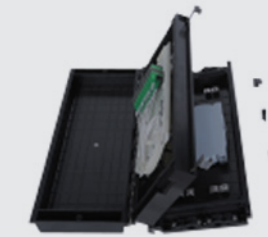
#### Description:

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.

#### Horizontal type:



GJS1011



GJS1020



GJS1029

#### Dome type:



GJS3010



GJS3045



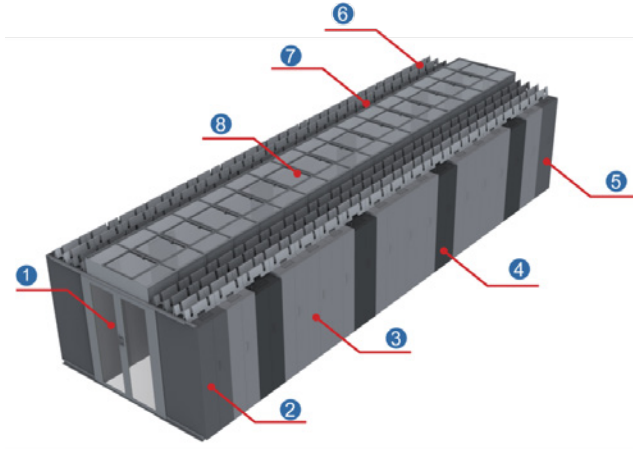
GJS2046

#### Order 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



## Internet Data Center (IDC)



### External characteristic :

- With airtight aisle, cold and hot air flow is completely isolated.
- The height, width and depth of the cabinet are the same, inlet air from front, outlet air from back.
- Each micro module integrates structure, power supply and distribution, refrigeration and moving loop monitoring.

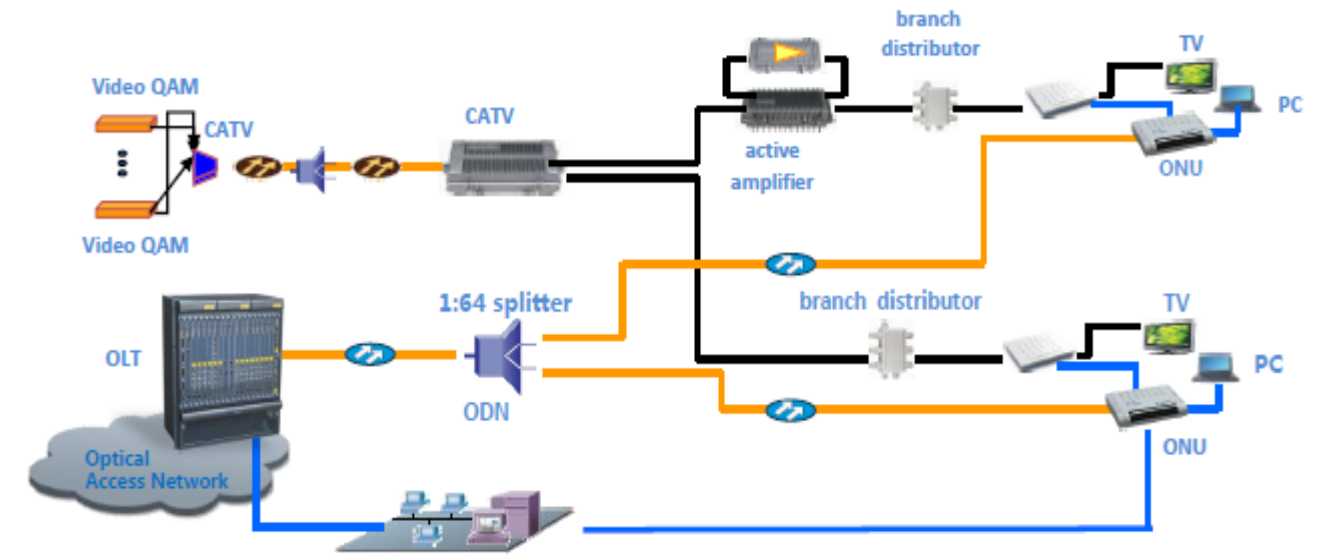
### Advantages :

- Factory prefabrication, building blocks.
- Modular design, on-demand deployment, low investment.
- Close accurate refrigeration, air conditioning efficiency is high.
- Low operating costs.
- The power density of single cabinet can reach 9kW.



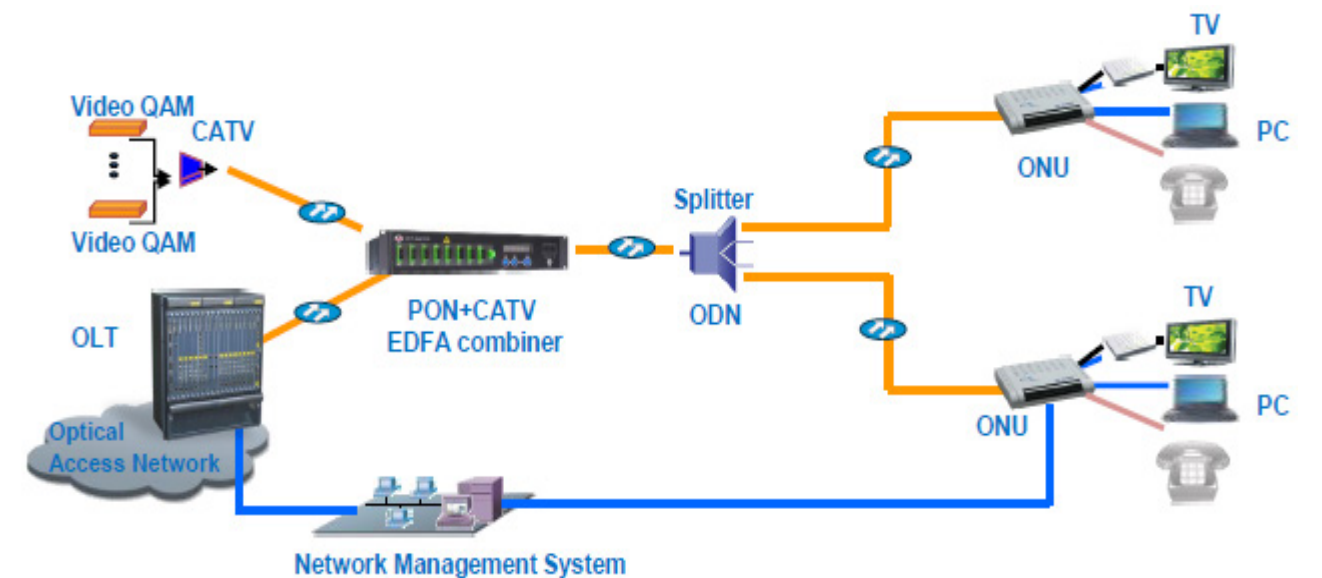
## PON Solution

### Typical networking structure: (FTTH pure ONU + fiber coaxial entry)



- The data adopts PON technology to realize fiber - to - home.
- The CATV adopts the optical receiver to receive the optical signal, through the active amplifier and passive branch distributor to realize television signal amplification and distribution.

### Typical networking structure: (single fiber household)



- Adopts three-wave integration technology (PON's 1310nm, 1490nm and CATV's 1550nm) to construct high bandwidth, high-capacity fiber bidirectional access.

## G/EPON ONU

### Description:

Plug and play, integrated automatic detection, automatic configuration and automatic firmware upgrade technology, support diagnostic testing optical path and remote disable optical path and support IPv4 and IPv6 protocol stack. Compatible with various OLT.

### Environmental Parameters:

- Operating temperature: -40°C~70°C
- Storage temperature: -40°C~85°C
- Relative humidity: 10%~90% non-condensing

#### ZG140P/ZE140P

- Emission wavelength 1310nm, receive wavelength 1490nm.
- Receive sensitivity < -27dbm.
- Compatible with 24VAC/12VDC input.
- Lightning protection: power supply:±4kV, ethernet port ±1.5kV.
- Button: reset.
- Size:89\*58\*56mm.



#### ZG140-P/ZE140-P

- Emission wavelength 1310nm, receive wavelength 1490nm.
- Optical port: SC/PC
- Receive sensitivity < -27dbm(1490nm).
- Power supply:AC100~240V.
- Lightning protection: power supply 6kV, signal port 4kV.
- Button: reset, power supply.
- Size: 210\*148\*38mm.



#### ZG140-C/ZE140-C

- Emission wavelength 1310nm, receive wavelength 1490nm.
- Optical port: SC/PC
- Receive sensitivity < -27dbm(1490nm).
- DC power supply:12V 1.0A,outer AC-DC power adapter.
- Button: reset, power supply.
- Size: 180\*125\*30mm.



## EPON OLT

### Description:

ZE2000 series provide 4/8/16 downstream gigabit EPON ports, 8 GE Ethernet ports and 2/4 ten Gb upstream ports. With the height 1U, it is convenient to install and maintain and saving space. It is widely applied in the access network construction, i.e. operator front-end network coverage, private network construction and enterprise network campus access etc.

### Environmental Parameters:

- Operating temperature: -10°C~55°C
- Storage temperature: -40°C~70°C
- Relative humidity: 10%~90% non-condensing

#### ZE2000-04P

- 1RU19 inches frame
- 1+1Power redundancy
- 4 fixed EPON interfaces
- 4\*10GE SFP+ optical port+8GE electric port
- 1 console ports
- The full load power consumption of the machine is less than 40 W.



#### ZE2000-08P

- 1RU19 inch frame
- 1+1Power redundancy
- 8 fixed EPON interfaces
- 4\*10GE SFP+ optical port+8GE electric port
- 1 console ports
- The full load power consumption of the machine is less than 45 W.



#### ZE2000-16P

- 1RU19 inches frame
- 1+1Power redundancy
- 16 fixed EPON interfaces
- 4GE SFP, 4\*GE COMBO ports, 2\*10GE SFP+ optical ports
- 1 console ports
- The full load power consumption of the machine is less than 85 W.





## 400G QSFP-DD SR8 Transceiver

### Applications

- 400G Ethernet

### Reference Standards

- QSFP-DD MSA
- IEEE 802.3bs
- SFF-8436, SFF-8636
- IEEE 802.3cd

### Key Features

- Retimed 8-lane high speed PAM4 level Electric Interface
- MPO-24 Optical Interface
- 8 pair independent parallel optical lanes
- Up to 100m transmission distance over OM4 Multi-mode fiber
- Power Consumption less than 10W (Power Class 5)
- Case Operating Temperature: 0 to 70°C

### Detailed Information

400G QSFP-DD SR8 Transceiver									
P/N	Package	Interface	Temp*	Data rate	Distance	Laser	Output Power	Detector	Dynamic range
WMDQ-850SRPC	QSFP-DD	MPO	C	8x53.125Gbps	100m	850nm VCSEL array	-6~+4dBm	PIN array	-7.9~+4dBm

\*TEMP: I=Industrial, E=Extended, C=Commercial



## 25G SFP28 / 10G SFP+ SR Transceiver

### Applications

- 10G/25G Ethernet
- 10G/25G CPRI

### Reference Standards

- SFP+/SFP28 MSA
- IEEE 802.3by
- SFF-8472, SFF-8431
- IEEE 802.3ae

### Key Features

#### 25G SFP28 SR

- Built-in CDR
- LC Optical Interface
- Up to 100m transmission distance over OM4 Multi-mode fiber
- Power Consumption less than 1W

#### 10G SFP+ SR

- LC Optical Interface
- High Speed Differential Data I/O
- Up to 300m transmission distance over OM3 Multi-mode fiber
- Power Consumption less than 0.8W

### Detailed Information

25G SFP28/10G SFP+ SR Transceiver									
P/N	Package	Interface	Temp*	Data rate	Distance	Laser	Output Power	Detector	Dynamic range
WMPL-850SRNx	SFP28	LC	I,E,C	24.33/25.78Gbps	100m	850nm VCSEL	-7.6~+2.4dBm	PIN	-11.9~+2.5dBm
WMPK-850S1Nx	SFP+	LC	I,E,C	2.5~10.3Gbps	300m	850nm VCSEL	-7.3~+1dBm	PIN	-10.5~+1dBm

\*Temp: I=Industrial, E=Extended, C=Commercial



## 100G QSFP28 SR4/CWDM4 Transceiver

### Applications

- 100G Ethernet

### Reference Standards

- QSFP28 MSA
- IEEE 802.3bm
- SFF-8436, SFF-8636
- 4WDM MSA

### Key Features

#### 100G QSFP28 SR4

- Retimed 4-lane high speed Electric Interface
- MPO-12 Optical Interface
- 4 pair independent parallel optical lanes
- Up to 100m transmission distance over OM4 Multi-mode fiber
- Power Consumption less than 2W
- Case Operating Temperature: 0 to 70°C

#### 100G QSFP28 CWDM4

- Retimed 4-lane high speed Electric Interface
- LC Optical Interface
- Uncooled CWDM4 DFB Laser
- Up to 2km transmission distance over Single mode fiber
- Power Consumption less than 3.5W
- Case Operating Temperature: 0 to 70°C

### Detailed Information

100G QSFP28 SR4/ CWDM4 Transceiver									
P/N	Package	Interface	Temp*	Data rate	Distance	Laser	Output Power	Detector	Dynamic range
WMQO-850SRNC	QSFP28	MPO	C	4x25.78Gbps	100m	850nm VCSEL array	-8.4~+2.4dBm	PIN array	-10.3~+2.4dBm
WMQO-CDMFRNC	QSFP28	LC	C	4x25.78Gbps	2km	CWDM4 DML	-6.5~+2.5dBm	CWDM PIN array	-11.5~+2.5dBm

\*TEMP: I=Industrial, E=Extended, C=Commercial



## 10G/25G/100G Active Optical Cable

### Applications

- 10G/25G/100G Ethernet

### Reference Standards

- SFP+/SFP28/QSFP28 MSA
- SFF-8472, SFF-8431, SFF-8436, SFF-8636
- IEEE 802.3ae, IEEE 802.3by, IEEE 802.3bm

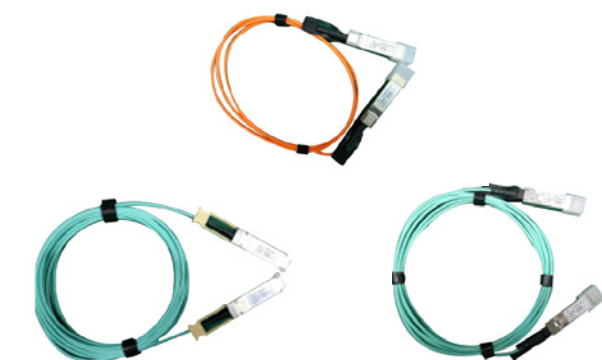
### Key Features

- High Speed Differential Data I/O
- Low Power Consumption
- Up to 100m Fiber-optic link
- Commercial operating temperature range

### Detailed Information

10G/25G/100G Active Optical Cable									
P/N	Package	Interface	Temp*	Data rate	Distance	Laser	Output Power	Detector	Dynamic range
WAPK-850S1NC	SFP+	Cable	C	10.3Gbps	1~100m	850nm VCSEL	-	PIN	-
WAPL-850SRNC	SFP28	Cable	C	25.78Gbps	1~100m	850nm VCSEL	-	PIN	-
WAQO-850SRNC	QSFP28	Cable	C	4x25.78Gbps	1~100m	850nm VCSEL array	-	PIN array	-

\*Temp: I=Industrial, E=Extended, C=Commercial



## 100G QSFP28 LR4/4WDM-10km Transceiver

### Applications

- 100G Ethernet

### Reference Standards

- QSFP28 MSA
- IEEE 802.3ba

### Key Features

#### 100G QSFP28 LR4

- Retimed 4-lane high speed Electric Interface
- LC Optical Interface
- Cooled LAN-WDM DFB Laser
- Up to 10km transmission distance over Single mode fiber
- Single Lane data rate up to 25.78Gb/s~27.95Gb/s
- Case Operating Temperature: 0 to 70°C

### Detailed Information

100G QSFP28 LR4/ 4WDM-10km Transceiver									
P/N	Package	Interface	Temp*	Data rate	Distance	Laser	Output Power	Detector	Dynamic range
WMQO-LDMLRNC	QSFP28	LC	C	4x25.78Gbps	10km	LAN-WDM4 DML	-4.3~+4.5dBm	LAN-WDM PIN array	-10.6~+4.5dBm
WMQO-CDMLRNx	QSFP28	LC	I,C	4x25.78Gbps	10km	CWDM4 DML	-6.5~+2.5dBm	CWDM PIN array	-11.5~+2.5dBm

\*Temp: I=Industrial, E=Extended, C=Commercial



- 5G Wireless

- SFF-8436, SFF-8636
- 4WDM MSA

#### 100G QSFP28 4WDM-10km

- Retimed 4-lane high speed Electric Interface
- LC Optical Interface
- Cooled CWDM DFB Laser
- Up to 10km transmission distance over Single mode fiber
- Single Lane data rate up to 24.33Gb/s~25.78Gb/s
- Case Operating Temperature: -40 to 85°C

## 25G SFP28 Wireless Transceiver

### Applications

- 25G Ethernet

### Reference Standards

- SFP28 MSA
- IEEE 802.3ba

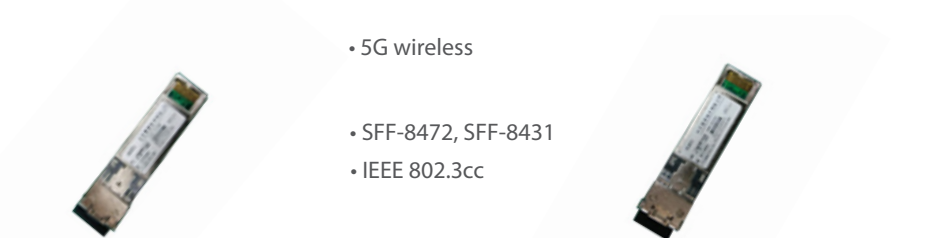
### Key Features

- Built-in CDR
- Duplex or BIDI LC Optical Interface
- CWDM DFB Laser
- Up to 10km transmission distance
- Power Consumption less than 1W

### Detailed Information

25G SFP28 Wireless Transceiver									
P/N	Package	Interface	Temp*	Data rate	Distance	Laser	Output Power	Detector	Dynamic range
WMPL-131LRNx	SFP28	LC	I,C	24.33/25.78Gbps	10km	1310nm DFB	-7~+2dBm	PIN	-12~+2dBm
WMPL-B03LRNx	SFP28	LC/BIDI	I,C	24.33/25.78Gbps	10km	1270nm DFB	-7~+2dBm	1330nm PIN	-12~+2dBm
WMPL-B30LRNx	SFP28	LC/BIDI	I,C	24.33/25.78Gbps	10km	1330nm DFB	-7~+2dBm	1270nm PIN	-12~+2dBm
WMPL-xxxLRNC	SFP28	LC	C	24.33/25.78Gbps	10km	1271/1291/1311/1331nm DFB	-7~+2dBm	PIN	-12~+2dBm

\*Temp: I=Industrial, E=Extended, C=Commercial



- 5G wireless

- SFF-8472, SFF-8431
- IEEE 802.3cc

## 10G SFP+ Wireless Transceiver

### Applications

- 10G Ethernet

- CPRI

### Reference Standards

- SFP+ MSA
- SFF-8472, SFF-8431
- IEEE 802.3ae

### Key Features

- Duplex or BIDI LC Optical Interface
- 18 channels CWDM DFB Laser
- Up to 10km transmission distance
- Power Consumption less than 1W

### Detailed Information

10G SFP+ Wireless Transceiver									
P/N	Package	Interface	Temp*	Data rate	Distance	Laser	Output Power	Detector	Dynamic range
WMPK-131FRNI	SFP+	LC	I	2.5~10.3Gbps	2km	1310nm FP	-8.2~+0.5dBm	PIN	-14.4~+0.5dBm
WMPK-131LRNx	SFP+	LC	I,C	2.5~10.3Gbps	10km	1310nm DFB	-5.2~+0.5dBm	PIN	-14.4~+0.5dBm
WMPK-B03LRNx	SFP+	LC/BIDI	I,C	2.5~10.3Gbps	10km	1270nm DFB	-5.2~+0.5dBm	1330nm PIN	-14.4~+0.5dBm
WMPK-B30LRNx	SFP+	LC/BIDI	I,C	2.5~10.3Gbps	10km	1330nm DFB	-5.2~+0.5dBm	1270nm PIN	-14.4~+0.5dBm
WMPK-xxxLRNC	SFP+	LC	C	2.5~10.3Gbps	10km	18ch CWDM DFB	-5.2~+0.5dBm	PIN	-14.4~+0.5dBm

\*Temp: I=Industrial, E=Extended, C=Commercial

## 10G SFP+ WDM/TDM Transceiver

### Applications

- 10G Ethernet

- SONET OC-192 / SDH STM-64

### Reference Standards

- SFP+ MSA
- SFF-8472, SFF-8431
- IEEE 802.3ae
- ITU-T G.957/G.694/G.709

### Key Features

- LC Optical Interface
- +3.3v Single power supply
- Up to 80km transmission distance
- Low power consumption

### Detailed Information

10G SFP+WDM/TDM Transceiver									
P/N	Package	Interface	Temp*	Data rate	Distance	Laser	Output Power	Detector	Dynamic range
WMPK-155ERNx	SFP+	LC	I,C	9.953~11.1Gbps	40km	1550nm EML	-4~+4dBm	PIN	-16~-1dBm
WMPK-155ZRNx	SFP+	LC	I,C	9.953~11.1Gbps	80km	1550nm EML	0~+5dBm	APD	-23~-7dBm
WMPK-xxxZRNC	SFP+	LC	C	9.953~11.1Gbps	80km	80ch DWDM EML	0~+5dBm	APD	-23~-7dBm

\*Temp: I=Industrial, E=Extended, C=Commercial



## SFP/SFF Transceiver

### Applications

- Gbit Ethernet
- SONET OC-24

### Reference Standards

- SFP MSA
- FF-8472
- IEEE 802.3z

### Key Features

- LC Optical Interface
- +3.3v Single power supply
- Up to 120km transmission distance
- Low power consumption

### Detailed Information

10G SFP+ Wireless Transceiver									
P/N	Package	Interface	Temp*	Data rate	Distance	Laser	Output Power	Detector	Dynamic range
WMPG-131LRNx	SFP	LC	I,C	1.25Gbps	10km	1310nm FP	-9~-3dBm	PIN	-22~-3dBm
WMPG-B2CLRNx	SFP	LC/BIDI	I,C	1.25Gbps	10km	1310nm FP	-9~-3dBm	1550nm PIN	-22~-3dBm
WMPG-BC2LRNx	SFP	LC/BIDI	I,C	1.25Gbps	10km	1550nm DFB	-9~-3dBm	1310nm PIN	-22~-3dBm
WMPG-155Z2Nx	SFP	LC	I,C	1.25Gbps	120km	1550nm DFB	0~+5dBm	APD	-32~-7dBm
WMPI-B2CL1Nx	SFP	LC/BIDI	I,C	2.4576~3.072Gbps	20km	1310nm DFB	-2~-3dBm	1550nm PIN	-20~-3dBm
WMPI-BC2L1Nx	SFP	LC/BIDI	I,C	2.4576~3.072Gbps	20km	1550nm DFB	-2~-3dBm	1310nm PIN	-20~-3dBm

\*Temp: I=Industrial, E=Extended, C=Commercial

## 10G PON ONU Transceiver

### Applications

- 10G GPON FTTx
- 10G EPON FTTx

### Reference Standards

- SFP+ MSA
- IEEE 802.3av
- SFF-8472, SFF-8431
- ITU-T G.987.2/G.9807.1

### Key Features

- SC Optical Interface
- +3.3v Single power supply
- 20km link on SMF
- Low power consumption

### Detailed Information

10G PON ONU Transceiver									
P/N	Package	Interface	Temp*	Data rate	Application	Laser	Output Power	Detector	Dynamic range
WMPK-131AENC	SFP+	SC/BIDI	C	Tx: 1.25Gbps Rx: 10.3125Gbps	10GEPON Asymmetrical	BM 1310nm DFB	+0.62~+5.62dBm	1577nm APD	-28.5~-10dBm
WMPK-127SENC	SFP+	SC/BIDI	C	Tx: 10.3125Gbps Rx: 10.3125Gbps	10GEPON Symmetrical	BM 1270nm DFB	+4~+9dBm	1577nm APD	-28.5~-10dBm
WMPK-127AGNC	SFP+	SC/BIDI	C	Tx: 2.488Gbps Rx: 9.953Gbps	XGPON	BM 1270nm DFB	+2~+7dBm	1577nm APD	-28~-8dBm
WMPK-127SGNC	SFP+	SC/BIDI	C	Tx: 9.953Gbps Rx: 9.953Gbps	XGSPON	BM 1270nm DFB	+4~+9dBm	1577nm APD	-28~-9dBm

\*Temp: I=Industrial, E=Extended, C=Commercial

## ZTT-AWG 40 48

### General Property:

A set of optical waveguide formed by a set of specific lengths, using the ability to divide waves. Mainly used in the production of high density wavelength and wave/demodulation.

### Product Feature:

- 100GHz ITU channel space.
- Low insertion loss.
- Broadband transmission.
- High channel isolation.
- High stability and reliability.
- Without glue light path.



Parameter	Unit	Index
Channel Quantity		40,48
Working Wavelength Range	nm	C waveband
0.5dB bandwidth	nm	≥0.3
Pass band width	nm	λ ITU±0.11
Pass band flatness	dB	≤0.5
Insertion Loss	dB	≤6
Polarization dependent loss	dB	≤0.3
Adjacent channel isolation	dB	≥25
Non-adjacent channel isolation	dB	≥45
Return Loss	dB	≥45
Directivity	dB	≥50
Working Temperature	°C	-5~+65°C
Storage Temperature	°C	-40~+85

## 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.



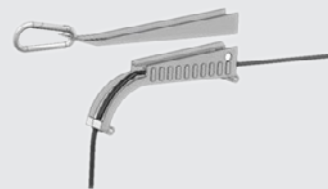
### Adjustable Diameter Hold Hoop

**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.



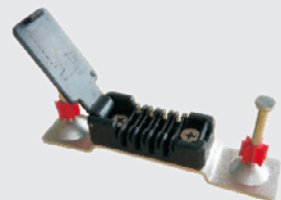
### Centre pole Cable Clamp

**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:  $-25^{\circ}\text{C} \sim +55^{\circ}\text{C}$  (indoor),  $-40^{\circ}\text{C} \sim +60^{\circ}\text{C}$  (outdoor);
- Relative humidity:  $\leq 85\%$  ( $+30^{\circ}\text{C}$ );

- Air pressure:  $70\text{KPa} \sim 106\text{Kpa}$  ;
- Voltage Proof:  $\geq 3000\text{V(DC)}$ ;
- Insulating resistance between the metal parts of the body and grounding fitting:  $\geq 2 \times 10^3 \text{M}\Omega/500\text{V(DC)}$ .

### Optical distribution & splitting box series

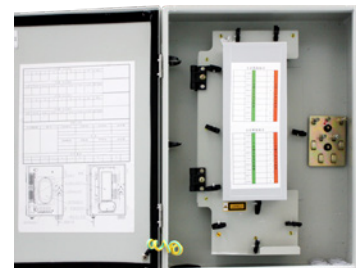
#### GF01-BJ12/24L (Indoor & Outdoor, splitter for option)

- Cold-rolled steel material, good appearance;
- Special fixture for butterfly cable;
- IP55 (Outdoor), IP53 (Indoor);
- $450 \times 300 \times 100\text{mm}$ .



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

- Cold-rolled steel material, good appearance;
- 4pcs  $1 \times 8$  or 2pcs  $1 \times 16$  blade package type splitter can be installed;
- IP55 (Outdoor), IP53 (Indoor);
- $460 \times 340 \times 105\text{mm}$  (Max size).



#### GFS03-GS24SC(Indoor & Outdoor, splitter for option)

- ABS+PC alloy material;
- Maximum Capacity: 24 Cores;
- IP55 (Outdoor), IP53 (Indoor);
- $320 \times 235 \times 100\text{mm}$ .



## Optical Cable Distribution Box

#### GF03-GS/C16SC(Indoor & Outdoor, splitter for option)

- ABS+PC alloy material;
- 2 pcs  $1 \times 8$  blade package type splitter are optional;
- IP55 (Outdoor), IP53 (Indoor);
- Maximum Capacity: 16 Cores;
- $330 \times 260 \times 130\text{mm}$ .



#### GF03-GS/C32SC(Indoor & Outdoor, splitter for option)

- ABS+PC alloy material;
- 4 pcs  $1 \times 8$  or 2 pcs  $1 \times 16$  blade package type splitter are optional;
- IP55 (Outdoor), IP53 (Indoor);
- $412 \times 312 \times 140\text{mm}$ .



#### GF03-GS36SC(Indoor & Outdoor)

- ABS+PC alloy material;
- Maximum Capacity: 48 Cores;
- IP55 (Outdoor), IP53 (Indoor);
- $412 \times 312 \times 140\text{mm}$ .



#### GF03-BS12LF-2 (Indoor & Outdoor, splitter for option)

- ABS material, good anti-aging performance;
- Reversible structure, easy to operate;
- Special fixture for butterfly cable;
- blade package type splitter is optional;
- IP55 (Outdoor), IP53 (Indoor);
- $310 \times 250 \times 95\text{mm}$ .



Note: above box size just for reference, and capacity and appearance could be customized.

## 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

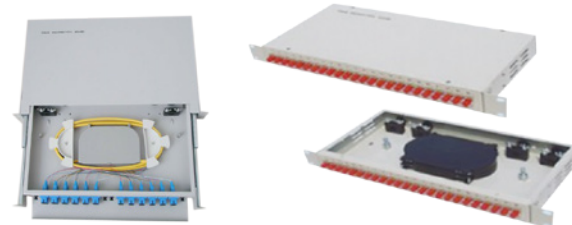
- Cold-rolled steel material, compact structure;
- Special outlet for drop cable;
- FC, SC, ST and LC adaptor are available;
- 300\*130\*88mm.



### 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.

## Broadband Access Box Series

### Description:

Broadband access box is used for drop cable's termination and connected to ONU, separating the Voice, Internet and IPTV service. It mainly includes individual type and multi-users type, individual type is used in user's home to accomplish FTTH, multi-users type is used in corridor or floor to accomplish FTTB.

### Environmental requirements:

- Environment temperature: -20℃~+45℃; Storage Temperature: -25℃~+55℃.
- Storage relatively humidity: ≤75%.
- Relative humidity: ≤85%(+30℃).
- Air pressure: 70Kpa~106 kPa.

#### SPX02-QJ-2

- Compact structure, embedded design, suit for FTTH;
- Install 1 ONU;
- Dimension: 385\*290\*150mm.



#### SPX02-QJ-1

- Compact structure, embedded design, suit for FTTH;
- Installation plate for ONU is reversible, easy to operate;
- Install 1 ONU;
- Dimension: 300\*450\*120mm.



#### SPX01-BJ200T

- Three functions areas: power, equipment and fiber distribution;
- Install 2 ONU, each ONU afford 16 FE interfaces and 16 Ports, suit for FTTB;
- Configure fans and switch of thunder-proof;
- Dimension: 700\*600\*150mm.



#### SPX01-BJ300T

- Spare space for chip type splitter;
- Install 2 ONU, each ONU afford 16 FE interfaces and 16 Ports, suit for FTTB;
- Dimension: 550\*600\*200mm.





## OCC (Optical Cross Connecting Cabinet)

### Description:

The OCC is used in the node between the feeder cable and distribution cable, accomplishing the main cable's storage and distribution cable's distribution flexibly, supplies a safe, flexible and reliable optical distribution node in Access Network.



### Main characteristics:

#### Environment:

- Work temperature: -40℃~+60℃;
- Relative humidity: ≤95% (+40℃) ;
- Air pressure: 70kPa~106kPa;

#### Photoelectricity Performance:

- Insertion loss of optical connector ( include interchangeability and repeatability) ≤0.3dB;
- Return Loss: APC≥60dB; UPC≥50dB; PC≥40dB;
- Connector durability: ≥500 times;
- Insulating resistance between the metal parts of the cabinet body and grounding fitting: ≥2\*10<sup>4</sup>MΩ/500V(DC);
- Voltage Proof: 3000VDC/1min;
- Cross area of earth wire: ≥6mm<sup>2</sup>.

#### Mechanical Performance:

- Front surface of the OCC could endure vertical force more than 1000N, the farthest side of the door could endure vertical force more than 200N when the door is open;
- Seal performance: IP65.
- Curvature radius of the fiber in the OCC ≥30mm.

## OCC (Optical Cross Connecting Cabinet)

### SMC series:

High polymer material is adopted in the cabinet body, light weight and good mechanical strength, suit for the situation of high humidity and much rain.



### Order information:

Specification	Cabinet Dimension		Capacity	Dimension H*W*D(mm)
	H*W*D	Base Dimension (mm) H*W*D		
GXF-HS48	440*310*180	No base	48	Wall/Aerial
GXF-HS96	775*545*300	250*545*300	96	Wall/ Floor
GXF-HS144	775*545*300	250*545*300	144	Floor /Aerial
GXF-HS288	1100*750*305	350*750*305	288	Floor /Aerial
GXF-HS576	1100*750*520	350*750*520	576	Floor /Aerial
GXF-HS1152	1550*1455*652	350*1455*652	1152	Floor /Aerial

### Stainless steel series:

Cabinet body is adopted double layers stainless steel structure, heat insulating material is used in the middle layer, used in the situation of weather enormous change.



## OCC (Optical Cross Connecting Cabinet)

### Order information:

Specification	Cabinet Dimension	Base Dimension (mm)	Capacity	Dimension H*W*D(mm)
	H*W*D	H*W*D		
GXF-HB96	640*580*320	No base	96	Wall
GXF-HB96	640*580*320	250*580*320	96	Wall/Floor
GXF-HB144	750*580*320	250*580*320	144	Floor /Aerial
GXF-HB288	1090*750*320	300*750*320	288	Floor /Aerial
GXF-HB576	1090*750*540	300*750*540	576	Floor /Aerial
GXF-HB1152	1200*1390*580	300*1390*580	1152	Floor /Aerial

### No-jumper OCC

#### Description:

Adopting special design decreases 1 pair of optical connectors in an optical link. Improve the communication quality, spare the optical power, and reduce the transmission loss. Each function module is separate; cable wire is easy to distinguish.

#### No-jumper OCC with cassette type splitter:



#### No-jumper OCC with blade package type splitter:



Note: the capacity of no-jumper OCC could be customized.

## ODF-Optical Distribution Frame series

### Description:

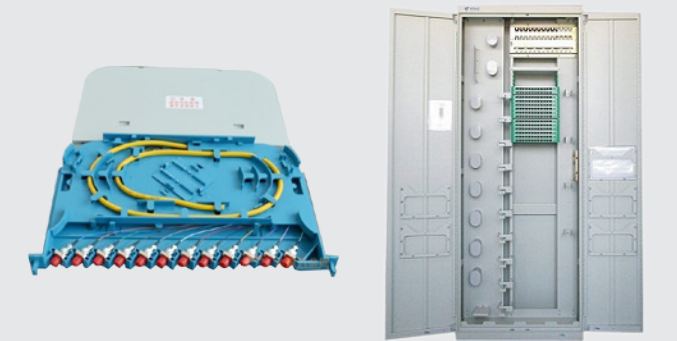
ODF series are suitable for central office, optical access joint of subscribers' fiber access construction, accomplishing cable's leading, fixing and peeling, as well splicing and protecting for fiber, storing and managing for pigtail, fiber's fixing and cross connecting and so on; and accommodate for splitter or WDM according to requirements.

### Main characteristics:

- Module design, front and back operation, standard 19" installation;
- Fiber distribution unit is available, large density and capacity, spare space of central office;
- Optical cable, pigtail and patch cord are independent;
- Cold-rolled steel, static spraying plastic treatment, nice appearance.

### GPX02 Type

- Suit for medium capacity of optical fiber access;
- All close structure, front operation;
- Back to back or against the wall installation;
- Occupy less space under the same capacity.



### Order Information:

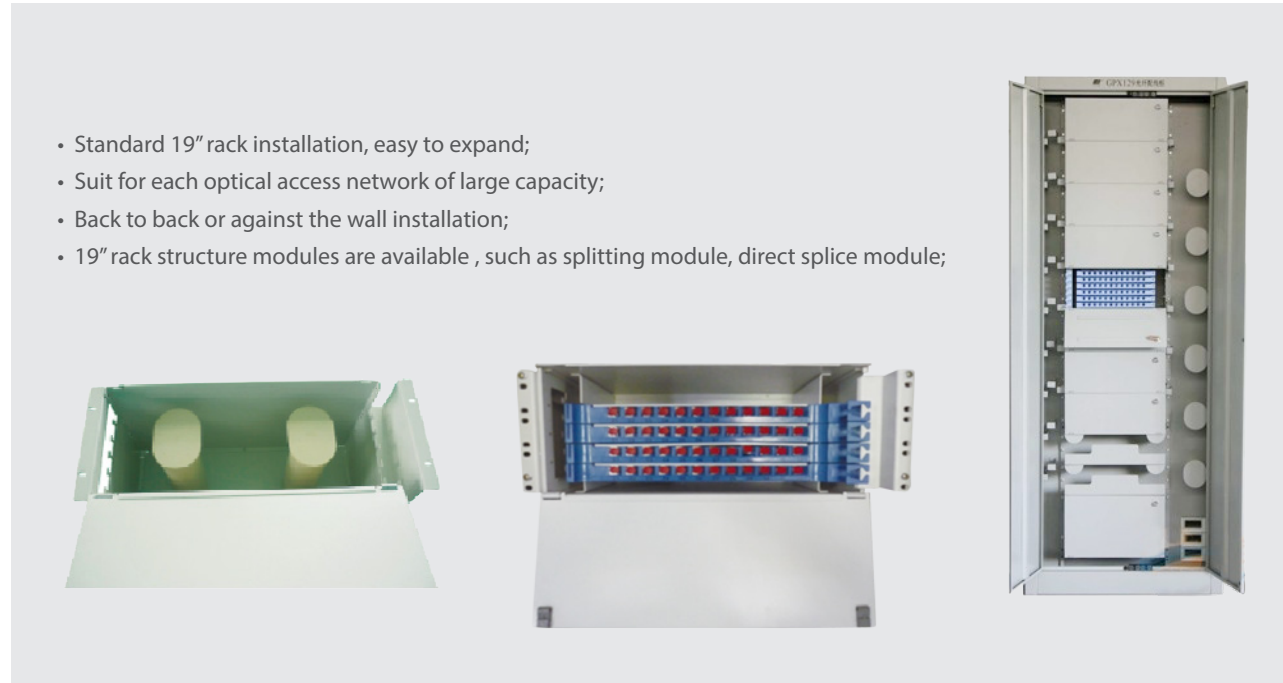
Type	Dimension(mm)H*W*D	Capacity(core)	Note
GPX02-600Y1	2000*600*300	360	Configure 30 pcs Integrated trays
GPX02-600Y2	2200*600*300	504	Configure 42 pcs Integrated trays
GPX02-600Y3	2600*600*300	576	Configure 48 pcs Integrated trays
GPX02-840Y1	2000*840*300	576	Configure 48 pcs Integrated trays
GPX02-840Y2	2200*840*300	720	Configure 60 pcs Integrated trays
GPX02-840Y3	2600*840*300	864	Configure 72 pcs Integrated trays



## ODF-Optical Distribution Frame series

### GPX03 Type

- Standard 19" rack installation, easy to expand;
- Suit for each optical access network of large capacity;
- Back to back or against the wall installation;
- 19" rack structure modules are available , such as splitting module, direct splice module;



### Order Information:

Type	Dimension(mm)H*W*D	Capacity(core)	Note
GPX03-840Y1	2000*840*300	504	Configure 7 pcs GPX-72YD-1
GPX03-840Y2	2200*840*300	576	Configure 8 pcs GPX-72YD-1
GPX03-840Y3	2600*840*300	720	Configure 10 pcs GPX-72YD-1
GPX-12YD-1	44*483*285	12	19" rack mounted
GPX-24YD-1	88*483*285	24	
GPX-48YD-1	130*483*285	48	
GPX-72YD-1	175*483*300	72	

## Digital Distribution Cabinet

Digital distribution cabinet is utilized for distributing and connecting between 2-155Mbit/s digital multiple access equipments, programme control exchange equipments, data service devices and others equipments, it accomplish transferring, supervision and managing for digital signal.



### Order information:

Name	Type	Dimension (mm)		Max Capacity	Note
		H*W*D			
Cabinet	MPX02-520K450S1	2000*520*450		288 system	Double Sides
	MPX02-520K450S2	2200*520*450		320 system	
	MPX02-520K450S3	2600*520*450		384 system	
	MPX02-480K450S1	2000*480*450		288 system	
	MPX02-480K450S2	2200*480*450		320 system	
	MPX02-480K450S3	2600*480*450		384 system	
Digital Module	MPX-8X465/400-1	/		8 system	Max 90° rotation
	MPX-10X465/400-1	/		10 system	Max 90° rotation
	MPX-16X465/400-1	/		16 system	Max 90° rotation
Test wire	CS	3m/5m		2Pcs/ cabinet	/
Distribution wire	TX	3m/5m		2Pcs/ cabinet	/

## Multi-purpose Cabinet

### Description:

Multi-purpose box can provide 19 inches standard installation space to integrate various active and passive 19 inches standard equipment in one Multi-purpose box. It is flexible to configure ODF, DDF, MDF. The multi-purpose cabinet is an ideal distribution equipment for communication network's remote office and module.

### Main characteristics:

- Welded into the frame, static spraying plastic treatment.
- The cabinet deploys shelf and power plate, could install the passive and active equipments flexibly.
- Glass door or mesh door as you choose for front door, doors are detachable.



### Order Information:

Type	Dimension mm (H*W*D)	Effective Height (U)
JPX01-600K450S0	1800*600*450	35U
JPX01-600K450S1	2000*600*450	40U
JPX01-600K450S2	2200*600*450	42U
JPX01-600K600S0	1800*600*600	35U
JPX01-600K600S1	2000*600*600	40U
JPX01-600K600S2	2200*600*600	42U
JPX02-600K450S0	1800*600*450	35U
JPX02-600K450S1	2000*600*450	40U
JPX02-600K450S2	2200*600*450	42U
JPX02-600K600S0	1800*600*600	35U
JPX02-600K600S1	2000*600*600	40U
JPX02-600K600S2	2200*600*600	42U

Note: • Please specify the accessories you need when order. • Dimension can be customized.

## Network Cabinet

### Description:

The network cabinet is used in the equipment room for various communication, power, railway, building, bank, national defence, finance, colleges.

### Main characteristics:

- Cabinet body is welded wholly by metal plates, ensures it having the high strength.
- Outer frame is sectional structure, easy installation and combination, complying with 19/21 inches safety industrial standard.
- The front door is adopted toughened glass, the back door is steel, the side door is detachable.
- Could avoid the imbalance caused by the various equipment dimension with the adjustable pillar.
- Ensure having a good air ventilation by three ventilation styles.



### Order Information:

Type	Dimension mm (H*W*D)	Effective Height (U)
BPX01-600K1000S0	2000*600*1000	40U
BPX01-600K1000S1	2200*600*1000	44U
BPX01-600K1000S2	2600*600*1000	54U
BPX01-600K1100S0	2000*600*1100	40U
BPX01-600K1100S1	2200*600*1100	44U
BPX01-600K1100S2	2600*600*1100	54U
BPX02-600K1200S0	2000*600*1200	40U
BPX02-600K1200S1	2200*600*1200	44U
BPX02-600K1200S2	2600*600*1200	54U

Note:

- Please inform the accessories, the way of front and back plate, and assemble way.
- Dimension can be customized.

## Outdoor Integrated Cabinet

### Description:

In order to change the original construction mode is mainly by copper access, extend optical fiber to user terminal as much as possible, ZTT designs and promote Outdoor Integrated Cabinet. In rural area, it adopts wired way for construction area, where optical fiber is connected to administrative village, and at the right time to promote fiber construction to home. In the light of strategy of "fiber replaces copper"; outdoor integrated cabinet, with the advantages of "low cost, convenient location selection and easy construction", has become an important supplementary means for solution of machine room construction investment and location selection pressure.



### Product Characteristics:

- Double layer' stainless steel structure, with the heat insulating middle layer, endure temperature's sudden drop and condensation;
- 19" standard design and nonstandard equipment platform, to install ONU/ONT, ADSL/VDSL, AG, IAD, etc;
- Protection level: IP55;
- Earthed system is safe;
- Cabinet durability exceeds 20 years.

### ZTM02-400F



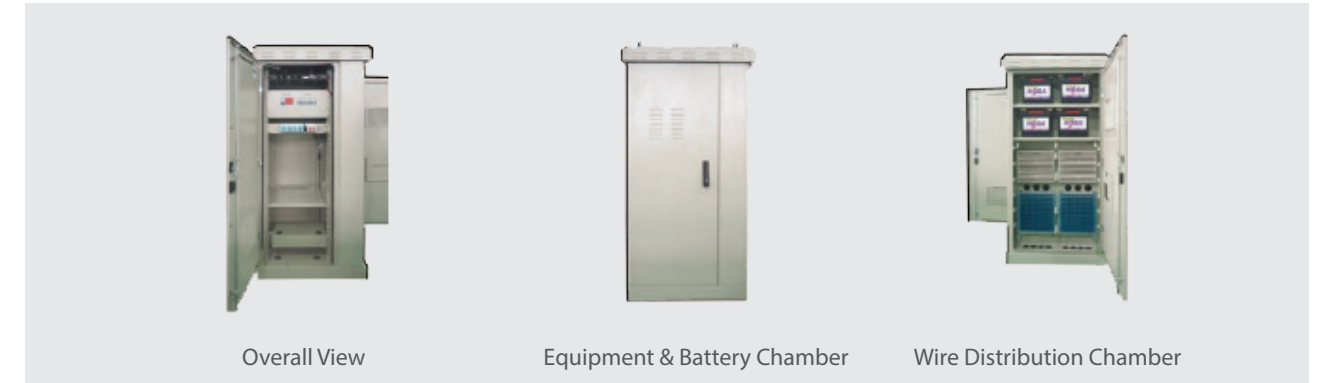
**Dimension:** 1200\*800\*450mm;

### Configuration:

- Equipment Chamber: power distribution unit, power for switch, Optical Distribution Unit (12/24 cores), clapboard, fans for ventilation;
- Battery Chamber: 48V;
- Wire Distribution Chamber: 608 loop line for equipment, 400 loop line for wire distribution.

## Outdoor Integrated Cabinet

### ZTM02-600F

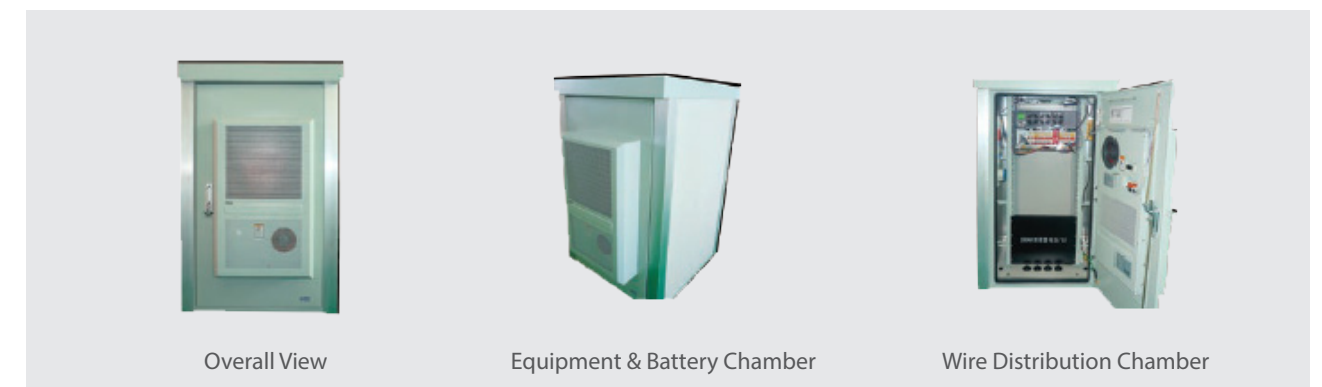


**Dimension:** 1600\*800\*750mm;

### Configuration:

- Equipment Chamber: power distribution unit, power for switch, Optical Distribution Unit (12/24 cores), clapboard, fans for ventilation;
- Battery Chamber: 48V;
- Wire Distribution Chamber: 768 loop line for equipment, 600 loop line for wire distribution.

### ZTM01-CK



**Dimension:** 1675\*910\*910mm;

### Configuration:

- Equipment Chamber: power distribution unit, power for switch, lithium battery and equipments of base, etc.

**Advantage:** Accommodate for distributed BBU+RRU of base and build a "no-room" base, save the investment.



## Micro Power Smart Lock

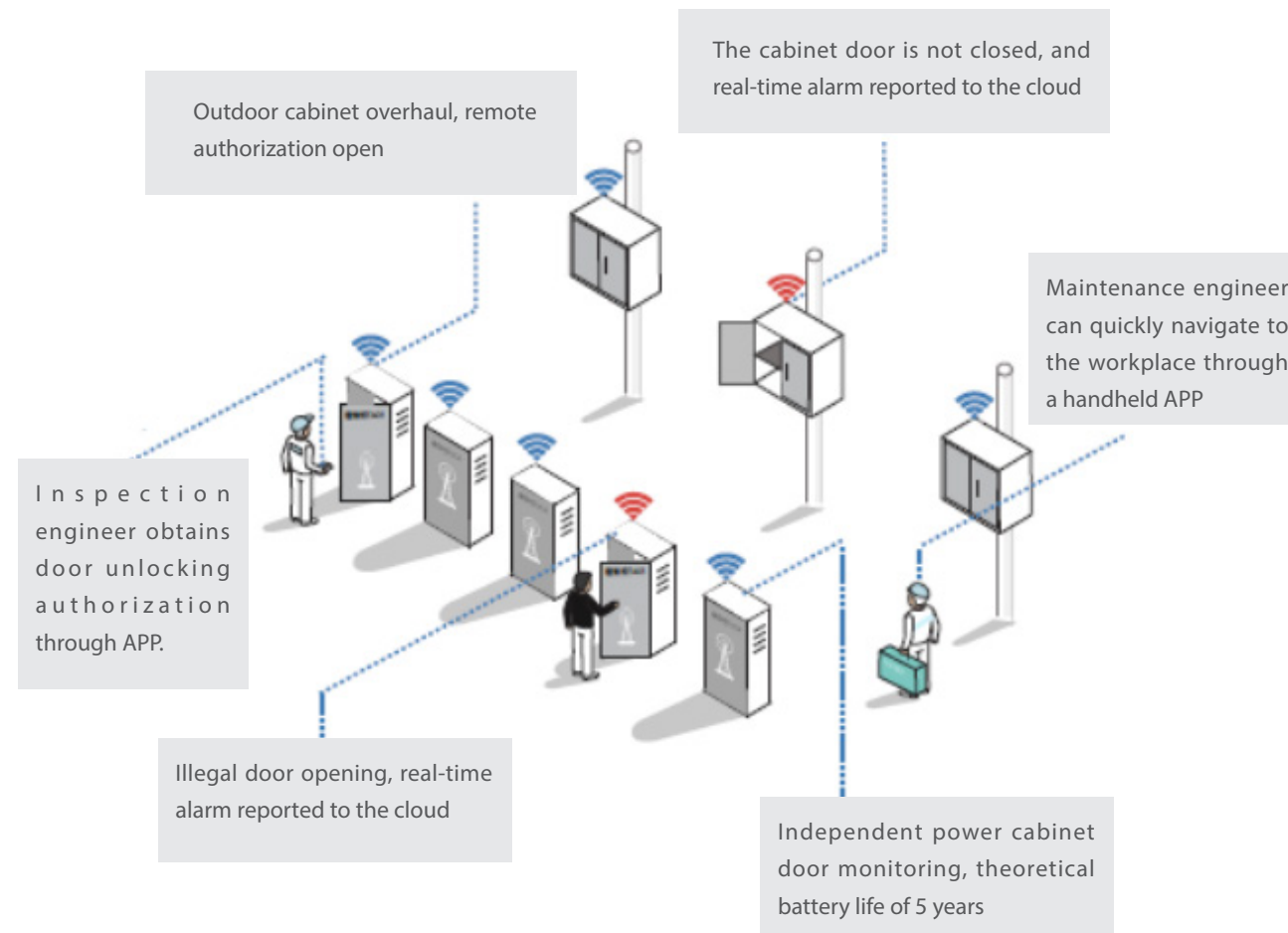
### Unlocking method:

- APP, Provisional Authority,
- Period password Authorization,
- Pre-authorization password authorization,
- Remote NB IoT unlock,
- Emergency unlock of independent construction,
- SMS unlock

### Technical Characteristics:

- Cloud real-time monitoring cabinet door status.
- Cloud real-time authorization of the cabinet door.
- The handheld APP is rich in functions.
- Low cost, low energy consumption.

### Application Scenarios:



## Antenna

### Base station antenna:



Ultra wideband electrical control antenna

Smart electrical control antenna

Multi-frequency electrical control antenna

### Embellished antenna:



Exhaust pipe antenna

Solar water heater antenna

High pole beautify tree antenna

### Indoor antenna:

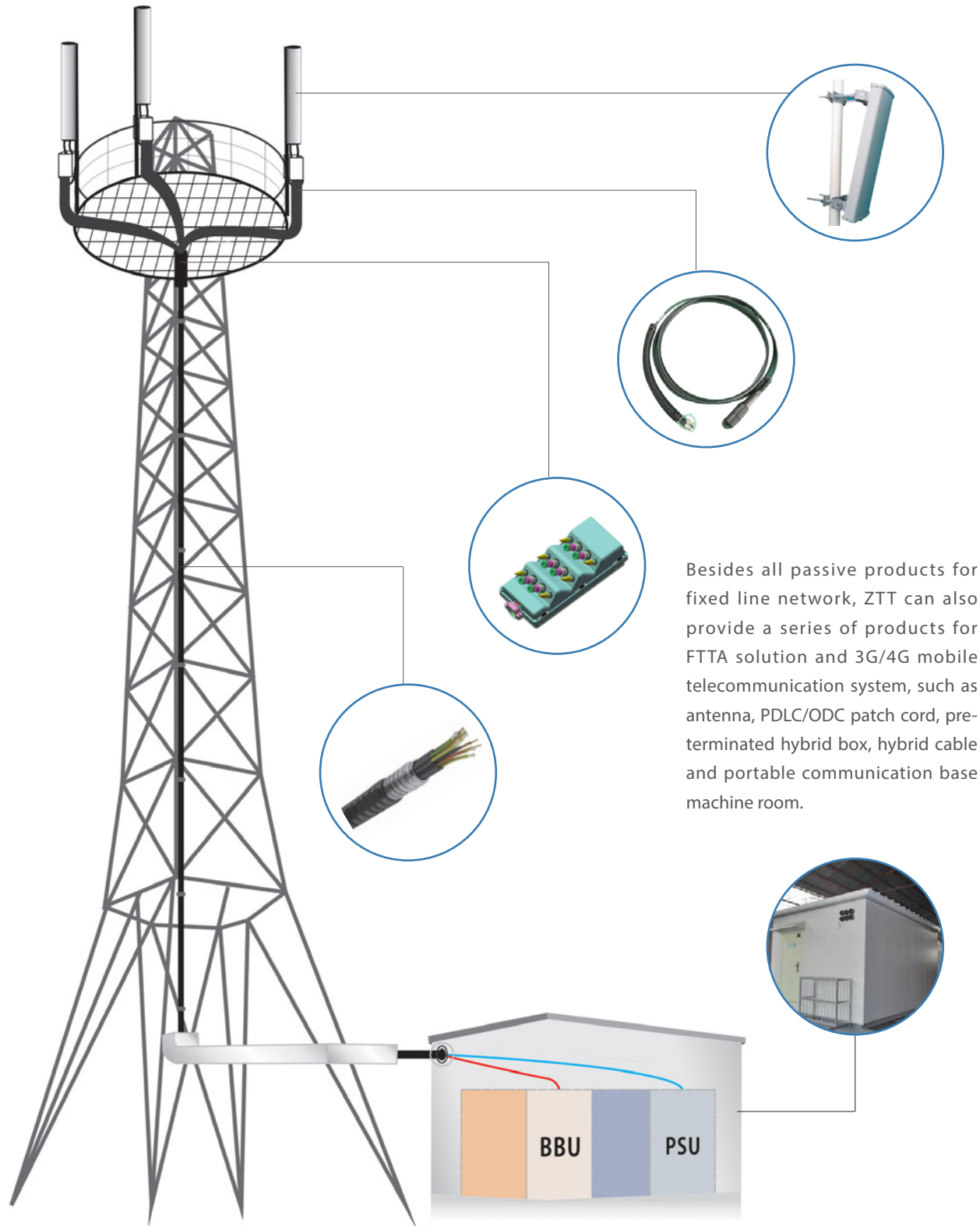


Ceiling antenna

Wall mounting antenna

Log-periodic antenna

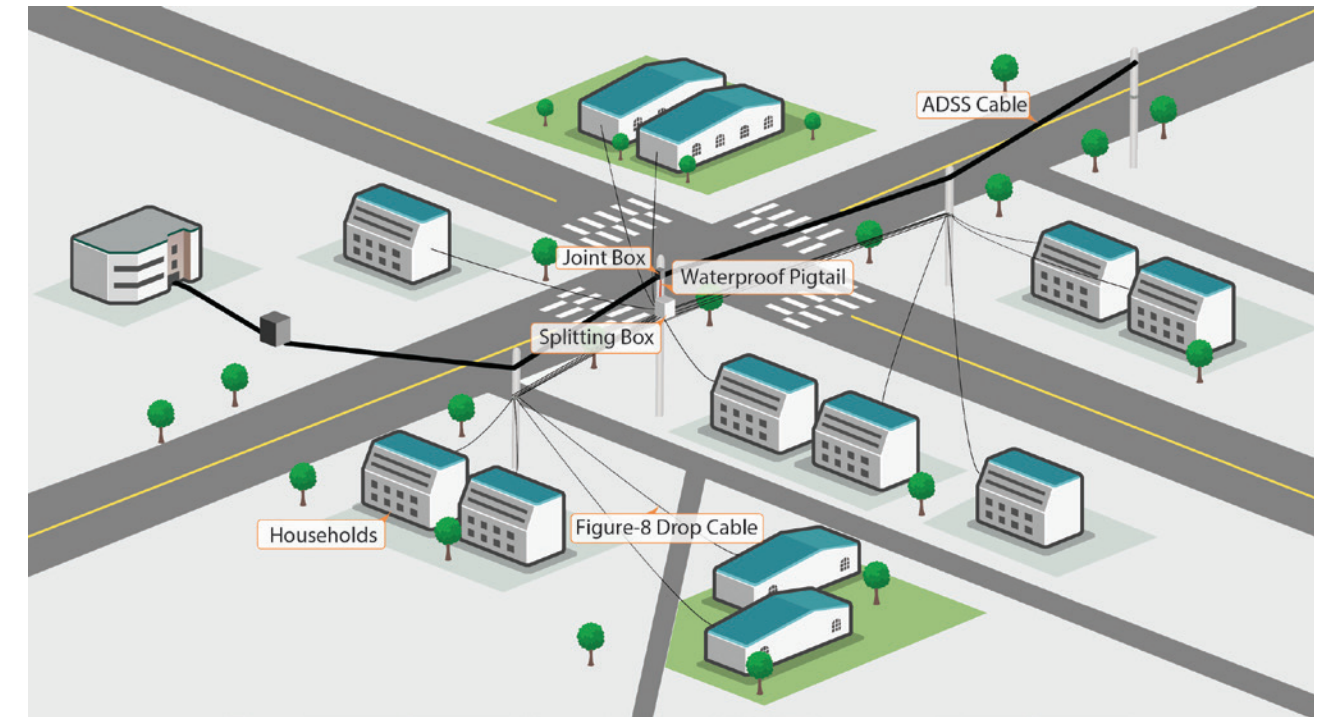
## ZTT Products for FTTA/4G Solution



## Typical Experience—ZTT FTTH Project in Zimbabwe

- First FTTH Project in Zimbabwe
- ZTT's first total-package overseas FTTx project
- Turnkey Solution—including solution design, products supply, training, installation guide, and construction supervision
- 1st Project: 800 households; 2nd Project: 1600 households; 3rd Project: 5400 households

### ZTT' FTTH Project Diagrammatic Profile in Zimbabwe



Products	Products Picture		
Cables			
Boxes			
Main Installation Accessories for ADSS			
Main Installation Accessories for Drop Cable			
Indoor Layout Accessories			



## Certification and Qualification



Zhongtian Broadband has established a complete, advanced quality inspection process for controlling raw materials and products quality. At the same time, Zhongtian broadband has received many types of authentications, such as ISO9001, ISO14001, TL Certification, Network Access Certificate, and Utility Model Patent Certificate.

## Test Facilities



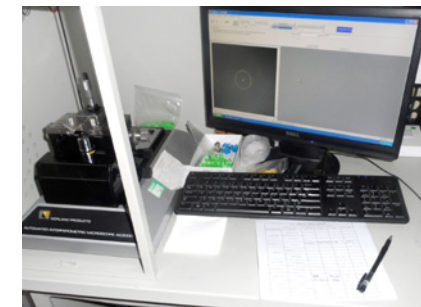
Insertion&return loss tester



Salt water ingestion test cabinet



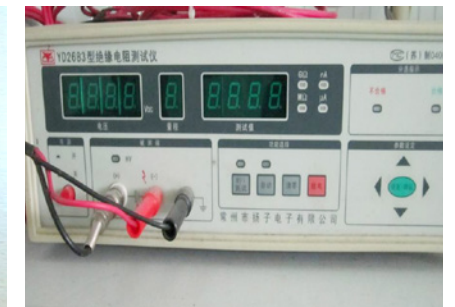
Electrodynamic vibration shaker



Interferometer



Thickness meter



Insulation resistance tester



Temperature and humidity chamber



Dustproof test cabinet



Digital pull tester

According to test requirements from different customers, Zhongtian Broadband has passed the tests by authoritative institutions in domestic and overseas. The authoritative institutions include Quality Supervision & Inspection Center of Optical Communication Products, Ministry of Information Industry of P.R.C.