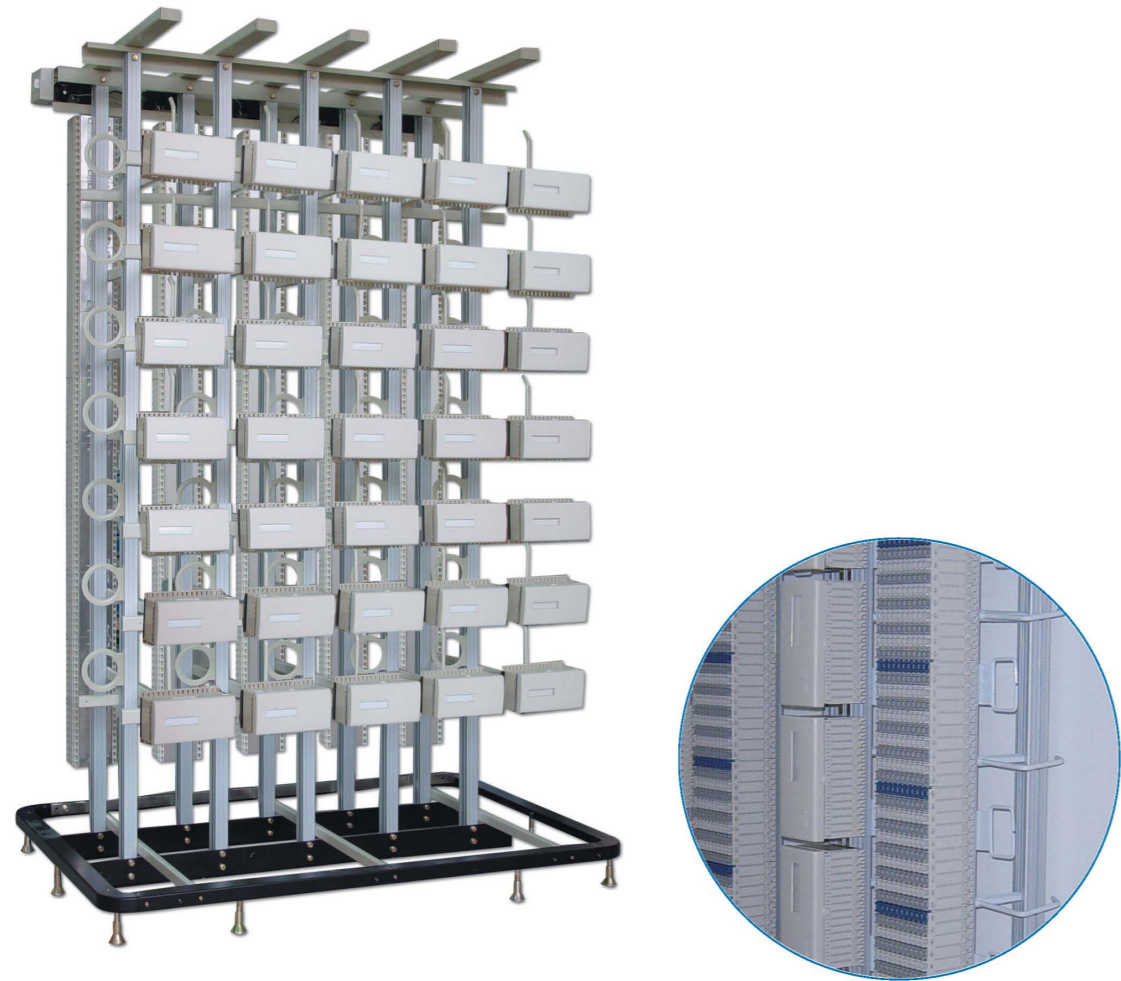


JPX01 IDC Main Distribution Frame

The product has incorporated the functions of cable connection and over-current/over-voltage protection and thus it can avoid the damages to the external cable, to the equipment in the equipment room and to personnel safety due to the invasion of large current. The splicing module of the product adopts a new-type heat-resistant (180□) self-extinguished material, which can ensure the safety of the main exchange equipment.

Due to the high-density design of the splicing module, the height and the width of the module have decreased to some extent, and thereby the height and weight of the MDF as a whole have been considerably reduced and the spacing of the columns have been increased, which has facilitated the operational work between the frames and improved the utilization of the space in the equipment room as well.

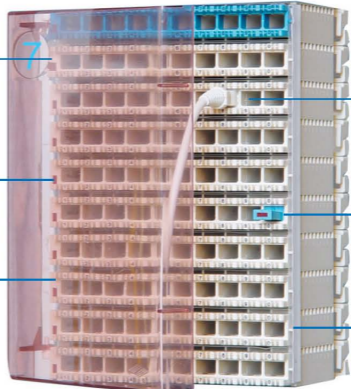
In the JPX01 main distribution frame, the column/block designation, which can be replaced and cleaned easily, is provided at the column alarms and the connection block as well as at the bottom railing.



The main distribution frame consists of the frame, protection block, test block, protector, main alarm board, column alarm assembly, accessories, etc.

Protetion Connection Block

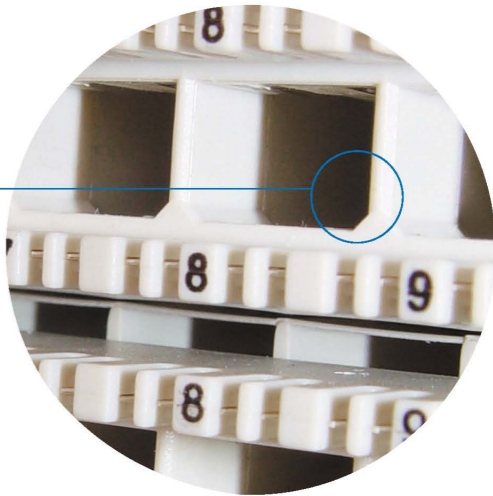
- Marking Plate (Optional)
- Row Alarm
- Dust Cover



- Testing Jack Cord for Vertical Columns
- Protector
- Designation Strip

Hight x WidthxDepth=180x120x98mm
Weight=675g

- 45o - radius design
- The IDC terminals adopt fully-enclosed design. Double contacts are used for both the terminals for outside lines and the terminals for jumper wires



Row Alarm

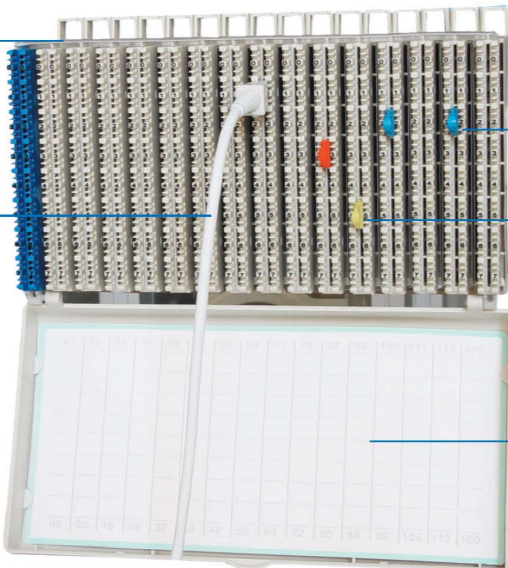
It adopts a built-in structure, the possible faulty points have decreased in number, and the removal of the modules does not affect the normal working of the alarm system.



Test Connection Block

■ Designation Strip

■ Testing jack cord for horizontal row



■ Break Jack

■ Protective Jack

■ Dust Cover Designation Paper

Hight x WidthxDepth=119 x 192 x 84 mm
Weight=647g

Protector

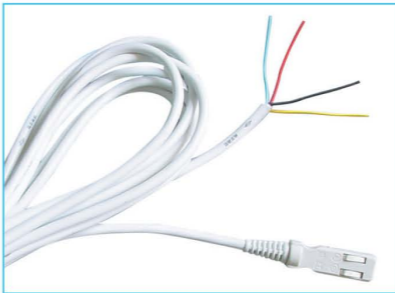
New-type devices have been used for the protectors



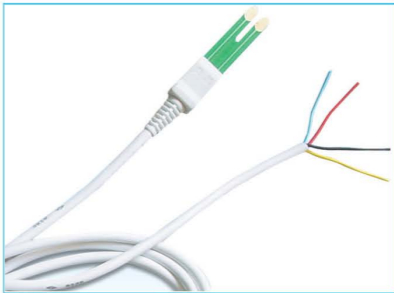
The categories and functions of the protector

Category	Protective Element
P01B	High-molecular PTC + GDT
P01D	High-molecular PTC +surface-mounted SA

Accessories



Testing jack cord for vertical columns



Testing jack cord for horizontal rows



Insertion tool



Disconnection jack and Protective jack

Product Configuration

NO.	capacity of Outside Line	Maximum capacity per vertical column	Maximum Number of Horizontal row	Standard Capacity per Horizontal row	Frame Body Dimensions			Column Alarm	General Column Alarm	Ladder (Optional)
					Height	Width	Depth			
1	1200 L	6 blocks x 100 L	8	1 blocks x 128 L	2200	500	880 970 (including the ruling)	2	1	XQ901Fthree steps
2	4000 L	8 blocks x 100 L	10	4 blocks x 128 L	2736 3000 (including the ruling)	1250	1140 1360 (including the ruling)	5	1	XQ901AT
3	5000 L	10 blocks x 100 L	11	4 blocks x 128 L	2970 3220 (including the ruling)	1250	1140 1360 (including the ruling)	1	1	XQ901AT
4	6000 L	12 blocks x 100 L	13	4 blocks x 128 L	3470 3720 (including the ruling)	1250	1140 1360 (including the ruling)	1	1	XQ901AT

> GPX 67 III A Optical Fiber Wiring Frame

GPX 67 III A type optical fiber wiring frame acts as the medium equipment connecting external optical cable and optical communication equipment. With the frame, functions of fixed grounding of cable, heat welding of optical cable and terminal, and their storage and dispatch are able to be realized.

This equipment is equipped with patent micro-tray, which is of two lists of modes respectively on the right and the left. The left mode is connected to external optical cable and the right one is connected to the wire jumper of communication equipment, for the realization of cross connection of external cable and equipment cable.

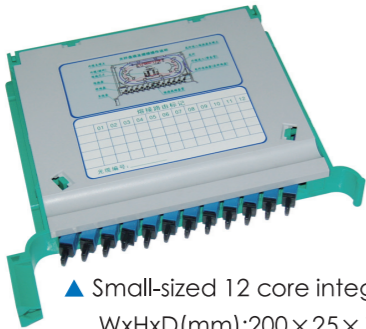
Main features:

Realize construction, operation and maintenance on the front face; offer convenience for the equipment to be installed against wall or in a back-to-back way; reduce area of machinery room.

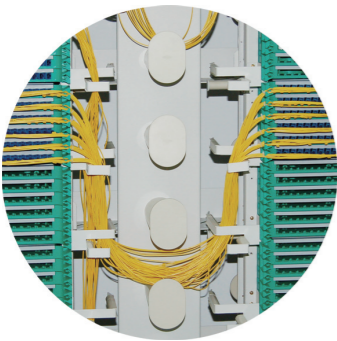
Adopting small-sized fuse-distribution integrated tray, largely increase accommodation capacity of machine frame with similar volume, and is applicable to adaptors of FC.SC. LC types.

Upper cable entry or lower cable entry is available.

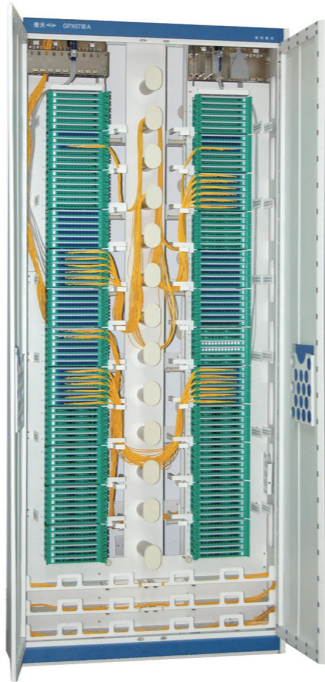
The bottom of machine frame is equipped with horizontal shape trough to allow for convenient mutual fiber jumping among frames in the case of paratactic installation of numerous machine frames.



▲ Small-sized 12 core integrated tray
WxHxD(mm):200×25×180



◀ Support management of left-right cross connection



Guidance for order

Ezternal dimensions(mm) (HxWxD)	Lower cable unit (Frame)	Number of tray	Capacity(core)
2000x1080x300	2	108	1296
2200x1080x300	2	120	1440
2600x1080x300	2	144	1728

> Features of ODF and Splicing Frame

- 1. High-density rack design
- 2.Large-capacity Rack
- 3.Flexible and nice operating interface
- 4.Out rack splicing

GPX09P-45/30 ODF Configuration Table

Model number	Dimension H*W*D(mm)	Unit volume (core)	Max unit	Max volume (core)	Remarks
GPX09P-45	2000*900*450	96	9	768	Propose use the SC Adapter
	2000*900*450	96	9	864	
	2000*900*450	96	11	1056	
GPX09P-30	2000*840*300	144	4	576	
	2000*840*300	144	5	720	
	2000*840*300	144	6	864	

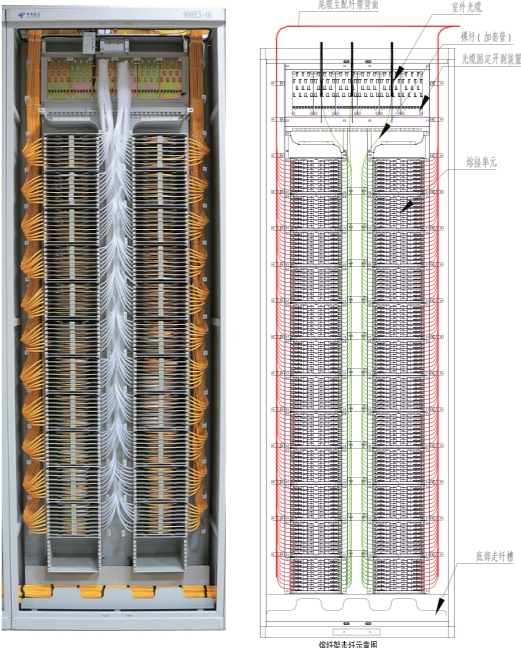


Images of China Telecom

> The introduction of the functions of optical splicing frame

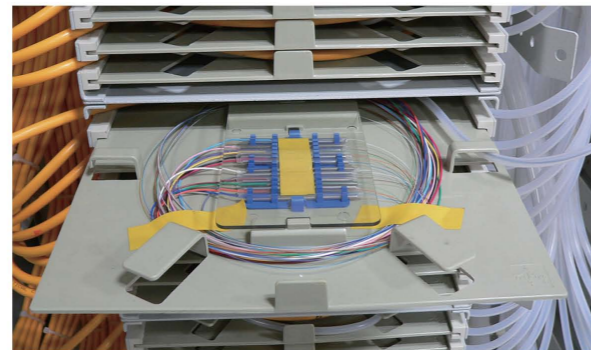
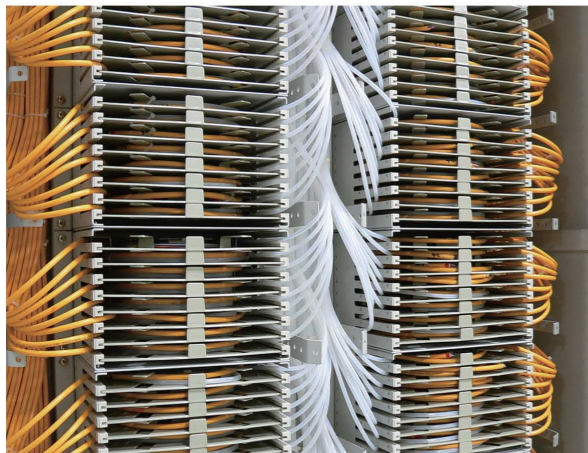
GPX09R-45/30 ODF Configuration Table

Model number	Dimension H*W*D(mm)	Unit volume (core)	Max unit	Max volume (core)
GPX09R-45	2000*900*450	96	16	1546
	2000*900*450	96	16	1728
	2000*900*450	96	22	2112
GPX09R-30	2000*840*300	144	8	1152
	2000*840*300	144	10	1440
	2000*840*300	144	12	1728



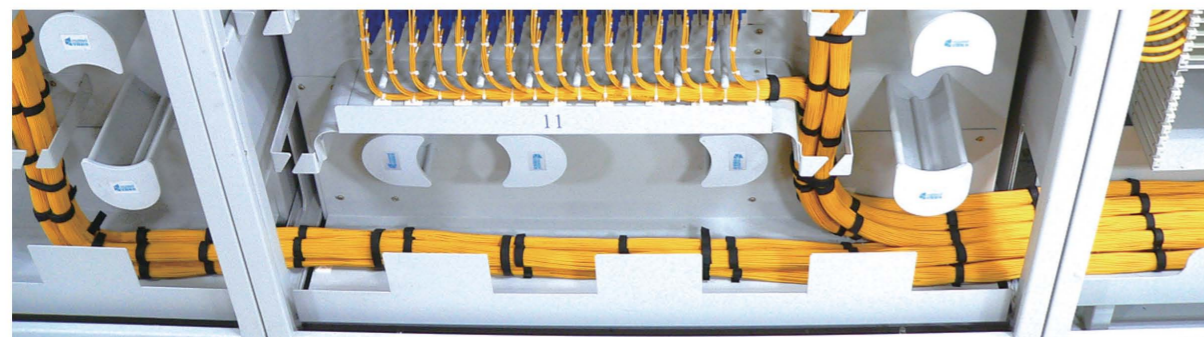
the front of the cabinet wiring channel design

> The introduction of the functions of optical splicing frame



12 core splicing tray ▲

◀ splicing module



jumping wire horizontal routing channel between frames ▲

> optical fiber channel

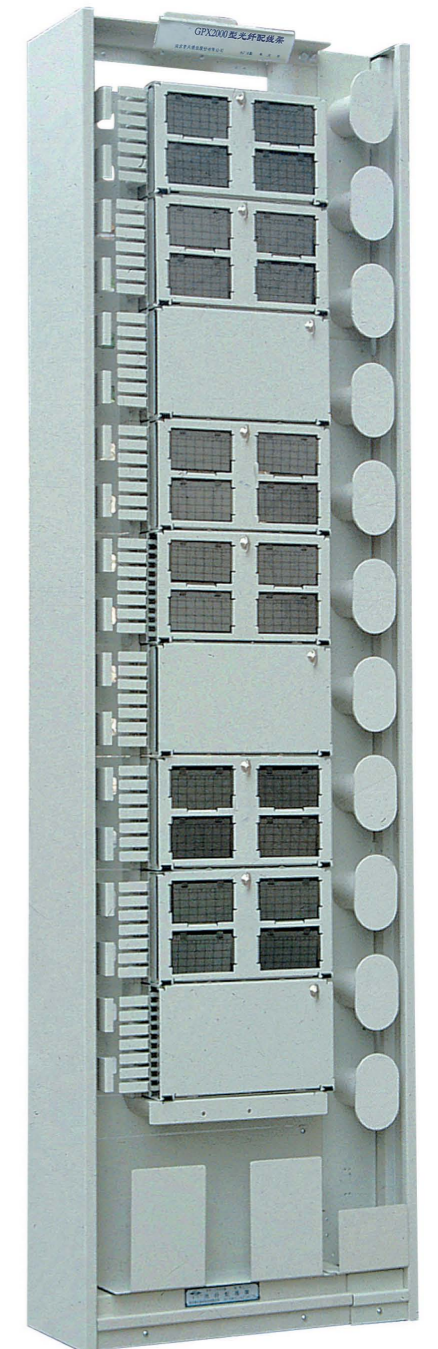


> GPX2000 Optical Distribution Frame

The GPX2000 ODF is an distribution equipment for connecting outside plant cables and optical telecommunication equipments, providing the functions of fixation, buffering, splicing, grounding for outside optic cables and also the distribution, combination and dispatching for optic fibers. The GPX2000 ODF consists of a 19" frame, termination frames, splicing frames, termination/ splicing and storage frames. The termination frame consists of a frame and 6-unit adapter holders; The splicing frame consists of a frame and splicing trays; The termination/splicing frame consists of a frame, 6-unit adapter holders; The storage frame consists of a frame and storage trays.

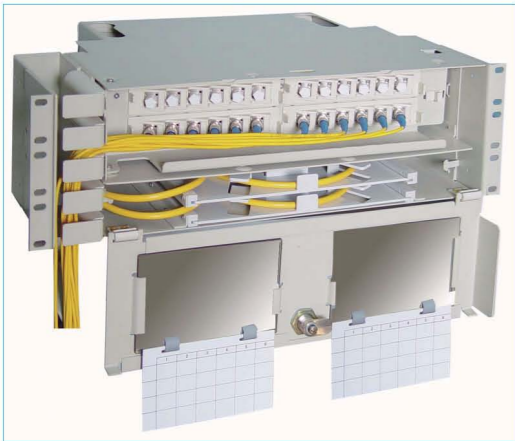


▲ 72 core termination frame

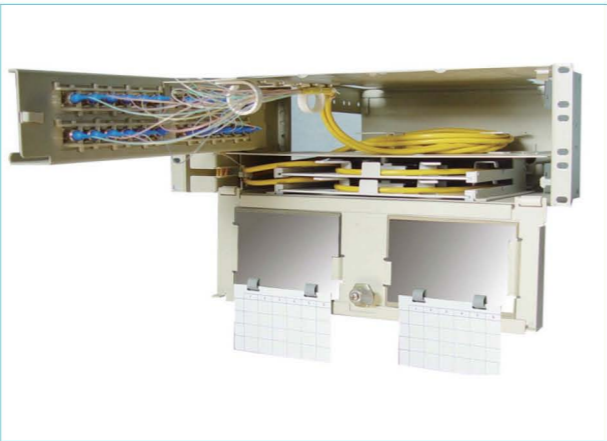


Features

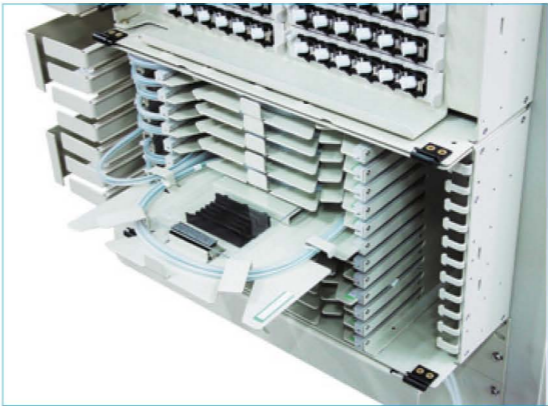
- >The frame of the cabinet is made of cold-rolled primes with static powder coating surface treatment.
- >Adapters are installed obliquely, which prevents direct exposure of laser light and are convenient for handling and management of single optic fiber with the operation platform becoming more closer to the operator, and also provide protection for optic fibers (to ensure the jumper fiber a curvature radius >40mm)
- >With indicating-plate on the door of termination module showing the fiber route makes it easy for maintenance. The front panel is equipped with a spiale, which makes the operator access the backside of the panel and inside of the module very easily.
- >The modules are equipped with 5' concave holder, and also have even ones, 1" or 2" concave mount parts available.
- >Provides two basic ways for connecting outside plant optic cables: on-frame splicing and off-frame splicing. The on-frame splicing mode mounts the splicing modules directly onto the GPX2000 ODF. The off-frame mode mainly includes an optic fiber lead-in box and a GPX2000 ODF (excluding splicing module)
- >Two types of trays in the splicing frame-quadrate and round ones are available for users.



▲24 core termination/splicing frame



▲24 core termination/splicing frame(open)



Dimension and Capacity of Module

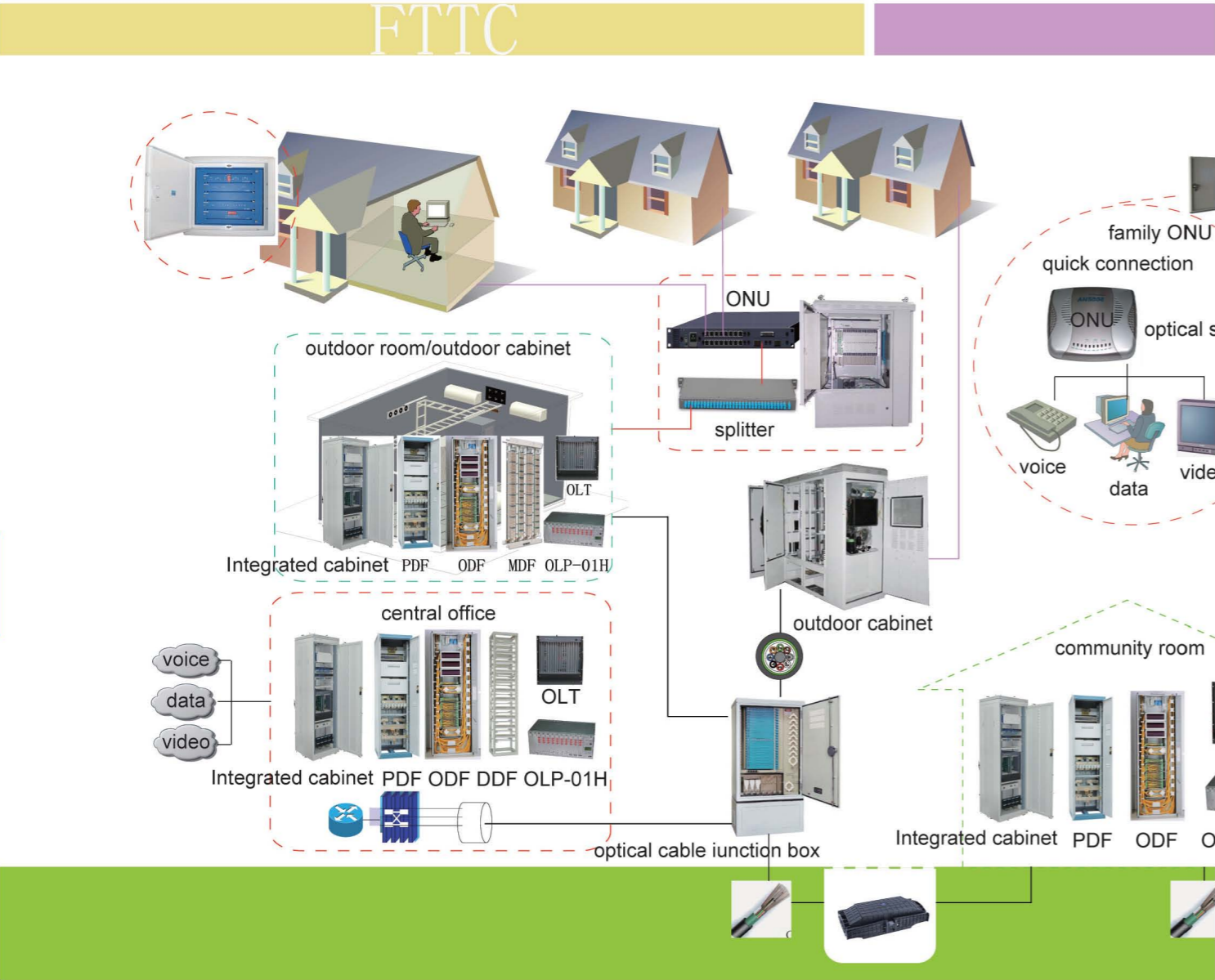
Description	Capacity (ports)	Dimension (H×W×D) mm
Termination frame	48	133×483×260
	72	222×483×260
	96	266×483×260
Splicing frame	48	89×483×260
	144	222×483×260
Termination/Splicing frame	24	133×483×260
	48	222×483×260
	72	355×483×260
Storage frame	2	89×483×260
	6	222×483×260

Dimension and Configuration of Frame

Type	Dimension (mm)			Max. Capacity (ports)	Remark
	H	W	D		
GPX2000	2600	732	300	576/432	Fiber/
	2200	732	300	432/360	Fiber/
	2000	732	300	360/336	Fiber/

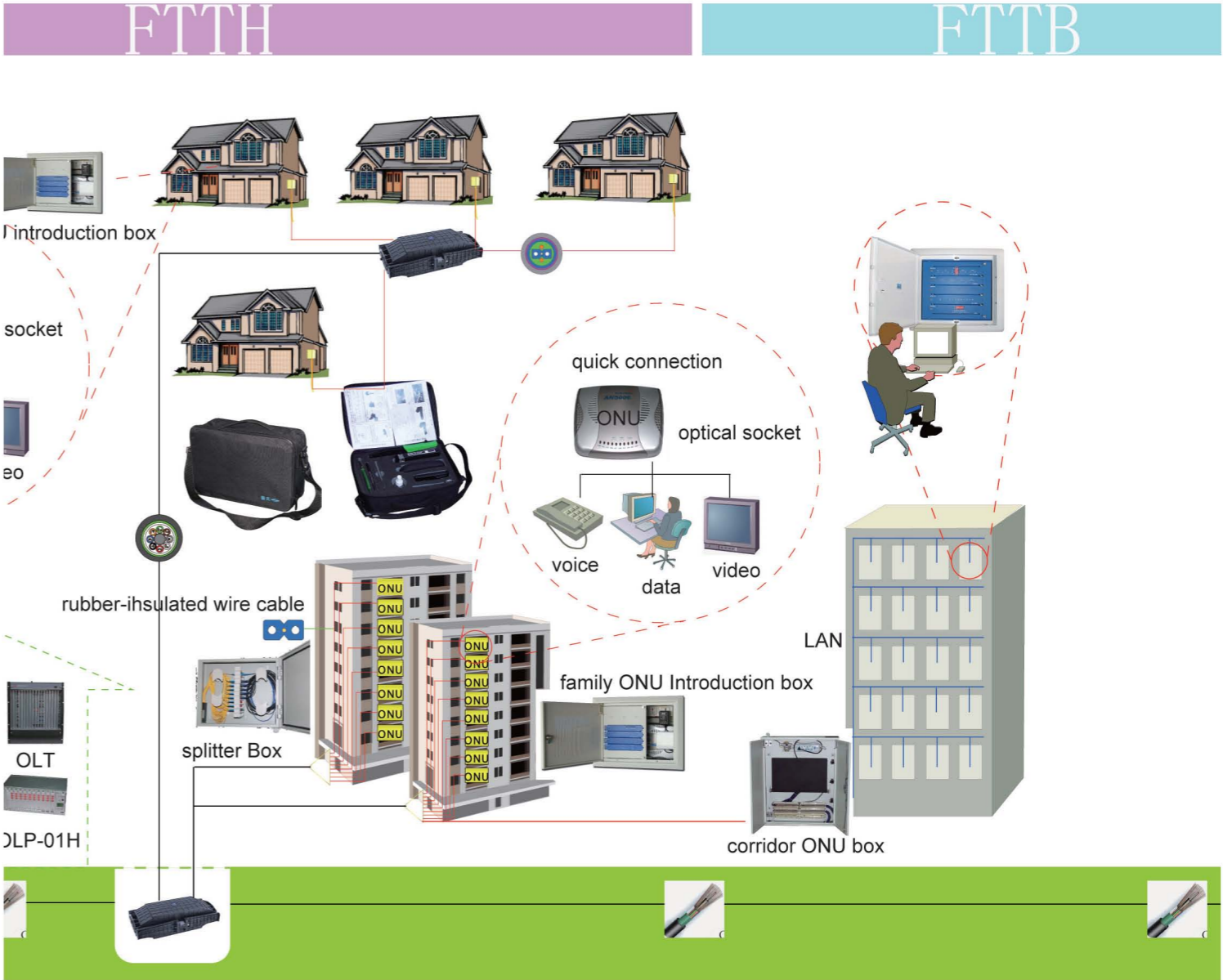
➤ Providing multi-services

Providing multi-services is one of the Important strategies of telecom operator all over the world in the process of transformation. Bundling various services together is not only can Enhance competitiveness and increase ARPU of operator's, but also can Enhance customer loyalty and Reduce customer churn rate. On providing multi-services, whether domestic operator or foreign operators, both of them put their eyes on IPTV service, but based on the present coding technique, IPTV business needs over 10M bandwidth especially HDTV, so raising speed of broadband is a strategic action of operators, if not they can not develop business of higher bandwidth and they also can not achieve the goal of strategic transformation. The DSL technique is fully exploit and it is limited to distance and business, FTTX will take the place of DSL technique, so FTTX is the inevitable trend of broadband development.



AS for different construction modes, we can adopt the following technologies, such as P2P, P2MP optical fiber technology based on PON, suitable xDSL and Ethernet-home-line technology according to different situations, such as the number of users of nodes, user bandwidth, pipeline resource, equipment construction cost, operation and maintenance cost. The saying is goes like that "the right is the best". The FTTx solution put forward by Nanjing Putian meet the demands of the four phases of Light into and copper back:

- 1)FTTC+xDSL mode is the first step of Broadband access equipment down, that means migrate route section to feeder section.
- 2)FTTB+xDSL+AP mode is the second step of Broadband access equipment down, that means migrate feeder section to route section.
- 3)FTTB+LAN construction mode is actually the construction mode of Ethernet access, it is the third step of promoting light into and copper back.
- 4)FTTH construction mode: FTTH or fiber to office is the Ultimate Mode of Fiber Access, it is ideal way of providing various high-bandwidth value-added services.



Plastic Alloy Adapter

Main features:

- Conform to the environmental protection requirements on communication products specified by China and EU (RoHS has offered solution to problems of existence of noxious substances contained in raw material for metal adaptor and its coating).
- Comply with the development of optical device and save national resource of copper.
- The imported high-molecular alloy material is of strong weather resistance, with fire retardation up to F-V0 grade. It is of plastic casting, with the stability of dimension higher than that of metal adaptor, and is applicable to butt joint of P C and A P connectors.
- The plastic-alloy ratio is 1/9 of that of copper, which can greatly lower requirements of O D on bearing capacity of floor in communication machinery rooms.
- When inserting or pulling out the connector, plastic-alloy adaptor can offer better protection to bushings in the cavity, so that they are break-resistant.



Access of Optical Fiber into Socket

Main features:

- Standard A8 overall dimension matches other household panel sockets.
- Adopting imported polycarbonate material which is of strong weather resistance and making the panel not easy to be aged and faded.
- Ultra-thin transparent design with a thickness of 22.5mm.
- Accessibility of single-core and double-core optical fiber.
- Apply to adaptors of FC, SC LC, FC/SC types.
- Satisfying the application of cold joiners, optical fiber flexible joint and swift coupling connector.



Normal Optical Fiber Devices

Normal and universal optical fiber devices produced by our company are exclusively designed for application fields such as telecommunication network, cable television, data communications and wide area networks. Such devices include all types of connector, adaptor, attenuator, tapping element, wavelength division multiplexer, fiber jumper, pigtail fiber, and waterproof pigtail cable. Technical indexes of the aforesaid products are higher than corresponding national standards.



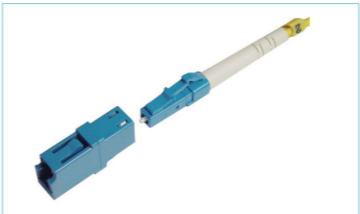
FC type



ST type



SC type



LC type



MU type



MTRJ type



Fixed optical attenuator



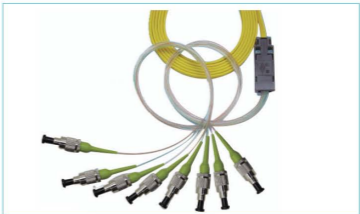
Adjustable optical attenuator



High return loss optical attenuator



Bunchy pigtail cable



Banded pigtail cable



Waterproof pigtail cable



PLC type optical tapping element



FBT type optical tapping element



Wavelength division multiplexer

➤ GP05 SERIES CABLE TERMINATION CABINET

▼ Features:

GP05 telecommunication optic cable termination box is used for the relay and storage of the fibers of outside optic cables and the pigtails of equipments. It can be wallmounted or footmoun-
-ted. The box is made of cold-rolled primes, and the splicing parts adopt laminated turnover structure, easy for operation.

▼ Technical specifications:

A. Operation conditions:

- 1)Atmospheric temperature: -25℃~ +40℃
- 2)Relative humidity: ≤85% (+30℃)
- 3)Air pressure: 70kPa ~ 106kPa

B. Insulation resistance:

The insulation resistance between metal component of optic termination and optic metal core, metal component of cable and metal component of cable, and metal component of cable and earth, should be over 2×10⁴MΩ.

C. Anti-voltage strength:

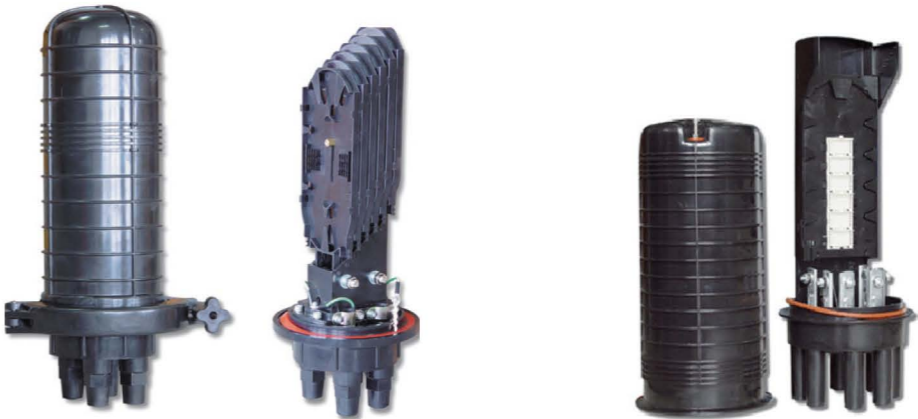
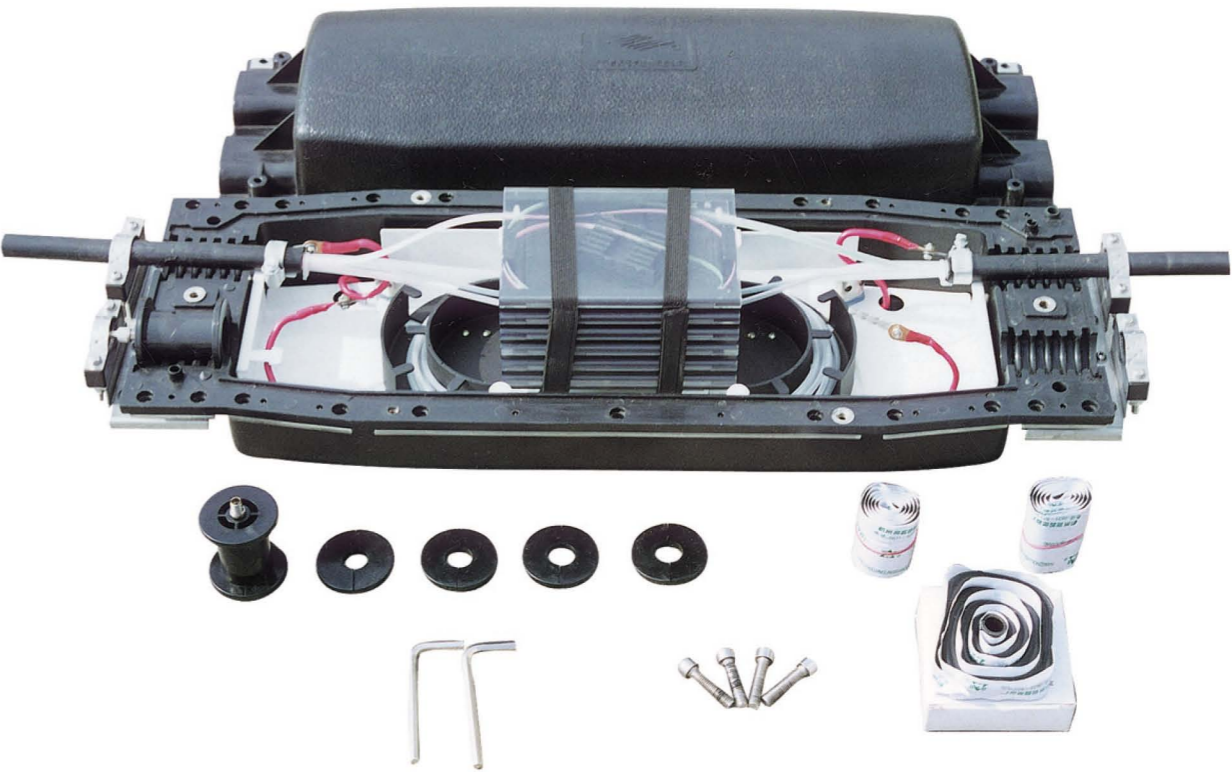
There are no break and arc in 1 minute under the voltage of 15KV between metal component of optic termination and optic metal core, metal component of cable and metal component of cable, and metal component of cable and earth.
The curvature radius of optic cable when it is stored is over 45mm.



Specification:

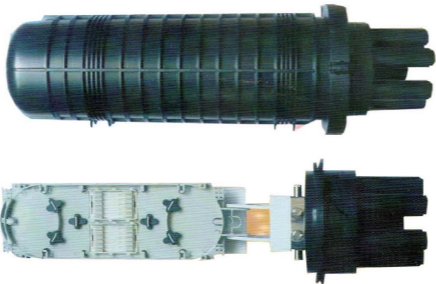
Model	Non-ribbon Cable	Capacity(part)		
		H	W	D
GP05-A	12	355	160	65
GP05-B	24	355	160	65
GP05-C	48	355	180	85

OPTICAL JOINT BOX



Specification

Item	GTJA8005
Dimension(mm)	220*567
Weight(Kg)	5
Cable Diameter(mm)	Φ7- Φ23
Cable Entry & Exit	3&3
Max Capacity of Cores Per Splice Tray	24(Single)
Max Capacity of Splice Trays/Closure	4
Max Capacity of Cores	96(single)
Sealing Structer of Cable Entry Port	Heat-shrinkable Sealing Structure
Sealing Structure	Silicon Gum Material



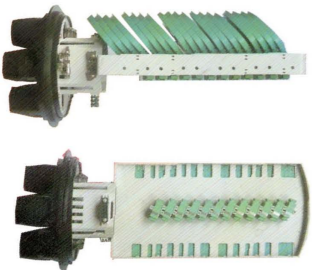
Product Description

The GTA8005 Closure allows three cables in and three cables out (with four stand-alone Cable Entry Ports and one oval cable entry port).Itaccommodates the splicing and branching of cable which is used in aerial-hanger,wall-mounting or direct buried.The Closure is an openable box which is made from high-quality PC.The closure and the foundation plate are sealed with Silicon Gum Material which fixes tightly by hoop.And the entry ports are sealed by heat-shrinkable tube.The Closure can be opened can be opened and used again.

Application:Aerial-hanger,wall-mounting,Direct Buried

Specification

Item	GTJA8006
Dimension(mm)	Φ278 560
Weight(Kg)	5
Cable Port(mm)	Φ7- Φ25
Cable Entry Ports	6&6
Max Capacity of Cores Per Splice Tray	12(Single)/4(Single)
Max Capacity of Splice Trays/Closure	20(12 Cores/Single)40(4Cores/Single)
Max Capacity	Single:240(12Cores)/160(4Cores), Ribbon 360(6Cores)/480(8Cores)/720(12Cores)
Sealing Structer of Cable Entry Port	Single Gum Material
Sealing Structure of box	Single Gum Material



Product Description

The GTJA8006 Closure allows six cable in and six cable out. It accommodates the splicing and branching of branching of cable which is used which is used in aerial-hanger.wall-mounting or direct buried.The Cloeure is an openable box which is made from high-quality PC.The closure andthe foundation plate are sealed with Silicon Gum Material which fixes tightly by hoop.And the enter ports are sealed are sealed by heat-shrinkable tube.The Closure can be opened and used again.

Application:Aerial-hanger, Wall-mounting,Direct Buried

Model XF5-17 Communication Cable Cable
Jointing Chamber

XF5-17 communication cable jointing chamber is the equipment (for finished-end cables)
Used at the junction of the trunk cable (for local call of cities or towns) and the distribution cable.
Within the chamber, the trunk cable and the distribution cable pairs can be connected at liberty by jumper wires.

The chamber body of this product is made of high-quality steel plate or stainless steel plate. A special surface coating is applied to its exterior, and therefore it has excellent performance of rust inhibition. The chamber body is rationally structured and its external appearance is artistic. When the chamber door is opened, the internal devices are all visible, so that the maintenance and operation can be carried out in an extremely convenient way.

This product is classified into ST003 type and ST003 10-pair spring-click modules. As the advanced air tightness principle in the world is applied to the splicing of core wires, the electric characteristics (such as contact resistance and etc.) of core wire splicing have come up to advanced standards in China.

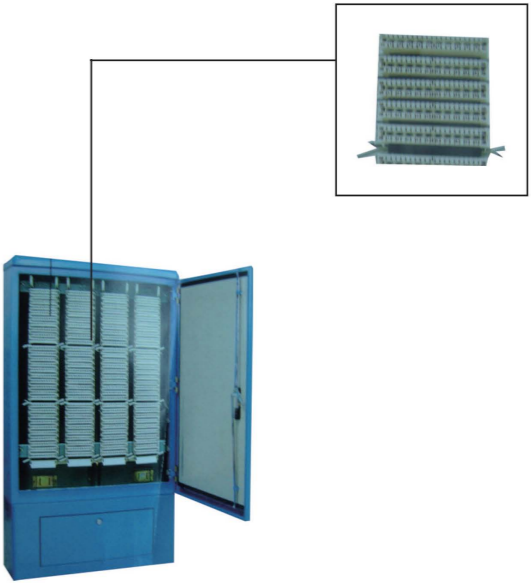




Figure 1 Outdoor Cabinet

▼ Operation Instruction

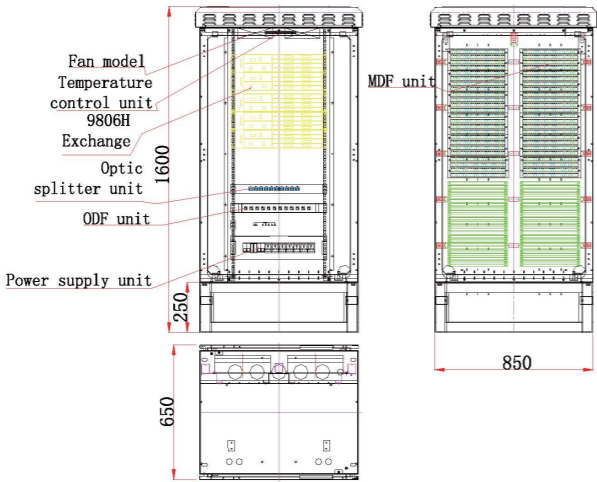


Figure 2 Scheme for Outdoor Cabinet Operation :1600(1000,1300,1850)×850×650mm

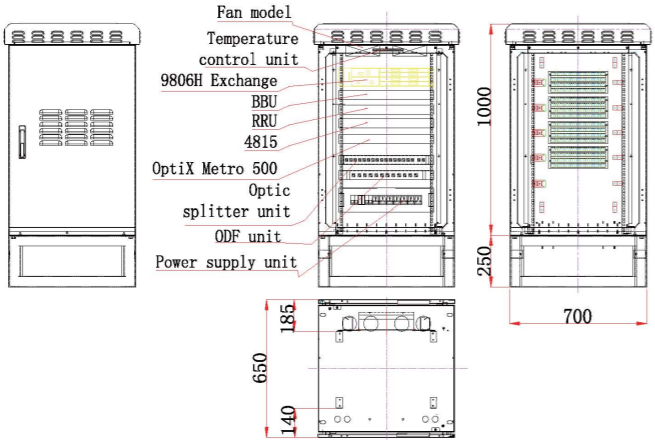


Figure 3 Scheme for Outdoor Cabinet Operation : 1250(1300)×700×650mm

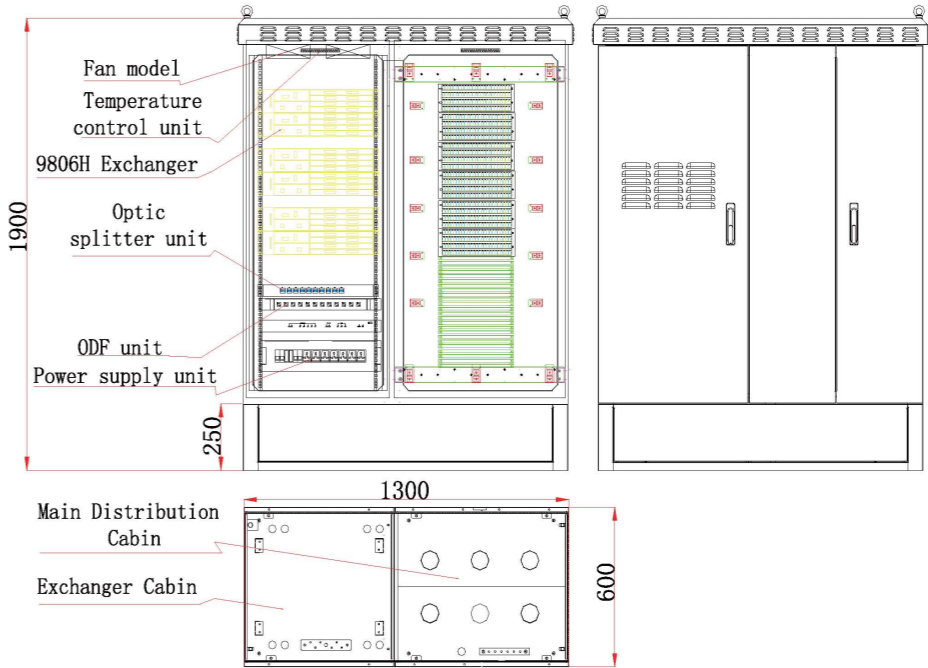


Figure 4 Scheme for Outdoor Cabinet Operation : 1650(1450)×1300×600mm



Figure 5 Main Distribution Model Application

STO-151 Test Connection Block

FA8-149 Protection Connection Block

•Test connection block consists of four separate test modules, each test module is 32 loops, up row is jump termination, down row is inside cable termination. Insert the disconnection jack, the outside and inside cable will be disconnected, use the testing jack cord could disconnect the test out cable and the inside cable.

•Protection connection block consists of four protection modules, at the left and back is row alarm.

•Each protection module is 25 loops, up row is jump termination, down row is outside cable termination, middle part is for protector installation.

•Dimension: Height*Width*Depth=10mm*280mm*70mm

•Dimension: Height*Width*Depth=104mm*280mm*70mm





Figure 6 12-Optical fiber Splice Tray & 2:32 Optical Fiber Splitter Model (19" installation) Operation Instruction



Figure 7 Power Supply with Lightning Protection design

▼ Operation Conditions

- Operation temperature: Indoor: -5℃ ~ +40℃ Outdoor: -40℃ ~ +60℃
- Relative humidity: Indoor: ≤85%(+30℃) Outdoor: ≤95%(+40℃)
- Atmosphere pressure: 70 kPa ~106 kPa

▼ Product Technical Performance

- Optic fiber Connectors loss (including Insertion, Changeability and Durability): ≤0.5dB
- Optic fiber Connectors Return loss: FC/PC≥40dB, FC/UPC≥50dB, FC/APC≥60dB SC/PC≥40dB, SC/UPC≥50dB, SC/APC≥60dB
- Optic fiber Connectors Connector life: > 1000 times
- Insulation resistance (between frame and protection grounding): >1000MΩ/500V(DC)
- Wire diameter range: - conductor diameter: φ 0.4 ~ φ 0.7 mm
- outer diameter: φ 0.7 ~ φ 1.5 mm
- Contact resistance: ≤2 mΩ
- Reliability: ≥200 times termination

▼ Applications

- Far off optic access network
- Video transmission network
- EPON access technology for FTTX network
- 3G network
- 4G network



Scheme 8 Workbench for Test



Scheme 9 Applications

▼ Product Type, Size and Capacity

Model	Outline Size(mm) Height×Width× Depth	Operating Temperature	Equipment power	Temperature Control Mode	Equipment Cabin Space	MDF Capacity	Installation Model	Lightning Protection Module
CP SC02 Type	1100×900 ×300	+62℃ /+55℃	600W	Fan type	4U	400L +512L	Wall or Pole	20KA
CP SC02 Type	1350×850 x650	+62℃ /+55℃	1200W	Fan type	26U	1000L +1536L	Ground	20KA
CP SC02 Type	1450×1300 x600	+62℃ /+55℃	1200W	Fan type	29U	1200L +1536L	Ground	20KA
CP SC02 Type	1650×1300 x600	+62℃ +55℃	1600W	Fan type	33U	1200L +1792L	Ground	20KA
CP SC02 Type	1650×1500 x600	+62℃ /+55℃	1600W	Fan type	33U	2400L +4096L	Ground	20KA
CP SC02 Type	1850×1500 x600	+62℃ /+55℃	2000W	Fan type	38U	2400L +5120L	Ground	20KA