

FIBER OPTIC PRODUCTS & SOLUTIONS

ver5.09

Splicing Machines

Testing Instruments

Cleaning & Tools

Passive components

Cable Management

Fiber Cables

CATV Equipments

FirstFiber.cn



FirstFiber

Fiber Optic Solutions Provider

FIRSTFIBER HAS DELIVERED FIBER OPTIC PRODUCTS WORLD-WIDE OVER MANY YEARS. AS A FULL-LINE DISTRIBUTOR AND MANUFACTURER, FIRSTFIBER MAINTAINS ONE OF THE LARGEST PRODUCT INVENTORIES IN THE INDUSTRY.

Reliable Solutions Provider Around the World !

- ☒ OEM and private label capabilities
- ☒ Wide product selection
- ☒ Engineering, production and application support expertise
- ☒ Managed costs provide the profits you deserve



FIRSTFIBER, a company devoting on the research & development, manufacture, and fiber connectivity network solutions for carriers, ISPs, content providers and contractors, has always engaged in high-performance and innovation.

FIRSTFIBER has been in the industry over many years. We have high standard in product manufacturing and foreign trade; and has accumulated ample logistical experience in international transportation. We aim to provide our customers with the product they need in a most competitive price.

All the products from FIRSTFIBER are tested individually and walk through the testing challenges. We set ourselves apart by investing in highly trained technical staff and state-of-the-art testing facilities to ensure the products consistency and reliability.

FIRSTFIBER and its highly trained sales staff are nationally and internationally recognized as the fiber industry's premier problem solvers.

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FF-710M

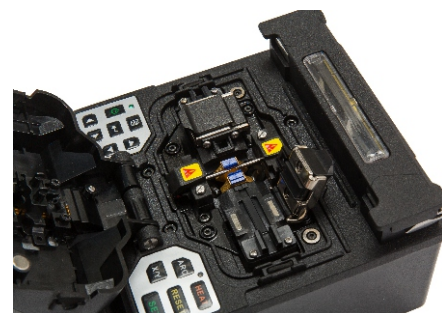
Cladding Alignment Fusion Splicer

FF-710M Fiber fusion splicer is a 4-motor fusion splicer with active V-groove design. The splicer can adjust fiber position more flexible and accurate. And its performance is very stable even in harsh environment.

It is specially designed for FTTx/FTTH projects, it could also be used in heights conveniently.

Specification

Applicable fibers	SM, MM, DS, NZ-DS(G655), EDF, Bending Loss Insensitive fiber(G657), Pigtail, Drop cable
Typical Splicing loss	0.02dB(SM),0.01dB(MM), 0.04dB(DS),0.04dB(NZDS)
Return loss	>60dB
Diameter of Cladding	80 -150μm
Diameter of Coating	160 - 900μm
Fiber Cleaved Length	10-16mm (coating diameter< 250μm), 16mm(coating diameter: 250-1000μm)
Splicing program	40 groups
Auto-heating	Available
Operation Mode	Manual, Automatic
Typical splicing time	7seconds
Tube heating time	26 seconds
Magnification	250X(X or Y view), 125X(X and Y view)
Viewing Method	2 CMOS cameras
Display	4.3 inch color LCD monitor
Storage of Splice Result	4000 results
Loss Evaluation	Available
Tension test	1.8-2.2N
Interactive Interface	GUI menu interface, easier operation
Battery capacity	4400mAh Li-battery
Power supply	Power charging adaptor input: AC100-240V(50/60HZ),output: DC11-13.5V
Electrode life	More than 4000 ARC, replaced conveniently
Data Interface	USB 2.0
Operating condition	Altitude: 0-5000m, Humidity: 0-95%, Temp: -10℃ ~ +50℃, Wind speed: max 15m/s
Dimension	200mm(L)x123mm(W)x95mm(H)
Weight	1.6kg (Including battery)
Package Size	Packed in carton with protection foam Size 43cm*37cm*27cm, G.W.6.3kg



Features

- Small, light, long battery life
- 4 motors for accurate alignment
- 250 times magnification of fiber cores
- 7s fast splicing, 26s intelligent heating
- 4400mAh Li-battery
- Inductive automatic heater
- 3 in 1 multi-function clamps, new waterproof structure

ORDERING INFORMATION

FF-710M Fusion Splicer

The Kit Includes: Splicer, Power Adapter, User Manual, Drop Cable Stripper, Cooling Tray, Stripper, Spare Electrodes, Fiber Cleaver, Strap, Carrying Case

FF-720H

Cladding Alignment Fusion Splicer

FF-720H optical fiber fusion splicer is a mini fiber splicing equipment which is compactly designed, easy to carry and operate. It has vivid exquisite image-forming system and high precision image processing technology on fiber alignment, which ensures its high proficiency in splicing and low loss. Its user-friendly operation interface and body design with principle of ergonomics greatly improve user experience.

It is equipped with large capacity lithium battery which is reliable guarantee for a long time field work.

FF-720H is a totally automatic, small, light and beautiful Optical fiber fusion splicer with high performance, high safety, low power consumption and can be easily operated.

Specification

Applicable fibers	SM(ITU-T G.652),MM(ITU-T G.651), DS(ITU-T G.653),NZDS(ITU-T G.655)
Typical Splicing loss	0.02dB(SM),0.01dB(MM), 0.04dB(DS),0.04dB(NZDS)
Return loss	>60dB
Diameter of Cladding	80 -150μm
Diameter of Coating	160 - 900μm
Fiber Cleaved Length	10-16mm (coating diameter< 250μm), 16mm(coating diameter: 250-1000μm)
Splicing program	40 groups
Auto-heating	Available
Operation Mode	Manual, Automatic
Typical splicing time	7seconds
Tube heating time	18 seconds
Magnification	250X(X or Y view), 125X(X and Y view)
Viewing Method	High resolution cameras
Display	4.3 inch color LCD monitor
Storage of Splice Result	4000 results
Loss Evaluation	Available
Tension test	1.8-2.2N
Interactive Interface	GUI menu interface, easier operation
Battery capacity	5200mAh Li-battery
Power supply	Power charging adaptor input: AC100-240V(50/60HZ),output: DC11-13.5V
Electrode life	More than 4000 ARC, replaced conveniently
Data Interface	USB 2.0
Operating condition	Altitude: 0-5000m, Humidity: 0-95%, Temp: -10℃ ~ +50℃, Wind speed: max 15m/s
Dimension	157mm(L)x136mm(W)x138mm(H)
Weight	2.0kg (Including battery)
Package	Packed in carton with protection foam



Features

- 1s boot up, 7s splicing, 18s heating
- Automatic ARC calibration
- Inductive automatic heater, industrial quad-core CPU
- Big capacity battery, more than 250 cycles splice & heat

ORDERING INFORMATION

FF-720H Fusion Splicer

The Kit Includes: Splicer, Power Adapter, User Manual, Drop Cable Stripper, Cooling Tray, Stripper, Spare Electrodes, Fiber Cleaver, Strap, Carrying Case

FF-730ARC

Core Alignment Fusion Splicer

FF-730ARC Fiber fusion splicer is with active V-groove design, it has flexible and stable performance when aligning fibers. It is with classic industrial design, user-friendly size and weight, easy operating GUI menu, convenient ARC automatic calibration function and high quality components. It is suitable for both indoor and outdoor fiber splicing projects.

Specification

Applicable fibers	SM(ITU-T G.652),MM(ITU-T G.651), DS(ITU-T G.653),NZDS(ITU-T G.655)
Typical Splicing loss	0.02dB(SM),0.01dB(MM), 0.04dB(DS),0.04dB(NZDS)
Return loss	>60dB
Diameter of Cladding	80 -150μm
Diameter of Coating	160 - 900μm
Fiber Cleaved Length	10-16mm (coating diameter< 250μm), 16mm(coating diameter: 250-1000μm)
Splicing program	40 groups
Auto-heating	Available
Operation Mode	Manual, Automatic
Typical splicing time	6 seconds
Tube heating time	20 seconds
Magnification	250X(X or Y view), 125X(X and Y view)
Viewing Method	2 high resolution cameras
Display	4.3 inch color LCD monitor
Storage of Splice Result	4000 results
Loss Evaluation	Available
Tension test	1.8-2.2N
Interactive Interface	GUI menu interface, easier operation
Battery capacity	5800mAh Li-battery
Power supply	Power charging adaptor input: AC100-240V(50/60HZ),output: DC11-13.5V
Electrode life	More than 3000 ARC, replaced conveniently
Data Interface	USB 2.0
Operating condition	Altitude: 0-5000m, Humidity: 0-95%, Temp: -10℃ ~ +50℃, Wind speed: max 15m/s
Dimension	149mm(L)x120mm(W)x127mm(H)
Weight	1.9kg (Including battery)
Package	Packed in carton with protection foam



Features

- 1s boot up, 6s splicing, 20s heating
- Real-time ARC auto calibration
- Automatic splicing and heating, and supporting user-defined
- Industrial quad-core CPU

ORDERING INFORMATION

FF-730ARC Fusion Splicer

The Kit Includes: Splicer, Power Adapter, User Manual, Drop Cable Stripper, Cooling Tray, Stripper, Spare Electrodes, Fiber Cleaver, Strap, Carrying Case

FF-740PRO

Core Alignment Fusion Splicer

FF-740PRO, with its portability and reliability, offers customers unexpected convenience under any splicing conditions. The fast heating and six motor alignment splicing get the job done quickly with stability. F2H-740PRO offers SOC capability, providing superior performance with reduced insertion loss and back reflection. FF-740PRO works for you in tough conditions, including wind, moisture, dust, etc.

Specification

Applicable fibers	SM, MM, DS, NZ-DS(G655), EDF, Bending Loss Insensitive fiber(G657), Pigtail, Drop cable
Average splice loss	0.02dB(SM),0.01dB(MM), 0.05dB(DS),0.04dB(NZDS)
Return loss	>60dB
Tension test	2.0N(200gf)(Standard)
sleeve length	20mm, 40mm, 60mm and more
Splice program	15 groups of preset programs, 1 group of manual setting
Language	English, Chinese, Korean, Russian, Spanish, Portuguese, German, French
Operation temperature	-25 ~ +50 °C
Power supply	AC adaptor: 85~260V input voltage Internal battery: 12V, 6Ah, up to 120 times of continuous splice and heat
Dimension/weight	142(D)×122(W)×138(H)mm/1.95kg (with battery)



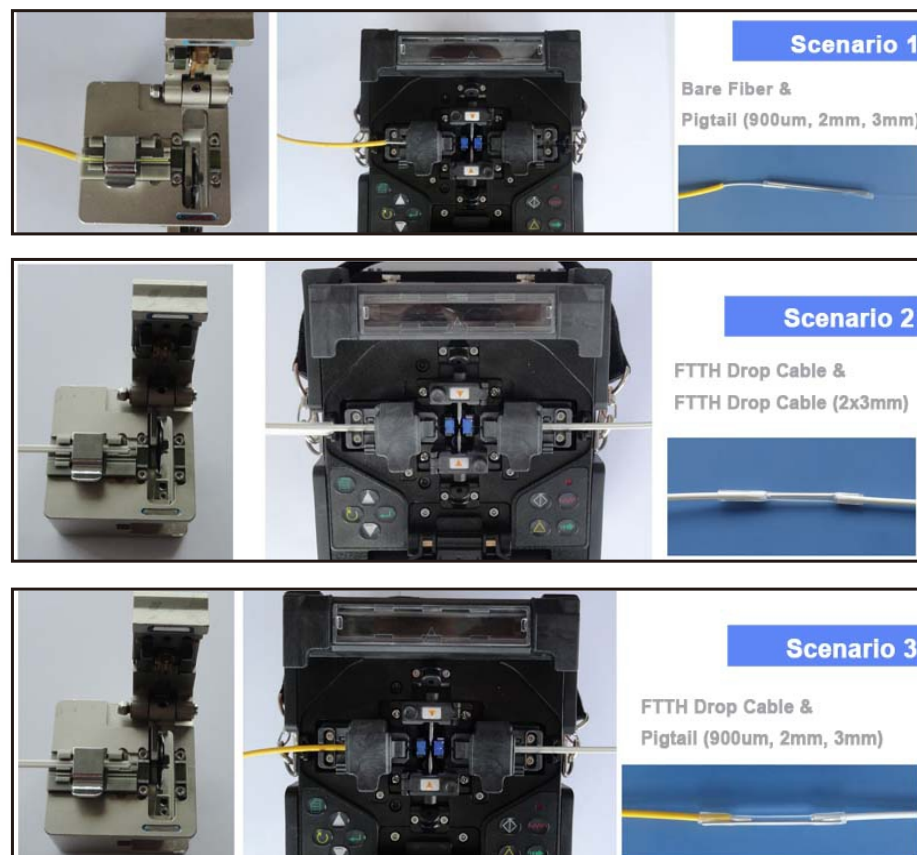
Features

- Compact & Light weight
- Fully Automatic Operation
- 5,000m altitude ensures Splice Quality
- SYSTEM TEST ensures the best working condition
- Color LCD monitor
- Pause function, convenient for scientific research
- Store 8,000 groups of splice results
- USB&DC interface
- High battery capacity, up to 120 times of continuous splice and heat

ORDERING INFORMATION

FF-740PRO Fusion Splicer

The Kit Includes: Splicer, Power Adapter, User Manual, Drop Cable Stripper, Cooling Tray, Stripper, Electrode, Fiber Cleaver, Case, SOC Holder



FF-790MAX

Core Alignment Fusion Splicer

FF-790MAX Fiber fusion splicer is a 6-motor fusion splicer with the latest fiber core to core alignment technology, it has very stable performance and low fusion loss, it is suitable for different fiber optical projects , including backbone, FTTx etc.

Specification

Applicable fibers	SM(ITU-T G.652),MM(ITU-T G.651), DS(ITU-T G.653),NZDS(ITU-T G.655)
Typical Splicing loss	0.02dB(SM),0.01dB(MM), 0.04dB(DS),0.04dB(NZDS)
Return loss	>60dB
Diameter of Cladding	80 -150μm
Diameter of Coating	160 - 900μm
Fiber Cleaved Length	10-16mm (coating diameter< 250μm), 16mm(coating diameter: 250-1000μm)
Splicing program	40 groups
Auto-heating	Available
Operation Mode	Manual, Automatic
Typical splicing time	6 seconds
Tube heating time	16 seconds
Magnification	250X(X or Y view), 125X(X and Y view)
Viewing Method	2 high resolution cameras
Display	5.0 inch color LCD monitor
Storage of Splice Result	4000 results
Loss Evaluation	Available
Tension test	1.8-2.2N
Interactive Interface	GUI menu interface, easier operation
Battery capacity	5200mAh Li-battery
Power supply	Power charging adaptor input: AC100-240V(50/60HZ),output: DC11-13.5V
Electrode life	More than 3000 ARC, replaced conveniently
Data Interface	USB 2.0
Operating condition	Altitude: 0-5000m, Humidity: 0-95%, Temp: -10℃ ~ +50℃, Wind speed: max 15m/s
Dimension	156mm(L)x148mm(W)x156mm(H)
Weight	2.45kg (Including battery)
Package	Packed in carton with protection foam



Features

- 1s boot up, 6s splicing, 16s heating
- Fiber type identification automatically
- Real-time ARC auto calibration
- Inductive automatic heater, separate charging battery
- Industrial quad-core CPU

ORDERING INFORMATION

FF-790MAX Fusion Splicer

The Kit Includes: Splicer, Power Adapter, User Manual, Drop Cable Stripper, Cooling Tray, Stripper, Spare Electrodes, Fiber Cleaver, Strap, Carrying Case

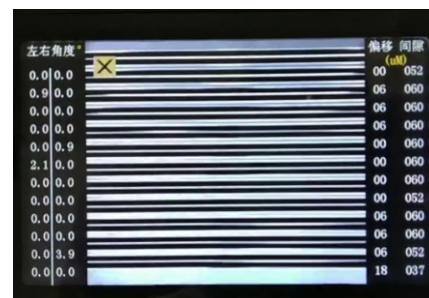
FF-880R

Ribbon Fiber Fusion Splicer

- Applicable to 2-12 ribbon fiber splicing
- Accurate alignment, world standard fusion loss
- 20s splicing time, heating 1-2/4-12 fiber ribbon 26s/40s
- Applicable to different types fibers (SM/MM/DS/NZDS)
- Ruggedized body, waterproof, anti-dust, anti-shock
- Pluggable Li-battery, support separate charging
- Easy to maintenance, easy to replace the electrodes
- USB port for software upgrading, records exporting
- Support 4000/100 groups fusion records/fusion images
- Comply with CE/Rohs international standard

Specification

Applicable fibers	SM(G.652) MM(G.651) DS(G.653) NZDS(G.655)
Typical Splicing loss	0.05dB(SM),0.02dB(MM), 0.08dB(DS),0.08dB(NZDS)
Return loss	>60dB
Fiber cores quantity	Single core, 2-12 cores
Diameter of Coating	250- 400μm
Splicing program	40 groups
Operation mode	Manual/ Automatic
Auto- heating	Available
Splicing program	Manual, Automatic
Typical splice time	20 seconds
Typical heating time	1-2 cores 26 seconds, 4-12 cores 40 seconds
Fiber magnification	25X
Viewing display	Dual high sensitivity camera, 5 inch 800*480 LCD Monitor
Data storage	4000 groups data records and 100 group images
Loss evaluation	Available
Tension test	1.8 to 2.2N
Interface	GUI menu interface, easy for operation
Battery capacity	5200mAh Li-battery 150 cycles splicing and heating
Power supply	Adaptor, input: AC100-240V(50/60HZ), output: DC11-13.5V
Electrode life	More than 3000 ARC discharges, easy to replace
Terminals	USB 2.0 port
Operating Environment	Altitude:0-5000m, Humidity:0-95%, Temperature:-10°C to +50°C; Wind: max 15m/s
Dimension	155mm (L)×144mm (W)×155mm (H)
Weight	2.3kg (including battery)



ORDERING INFORMATION

FF-880R Ribbon Fusion Splicer

The Kit Includes: Splicer, Power Adapter, User Manual, Drop Cable Stripper, Cooling Tray, Stripper, Spare Electrodes, Strap, Carrying Case

FF-980PRO

Optical Time Domain Reflectometer OTDR

As fiber optics plays more and more important role in modern telecommunication and CATV networks, the requirements to the construction, test and maintenance of fiber optics links also become more prominent.

FF-980PRO OTDR handheld design, compact and lightweight, easy to carry. Event information through TFT color display and data storage capabilities. Through the USB interface, the test data can be uploaded to the PC, to facilitate the post-processing, archiving and printing.

Specification

General	
Display	IPS Touch Screen, 800x400px, 4 inch
Interface	1×USB, 1xOTDR, 1xVFL, 1xOPM, 1xCharging Port
Power Supply	7.4V/4400mAH(dc), 100V(ac) to 240V(ac), 50~60Hz
Battery	4400mAH Lithium battery Operating Time: 8 hours, Telcordia GR-196-CORE
Power Saving	Backlight off, Auto shutdown
Data Storage	Internal memory: 200 curves
Language	English in default
Operating temperature	-10℃~+50℃, ≤95% (non-condensation)
Storage Temperature	-20℃~+75℃, ≤95% (non-condensation)
OTDR Testling parameter	
Pulse Width	5ns to 20us
Distance Range	3m to 60km
Dynamic Range	22/20dB
Sampling Resolution	Minimum 16cm
Sampling Point	Maximum 65K
Linearity	≤0.05dB/dB
Averaging Time	5s, 15s, 30s, 1min, 2min, 3min
Distance Accuracy	±(1m+measuring distance×3×10 ⁻⁵ +sampling resolution) (excluding IOR uncertainty)
IOR Setting	1.0000~2.0000
Unit	km, kft, ft
OTDR Trace Format	Telcordia universal, SOR, issue 2(SR-4731)
Event/Atten.Dead Zone	2/12m
Visual Fault Loctor	
Wavelength(±20nm)	650nm
Output Power	10mW,CLASSII B
Optical Power Meter	
Wavelength	850/1300/1310/1490/1550/1625nm
Testing Range	-70dBm ~ +10dBm
Light Source	
Wavelength	1310/1550nm
Power Level	-5dBm
Accuracy	±0.04@20℃@15min



Features

- Integrated design, smart & rugged
- Shockproof, outdoor enhanced
- FC / ST / SC adapters exchangeable
- Automatic and manual test function
- 4 in 1 functions(OTDR OPM OLS VFL)
- OTDRviewer software for data analysis

Application

- FTTX testing and maintenance
- CATV network testing
- Access network testing
- LAN network testing
- Metro network testing
- Lab and Factory testing
- FTTA troubleshooting

ORDERING INFORMATION

FF-980PRO OTDR

The Kit Includes: OTDR, FC/SC/ST Connector, User Manual, USB Cord, OTDRviewer Software, Power Charging Adapter, Inner Carrying Case, Certificate of Calibrate, Plastic Carrying Suitcase (optional)

FF-980REV

Optical Time Domain Reflectometer OTDR

As fiber optics plays more and more important role in modern telecommunication and CATV networks, the requirements to the construction, test and maintenance of fiber optics links also become more prominent.

FF-980REV OTDR handheld design, compact and lightweight, easy to carry. Event information through TFT color display and data storage capabilities. Through the USB interface, the test data can be uploaded to the PC, to facilitate the post-processing, archiving and printing.

Specification

General	
Display	Colorful Screen, 3.5 inch
Interface	1xUSB, 1xOTDR, 1xVFL, 1xOPM, 1xCharging Port 1xRJ45 Port, 1x Memory Card Port
Power Supply	100V(ac) to 240V(ac), 50~60Hz
Battery	4000mAH Lithium battery Operating Time: 12hours, Telcordia GR-196-CORE
Power Saving	Back light: 0% to 100%, Auto off: 10 to 60mins
Data Storage	Internal memory: 500 curves, TF card supported
Language	English in default, Russian for Option
Operating temperature	-10℃~+50℃, ≤95% (non-condensation)
Storage Temperature	-20℃~+75℃, ≤95% (non-condensation)
OTDR Testling parameter	
Pulse Width	3ns to 10us
Distance Range	Max. 64km
Dynamic Range	24/22dB
Sampling Resolution	Minimum 16cm
Sampling Point	Maximum 65K
Linearity	≤0.05dB/dB
Averaging Time	5s, 15s, 30s, 60s, 120s, 180s
Distance Accuracy	±(1m+measuring distance×3×10 ⁻⁵ +sampling resolution) (excluding IOR uncertainty)
IOR Setting	1.0000~2.0000
Unit	km
OTDR Trace Format	Telcordia universal, SOR, issue 2(SR-4731)
Event/Atten.Dead Zone	3/8m
Visual Fault Loctor	
Wavelength(±20nm)	650nm
Output Power	10mW,CLASSII B
Optical Power Meter	
Wavelength	850/1300/1310/1490/1550/1625nm
Testing Range	-50dBm ~ +26dBm
Light Source	
Wavelength	1310/1550nm
Power Level	-5dBm
Modulation Frequency	270Hz, 330Hz, 1kHz, 2kHz

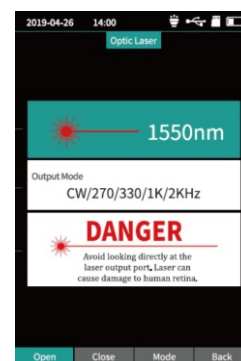
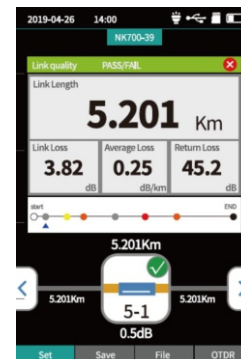
OTDR | EVENT MAP

OLS | OPM | VFL

RJ45 Ethernet Cable Sequence

Ethernet Cable Distance

Ethernet Cable Tracker | LED Light



ORDERING INFORMATION

FF-980REV OTDR

The Kit Includes: OTDR, FC/UPC Connector, SC/UPC Connector, User Manual, USB Cord, OTDRviewer Software, Carrying Case, Certificate of Calibrate, Ethernet Signal Detector, Warranty Card

FirstFiber

FF-990PRO series OTDR

Convenient multi-function fiber optic tester
Design for tough outdoor environment



FEATURES

- Integrated design, smart and rugged
- Shockproof, outdoor enhanced
- FC / ST / SC Connectors exchangeable
- Automatic and manual test function
- VFL (Visual Fault Location) function
- OTDR Viewer software for data analysis

APPLICATIONS

- FTTX testing and maintenance
- CATV network testing
- Access network testing
- LAN network testing
- Metro network testing
- Lab and Factory testing
- FTTA troubleshooting

Ready for all kinds of environment.

FF-990PRO series OTDR is specially designed for tough outdoor jobs. Lightweight, easy operation, low-reflection LCD and more than 8 hours working period make it be perfect in filed testing. FF-990PRO is qualified in the installation and maintenance of FTTx/Access optical networks.

FF-990PRO series OTDR could display Splice loss, Connector loss, Fiber attenuation, Reflection of points, Link optical return loss and distance to fiber events etc. With test information in a smart way, user could get detailed information immediately.

Simplified display style and structured menus help effective in reducing the time of study.

Multi Functions

ALL in ONE

OTDR

Light Source

Power Meter

VFL^①

Inspector^②

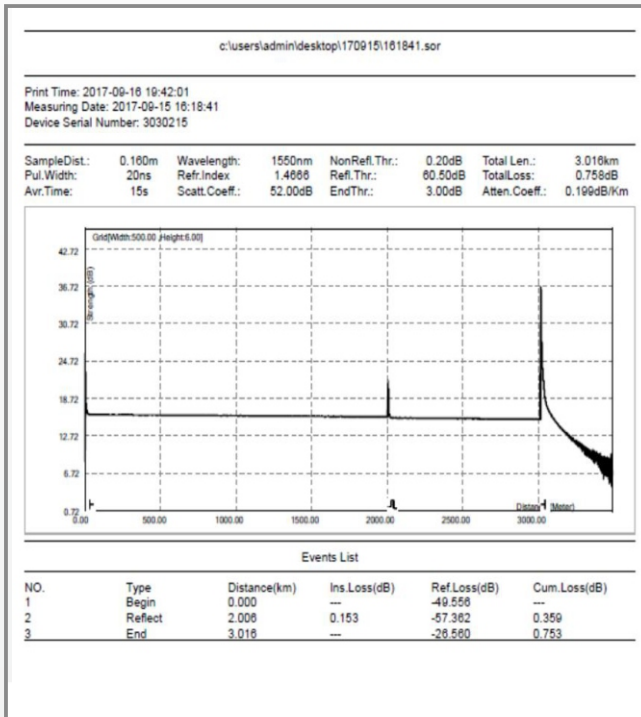
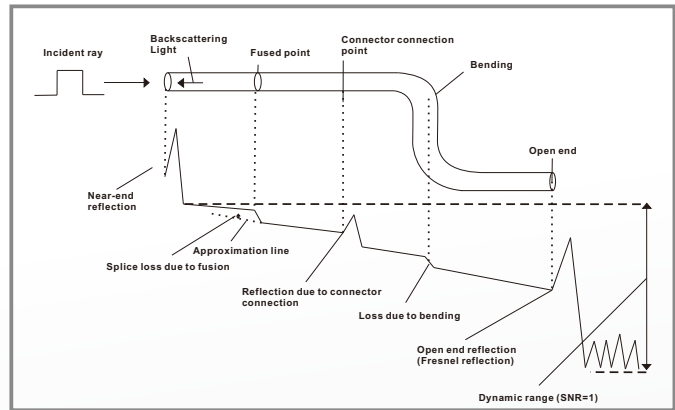
Event Map^③

I.L. Testing^④

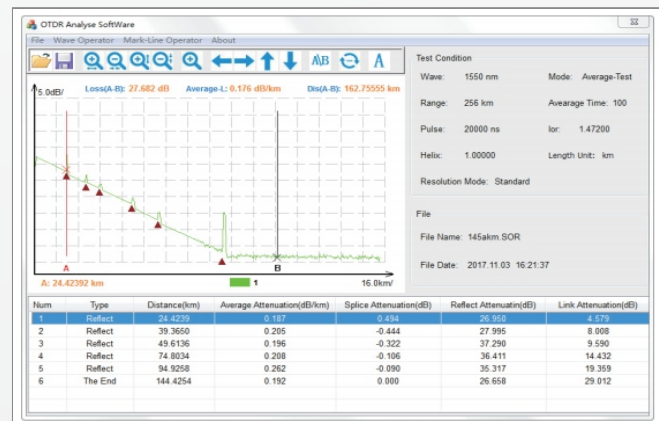
Report Print^⑤

- ① VFL is short for Visual Fault Locator which shines out red light (650nm) for locating cable break point.
- ② The inspector is used to check fiber connector's endface. Inspection probe is sold separately.
- ③ Events Map displays human friendly icon to indicate events.
- ④ OPM and OLS can be turned on same time to test insertion loss.
- ⑤ The OTDR comes with PC software to help print out test reports.

Data Display and Management



● Printed Report



● OTDRviewer PC Software

VFL Module

Wavelength(±20nm)	650nm
Power	5mW, CLASS II B
Range	10km
Launching Mode	CW/2Hz

Specification

General

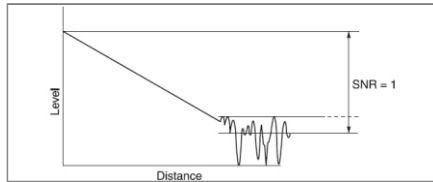
Dimension	227×160×70mm 0.8 kg(battery included)
Display	TFT-LCD with LED backlight (Touch Screen)
Interface	1×USB, 1×mini USB, 2×OTDR port, 1×VFL port, 1×Power Meter Port, 1×Charging Port
Power Supply	10V(dc), 100V(ac) to 240V(ac), 50~60Hz
Battery	Lithium battery (with air traffic certification) Operating Time: 8 hours, Telcordia GR-196-CORE Charging time: <3 hours (power off)
Power Saving	Backlight off: Disable/1 to 99minutes Auto shutdown: Disable/1 to 99minutes
DataStorage	Internal memory: 4GB (about 40,000 groups of curves)
Language	English in Default
Environmental Conditions	Operating temperature and humidity: -10℃~+50℃, ≤95% (non-condensation) Storage temperature and humidity: -20℃~+75℃, ≤95% (non-condensation) Proof: IP65(IEC 60529)
Accessories	Standard: Main unit, power adapter, SC Adapter, ST Adapter, FC adapter, USB cord, User guide, CD disk, carrying case Optional: LC Adapter, Bare fiber adapter

Test parameter

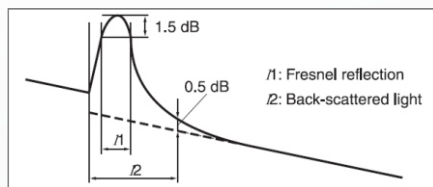
Pulse Width	3ns,5ns,10ns,30ns,50ns,80ns,160ns,320ns,500ns,800ns,1μs,3μs,5μs,8μs,10μs,20us
Distance Range	0.5km, 1km, 2km, 4km, 8km, 16km, 32km, 64km, 128km, 256km
Sampling Resolution	Minimum 16cm
Sampling Point	Maximum 128,000 points
Linearity	≤0.05dB/dB
Averaging Times	1 to 3000
Auto Off	off, 15mins, 30mins, 1hours, 2hours, 4hours
Distance Accuracy	$\pm(0.75m + \text{measuring distance} \times 3 \times 10^{-5} + \text{sampling resolution})$ (excluding IOR uncertainty)
Screen Backlight	≤100
IOR Setting	1.0000~2.0000, 0.00001 step
Units	km, mi, ft
OTDR Trace Format	Telcordia universal, SOR, issue 2(SR-4731) OTDR: User selectable automatic or manual set-up Auto or manual operation, displayed in table format
Fiber Event Analysis	User defined PASS/FAIL thresholds: -Reflective and non-reflective events: 0.01 to 1.99dB (0.01dB steps) -Reflective: 0.01 to 32dB (0.01dB steps) -Fiber end/break: 3 to 20dB (1dB steps)

Notes

- Dynamic range is measured with maximum pulse width, averaging time is 3 minutes, SNR=1; The level difference between the RMS noise level and the level where near end back-scattering occurs.



- Event dead zone is measured with pulse width of 10ns; attenuation dead zone is also measured with pulse width of 50ns.



Ordering Information

Model#	Testing Wavelength	Dynamic Range	Event/ Attenuation Dead Zone
FF-990PRO-S0	1310/1550nm	32/30dB	1/8
FF-990PRO-S1	1310/1550nm	35/33dB	1/6m
FF-990PRO-S2	1310/1550nm	38/36dB	0.8/6m
FF-990PRO-S3	1310/1550nm	42/40dB	0.8/6m
FF-990PRO-S4	1310/1550nm	45/43dB	0.8/6m
FF-990PRO-M1	850/1300nm	28/26dB	1/6m
FF-990PRO-T1	1310/1490/1550nm	37/35/35dB	0.8/6m
FF-990PRO-T2	1310/1550/1625nm	37/35/35dB	0.8/6m
FF-990PRO-Q1	850/1300/1310/1550nm	28/26/37/35dB	1/6m
* FF-990PRO-PD1	1310/1550nm	37/35dB	0.8/6m
* FF-990PRO-PS1	1625nm	38dB	0.8/6m
* FF-990PRO-PT1	1310/1550/1625nm	38/35/35dB	0.8/6m

**Optimized for EPON GPON Fiber Network
The Kit Includes: OTDR, FC/SC/ST Connector, User Manual,
Touch Pen, USB Disc OTDRviewer Software, Power Charging Adapter,
Cleaning Tool, Carrying Case, Certificate of Calibrate*

★ Note: Model#FF-990PRO-S0 does not support OLT and OFD functions.

8000MAX High Accurate OTDR

OPTIMIZED FOR FTTx/MDU FIBER DEPLOYMENTS
AND TROUBLESHOOTING, SUITABLE FOR METRO



Fully featured, high accurate, dedicated OTDR with human engineering design, suitable for metro and optimized to test through optical splitters, for seamless end-to-end FTTx characterization and troubleshooting.

FEATURES

- Built-in Optical Light Source (OLS) Module
- Built-in Optical Power Meter (OPM) Module
- Built-in Visual Fault Locator (VFL) Module
- Intelligent Event Identifying Function
- FC/SC/ST Connectors Interchangeable
- Auto/manual/Real Time/Average Time Testing
- Dual-battery for Heavy Testing Task
- OTDR Viewer software for data analysis

APPLICATIONS

- FTTx Testing and Maintenance
- CATV Network Testing
- Access Network Testing
- LAN Network Testing
- Metro Network Testing
- Lab and Factory Testing
- FTTA Troubleshooting

THE HANDHELD OTDR... REINVENTED

The 8000MAX series is handy, lightweight and rugged enough for any outside plant environment. With a 5.6-inch, outdoor-enhanced touchscreen—the most efficient handheld display in the industry—it delivers an unprecedented user experience. Its intuitive concise GUI ensures a fast learning curve. Plus, its new and improved environment offers icon-based functions, instant boot-up, as well as improved auto and real-time modes.

The 8000MAX series is a line of genuine high-performance OTDRs from the world's leading manufacturer. It delivers FirstFiber's tried and true OTDR quality and accuracy along with the best optical performance for right-first-time results, every time.

The amazing 8-hour battery life will never let a technician down, and the plug-and-play hardware options like fiber inspection probe and USB tools, make every technician's job easier.

Most importantly, the 8000MAX series is finally bringing the Event Map, an intelligent OTDR-based application, to the handheld market. This advanced software turns even the most complex trace analysis into a simple, one-touch task.

Multi Functions

ALL in ONE

OTDR

Light Source

Power Meter

VFL¹

Inspector²

Event Map³

I.L Testing⁴

Report Print⁵

- ¹ VFL is short for Visual Fault Locator which shines out red light (650nm) to locate cable break point.
- ² The inspector is used to check fiber connector's endface. Inspection probe is sold separately.
- ³ Events Map displays human friendly icon to indicate events.
- ⁴ OPM and OLS can be turned on at same time to test insertion loss.
- ⁵ The OTDR comes with PC software to help print out test reports.

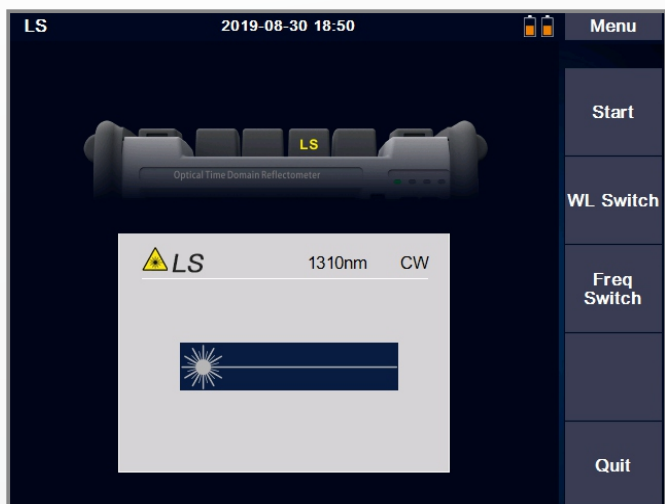
Functions Display



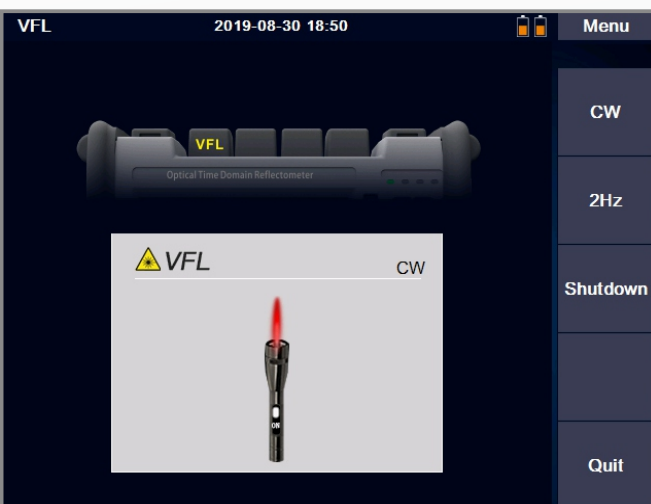
● OTDR



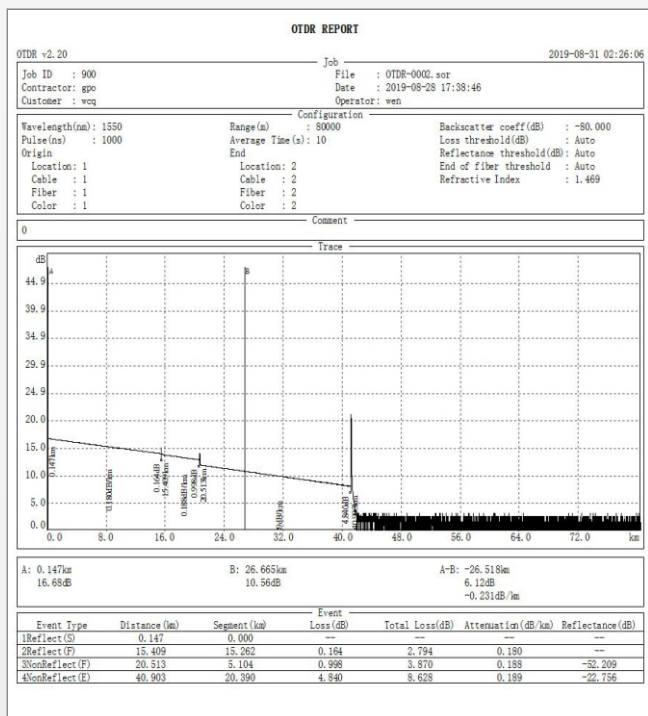
● Optical Power Meter



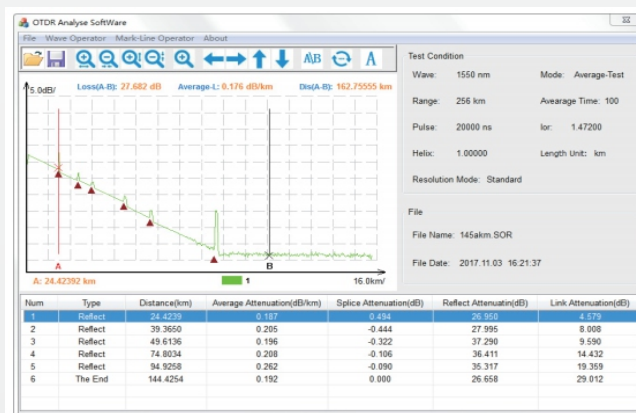
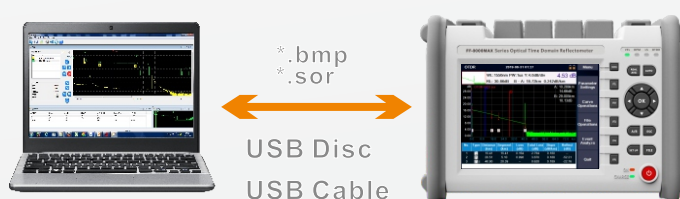
● Optical Light Source



● Visual Fault Locator



● Printed Testing Report



● PC Software

Specification

General

Size/Weight	215×155×68mm 1.1kg (Battery included)
Display	5.6 inch touch-sensitive TFT-LCD Screen
Interface	1×USB, 1×mini USB, 2×OTDR port, 1×VFL port, 1×Power Meter Port, 1×Charging Port
Power Supply	10V(dc), 100V(ac) to 240V(ac), 50~60Hz 7.4V/2500mAh x 2 lithium battery (with air traffic certification)
Battery	Operating Time: 8 hours, charging time: <3 hours
Power Saving	Back light: Common/Highligh/Power saving/Customized Auto power off: Never/1min/5min/10min/30min/60min
Data Storage	Internal memory: 16GB (about 100,000 curves)
Language	English, Spanish, French, Korean, Italian
Environmental Conditions	Operating temperature and humidity: -10℃~+50℃, ≤95% (non-condensation) Storage temperature and humidity: -20℃~+75℃, ≤95% (non-condensation)

OTDR Module

Pulse Width	3ns, 5ns, 10ns, 20ns, 50ns, 100ns, 200ns, 500ns, 1μs, 2μs, 5μs, 10μs, 20μs
Distance Range	100m, 500m, 2km, 5km, 10km, 20km, 40km, 80km, 120km, 200km, 250km
Sampling Resolution	Minimum 5cm
Sampling Point	Maximum 256,000 points
Linearity	≤0.05dB/dB
Averaging Time	10s, 15s, 30s, Real Time, Customized
Scale Indication	X axis: 4~70m/div, Y axis: 0.09~5dB/div
Distance Accuracy	±(1m+measuring distance×3×10 ⁻⁵ +sampling resolution) (excluding IOR uncertainty)
Loss Threshold	0.01dB
Loss Resolution	0.001dB
Distance Resolution	0.01m
IOR Setting	1.2000~1.5999, 0.0001 step
Units	km, miles, kfeet
OTDR Trace Format	Telcordia universal, SOR, issue 2(SR-4731)

VFL Module

Wavelength	650nm
Output Power	10mw, CLASSIII B
Range	12km
Launching Mode	CW/2Hz

OPM Module

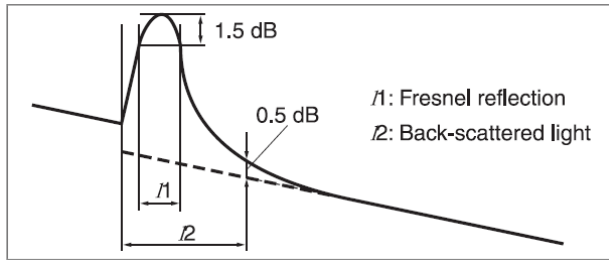
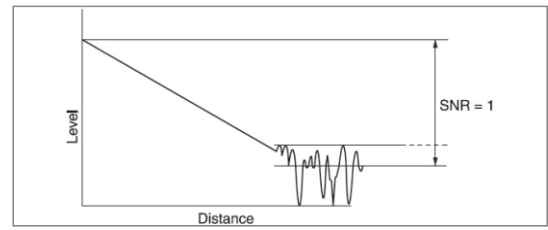
Wavelength	850/1300/1310/1490/1550/1625/1650nm
Test Range	-70~+ 10dBm
Resolution	0.01
Accuracy	±0.35dB±1nW
Modulation	270/1k/2k Hz, Pi≥-40dBm

OLS Module

Wavelength	Same as OTDR Wavelengths
Output Power	-5dBm±1dB
Output mode	CW/270/1k/2k Hz

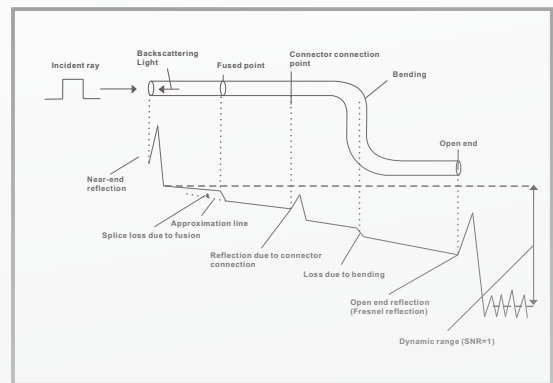
Notes

Dynamic range is measured with maximum pulse width, averaging time is 3 minutes, SNR=1; The level difference between the RMS noise level and the level where near end back-scattering occurs.



Event dead zone is measured with pulse width of 10ns; attenuation dead zone is also measured with pulse width of 50ns.

Instructions of OTDR Curves and Events that displayed on OTDR screen.



Ordering Information

Model#	Testing Wavelength	Dynamic Range	Event/ Attenuation Dead Zone
8000MAX-S1	1310/1550nm	32/30dB	0.8/4
8000MAX-S2	1310/1550nm	35/33dB	0.8/4m
8000MAX-S3	1310/1550nm	37/35dB	0.8/4m
8000MAX-T2	1310/1550/1625nm	35/33/32dB	0.8/4m
8000MAX-T3	1310/1550/1650nm	35/33/32dB	0.8/4m
8000MAX-M1	850/1300nm	20/26dB	1.2/5m
8000MAX-Q1	1310/1550/850/1300nm	28/26/20/26dB	0.8/4m, 1.2m/5m
8000MAX-Q2	1310/1550/850/1300nm	35/32/20/26dB	0.8/4m, 1.2m/5m

The Kit Includes: OTDR, FC/SC/ST Connector, User Manual, Touch Pen, USB Disc OTDRviewer Software, Power Charging Adapter, Cleaning Tool, Carrying Case, Certificate of Calibrate

★ Note: Model#FF-990PRO-S0 does not support OLT and OFD functions.

OTDR Accessories

OTDR Launch Cable Box



Fiber Ring



FF-LB0500 Launch Box

Fiber Reel



ORDERING INFORMATION

FF-LB0500 Launch Box 500m
FF-LB1000 Launch Box 1km

FF-LR0500 Fiber Ring 500m
FF-LR1000 Fiber Ring 1km

FF-BFR001 Fiber Reel 1km
FF-BFR002 Fiber Reel 2km
FF-BFR003 Fiber Reel 3km
FF-BFR004 Fiber Reel 4km
FF-BFR005 Fiber Reel 5km
FF-BFR006 Fiber Reel 6km
FF-BFR007 Fiber Reel 7km
FF-BFR008 Fiber Reel 8km
FF-BFR009 Fiber Reel 9km
FF-BFR010 Fiber Reel 10km
FF-BFR015 Fiber Reel 15km
FF-BFR020 Fiber Reel 20km
FF-BFR025 Fiber Reel 25km
FF-BFR030 Fiber Reel 30km
FF-BFR050 Fiber Reel 50km

OTDR Adapter

FC



ST



SC



LC



FF-OTFC OTDR FC Connector
FF-OTST OTDR ST Connector
FF-OTSC OTDR SC Connector
FF-ST LC OTDR LC Connector

FirstFiber

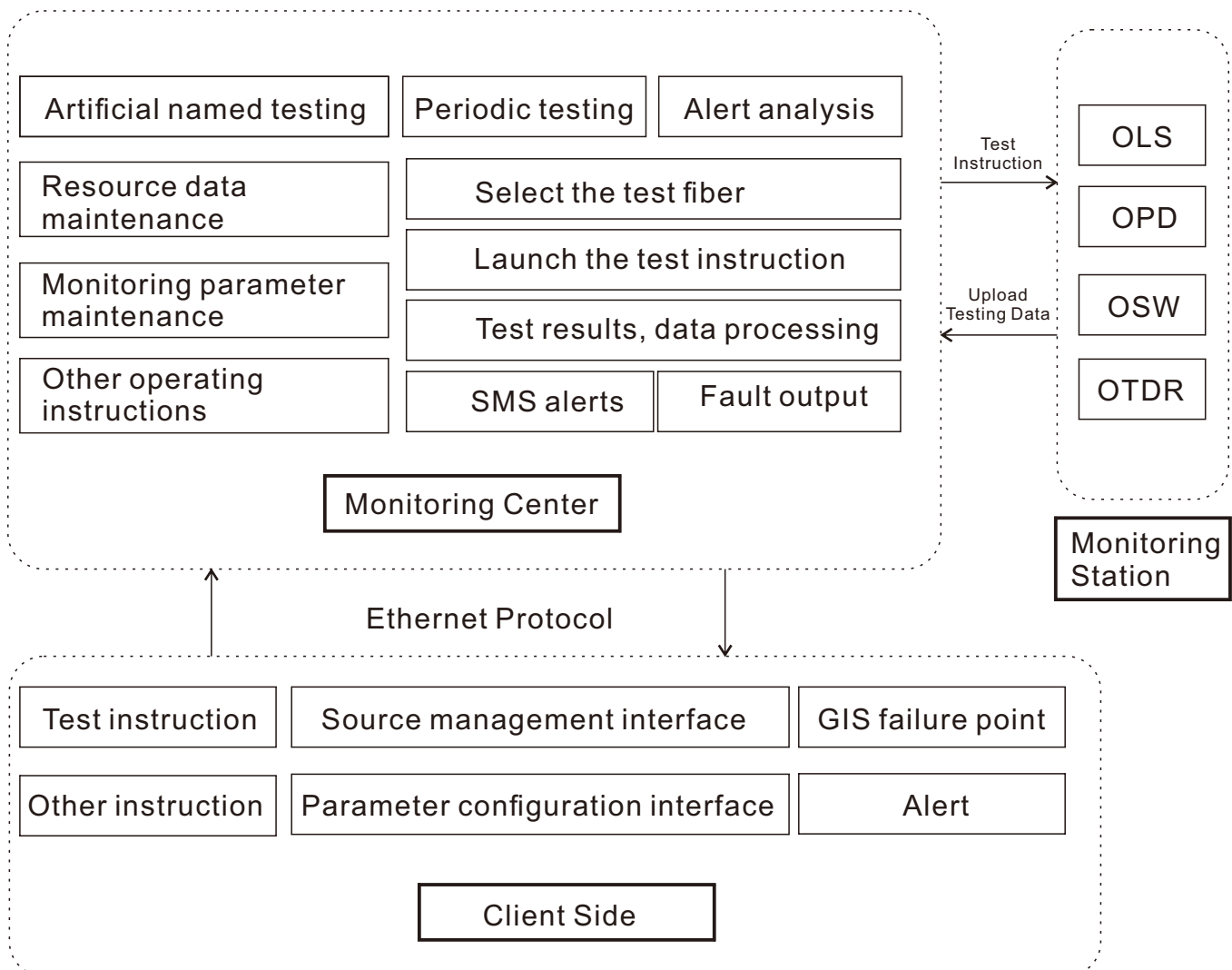
Optical Cable Monitoring System

As the scale of long-distance fiber optic transmission and the local network are rapidly expanded, in order to protect communications, to improve the availability of fiber optic cables, and to compensate for the shortcoming of the relatively insufficient maintenance strength, adoption of a centralized maintenance measure is required.

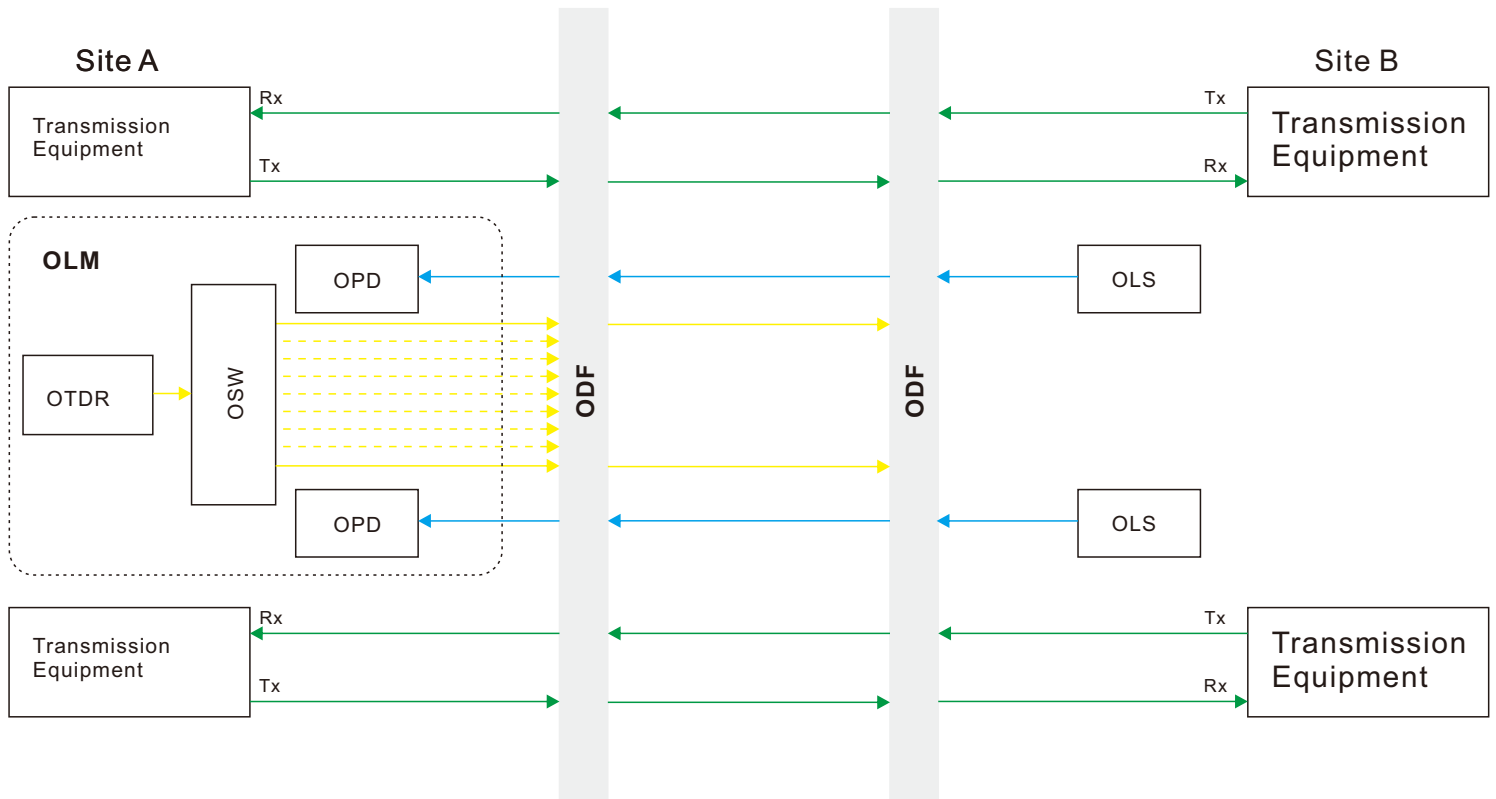
On the one hand it should inspect the operation conditions of fiber-optic network to detect degradation trends in time for prevention beforehand; on the other hand, when there is fiber broken, it can response fast and locate accurately, which can shorten the fault duration. Meanwhile, large amount information of construction, cutover, maintenance related with cable maintenance and management need electronic means for table recording, processing and querying.

OTDR is an important tool for monitoring fiber optic cable. Traditional OTDR used as test instrument is a decentralized, passive means of manual maintenance means, which is difficult to satisfy higher cable safety requirements. Therefore, the use of multiple OTDRs to achieve a set of test, analysis, warning, locating, information management, business reporting capabilities in one centralized cable network monitoring system, is a further development and innovation for traditional OTDR usage and maintenance institution, which can greatly improve the maintenance efficiency and standards.

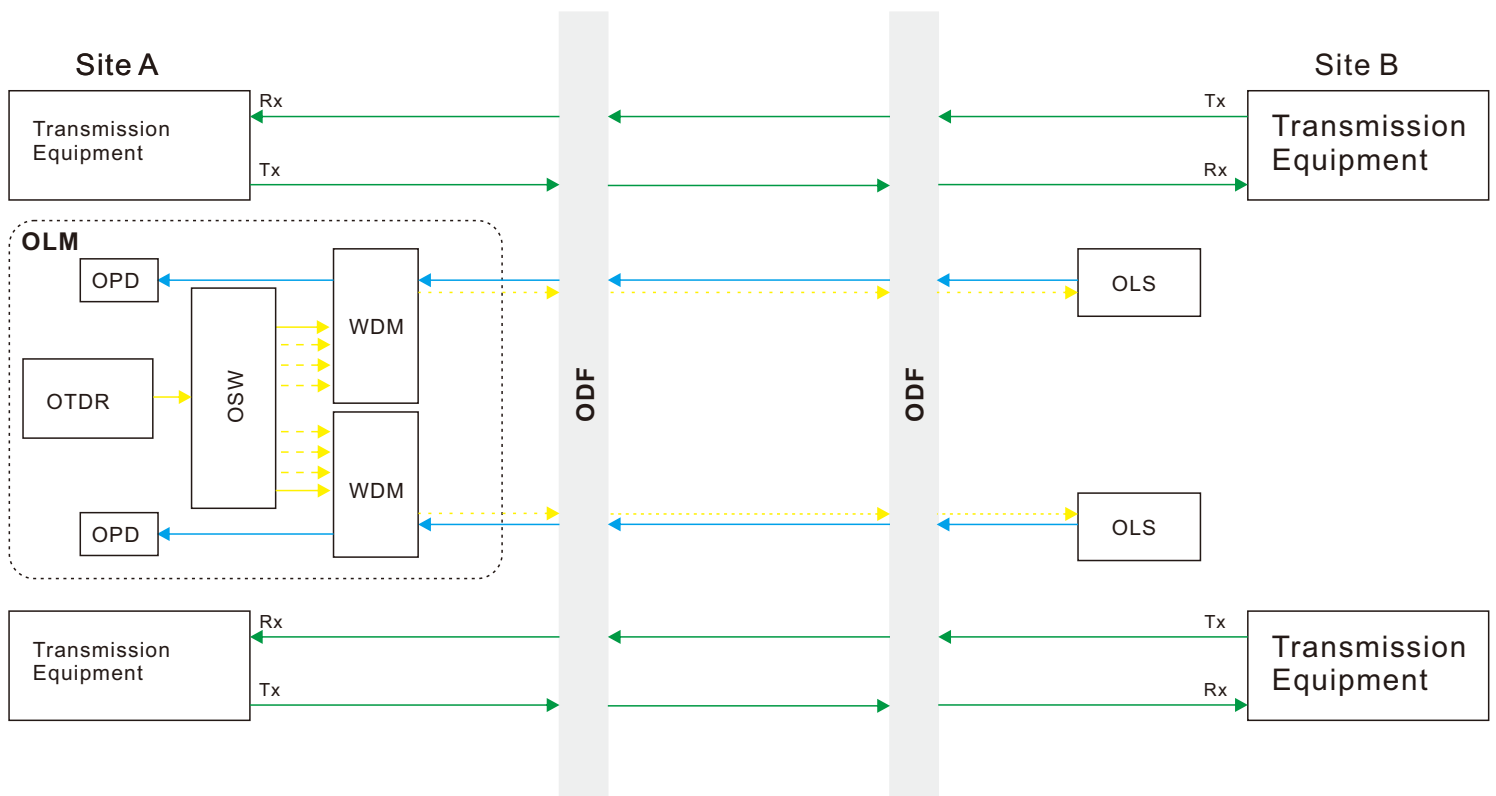
By deploying distributed clients of the system and using typical network and database technology, the operator can easily complete the operation of the system and view a variety of test results. The system automatically manage OTDR instrument, monitor cable networks, and give the real-time analysis of alarm and optical performance degradation. All the fiber test data and results are stored in the background data for easily querying and analyzing.



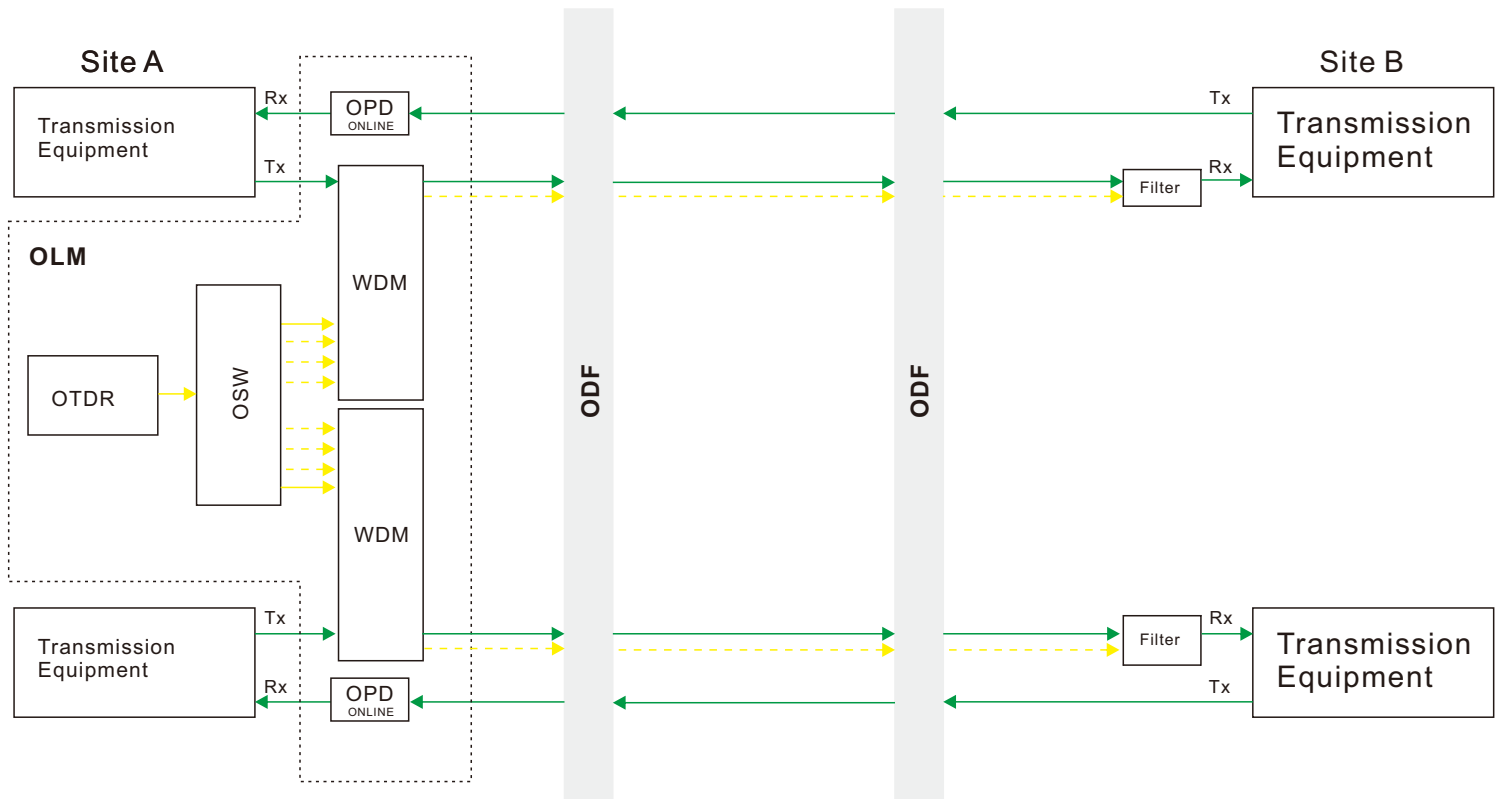
Solution 1: Double-Fiber Off-line Monitoring



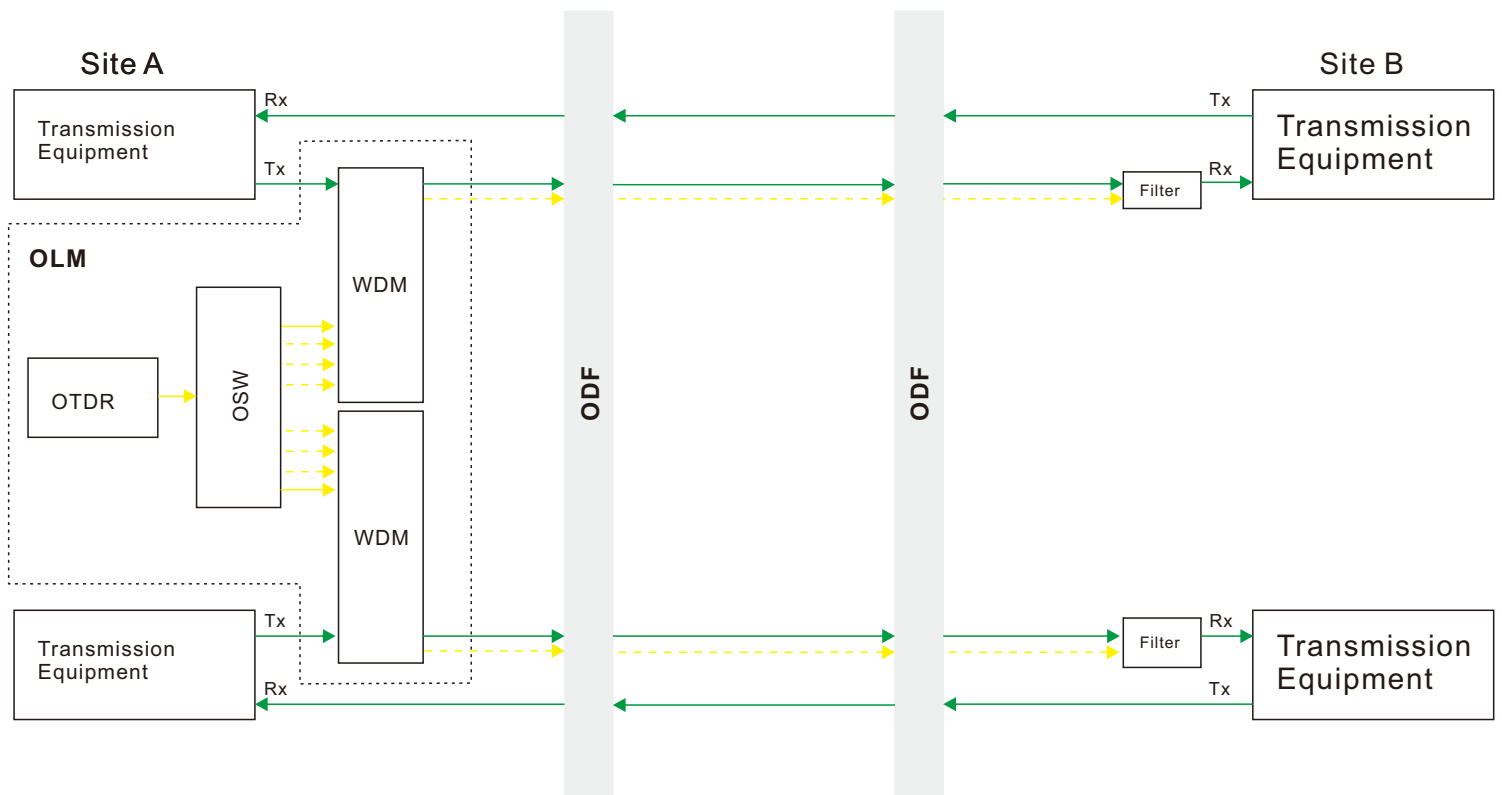
Solution 2: Single-Fiber Off-line Monitoring



Solution 3: Double-Fiber On-line Monitoring



Solution 4: Single-Fiber On-line Monitoring



FRONT



SIDE

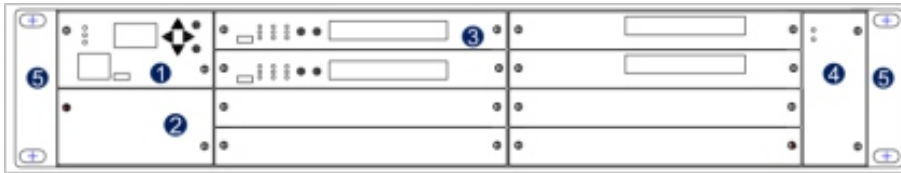


REAR

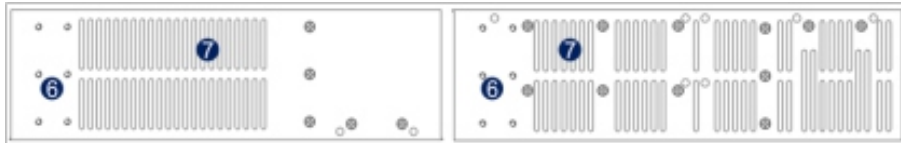


- 1 Main Control Card
- 2 Service Card, Max.4
- 3 Fan Card
- 4 Scalable Lug
- 5 Lug Installation Position
- 6 Side Vent
- 7 Power Source Card 1
- 8 Power Source Card 2
- 9 Grounding Screw

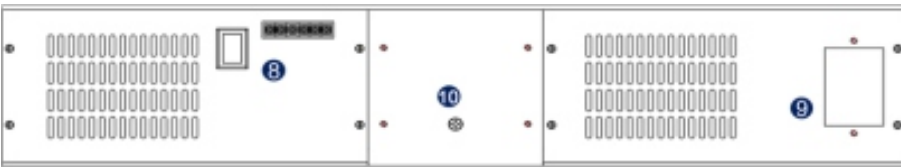
FRONT



SIDE

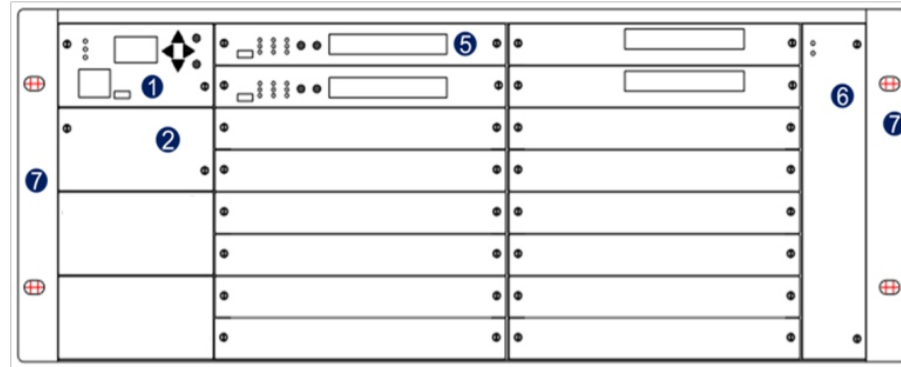


REAR

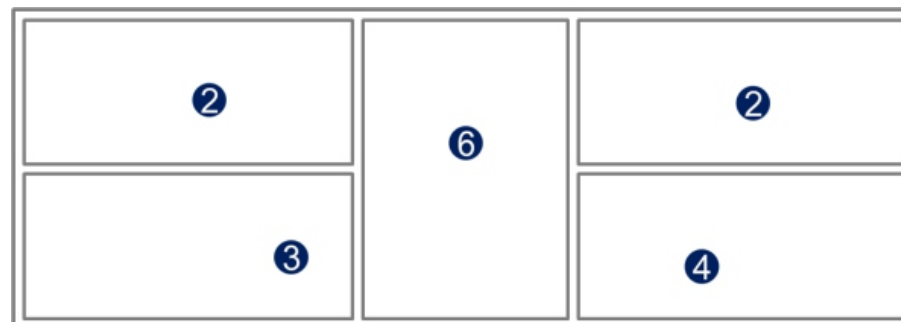


- 1 Main Control Card
- 2 Expansion Slot
- 3 Service Card, Max.8
- 4 Fan Card
- 5 Scalable Lug
- 6 Lug Installation Position
- 7 Side Vent
- 8 Power Source Card 1
- 9 Power Source Card 2
- 10 Grounding Screw

FRONT

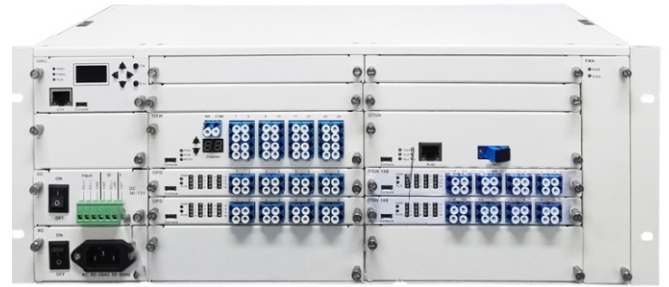


REAR



- 1 Main Control Card
- 2 Expansion Slot
- 3 Power Source Card 1
- 4 Power Source Card 2
- 5 Service Card, Max.16
- 6 Fan Card
- 7 Scalable Lug

1U/2U/4U Frame



Cards



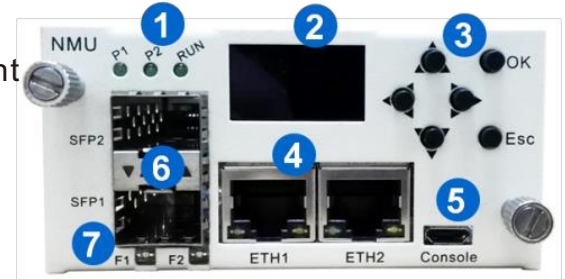
Frame Correlation Parameter

Working Temp.	-10 to +60°C
Storage Temp.	-20 to +70°C
Condensation	5% ~ 95% no Condensation
1U Frame Size	482.6Wx300Dx44.5H (mm)
2U Frame Size	482.6Wx300Dx86H (mm)
4U Frame Size	482.6Wx300Dx176H (mm)
Power Supply (AC)	85~264V,50~60hz
Power Supply (DC)	36~72
Consumption (1U)	Max. 50
Consumption (2U)	Max.100
Consumption (4U)	Max.200

Main Control Card

Equipment Management

- Equipment state, cards performance to be visible
- Other Card parameters can be set by buttons on the card
- Support income or outcome of band network management
- Supports SNMP, Telnet, Client



- 1 Status indicator P1(Power1) P2(Power2),RUN
- 2 HD dual color LCD display screen
- 3 Operation keys
- 4 Ethernet communication interface
- 5 Micro USB equipment upgrade interface
- 6 Optical transceiver slot(Support 100/1000Mbps SFP)
- 7 Optical transceiver working status indicator

OTDR Card

OTDR card has an OTDR internal module, for optical parameters statistics of locating malfunction, attenuation, return loss and reflectivity on fiber.



Dynamic Range	24 to 40dB
Wavelength (Optional)	1310/1550/1625/1550nm
Output Channel (Optional)	1/2/3/4
Pulse Width	5ns,10ns,20ns,40ns,80ns,160ns,320ns,640ns,
Event Dead Zone	2m
Attenuation Dead Zone	10m
Minimum Sampling Interval	0.25m
Max. Sampling	32k
Distance Accuracy	+/- (1m+5x10 ⁻⁵ x distance + Sampling interval)
Connector	SC/UPC or LC/UPC

OSW Card

Optical switch card is composed of several optical switches, it provides an input interface used for connecting with OTDR module, and selects the output routings through a variety of channels (1x8, 1x16, 1x32 routes, 1x48 routes, 1x64 routes), so as to make OTDR test signal arrive at different fibers to achieve multi-channel optical fiber detection. The switching of optical switch can be controlled by software.



Wavelength	1550±20nm/1625±20nm/1650±20nm
Insertion Loss	≤1.0dB
PDL	≤0.1dB
Return Loss	≥50dB
WDL	≤0.2dB
ISO	≥55dB
Repeatability	≤±0.01
Life cycle	≥160 millions times
Switch time	≤25+15×(N-1)(N is interval number of channels)ms
Maximum input power	≤500mW

OPD Card

OPD card (Optical Power Meter) is composed of Multi-channel detectors (4 channels, 8 channels, 16 channels) for detecting optical values of monitoring lines.



Wavelength	1200nm to 1650nm
Input optical power range	-70 to +3dBm or -50 to +26dBm
Resolution	0.01dB
Stability	±0.2dB
Electrical signal conversion time	≤25ms(between adjacent channel), ≤100ms(between any channel)
Return Loss	≥45dB
Monitoring channel number	4/8/16

OLS Card

Optical source unit is used to provide stable light source for real-time detecting of line.

Connector type	LC/UPC or SC/UPC
Wavelength	1310nm or 1550nm
Spectral length	≤ 4 nm
Output power	-6 to 0dBm
Short time Stability	$\pm 0.02/15\text{min}$
Long time Stability	$\pm 0.15/6\text{h}$

WDM & Coupler Card

The function of WDM Card is achieving coupling and isolating between transmission light signal and monitoring light signal, which ensures non-interference of the two signals.

Single WDM board can be configured 1 link or 2 links, which has function of filter.

Wavelength	1310 \pm 20nm, 1550 \pm 20nm
Monitoring wavelength	1625 \pm 10nm, 1650 \pm 10nm
Insertion Loss	≤ 1.0 dB
Monitoring IL	≤ 1.0 dB
Return Loss	≥ 45 dB
WDL	≤ 0.2 dB
PDL	≤ 0.2 dB
Power	500 mW
Connector type	LC/UPC or SC/UPC


Coupler board monitor light power by coupled light that splitting ratio is 10% from the transmission system. Single coupler board can be integrated 2 links.

Wavelength	1310 \pm 20nm, 1550 \pm 20nm
Splitting ratio	10%
Insertion Loss	≤ 1.5 dB
Monitoring IL	≤ 11 dB
WDL	≤ 0.2 dB
PDL	≤ 0.2 dB
Return Loss	≥ 45 dB
Power	500 mW
Connector type	LC/UPC or SC/UPC

Management Software

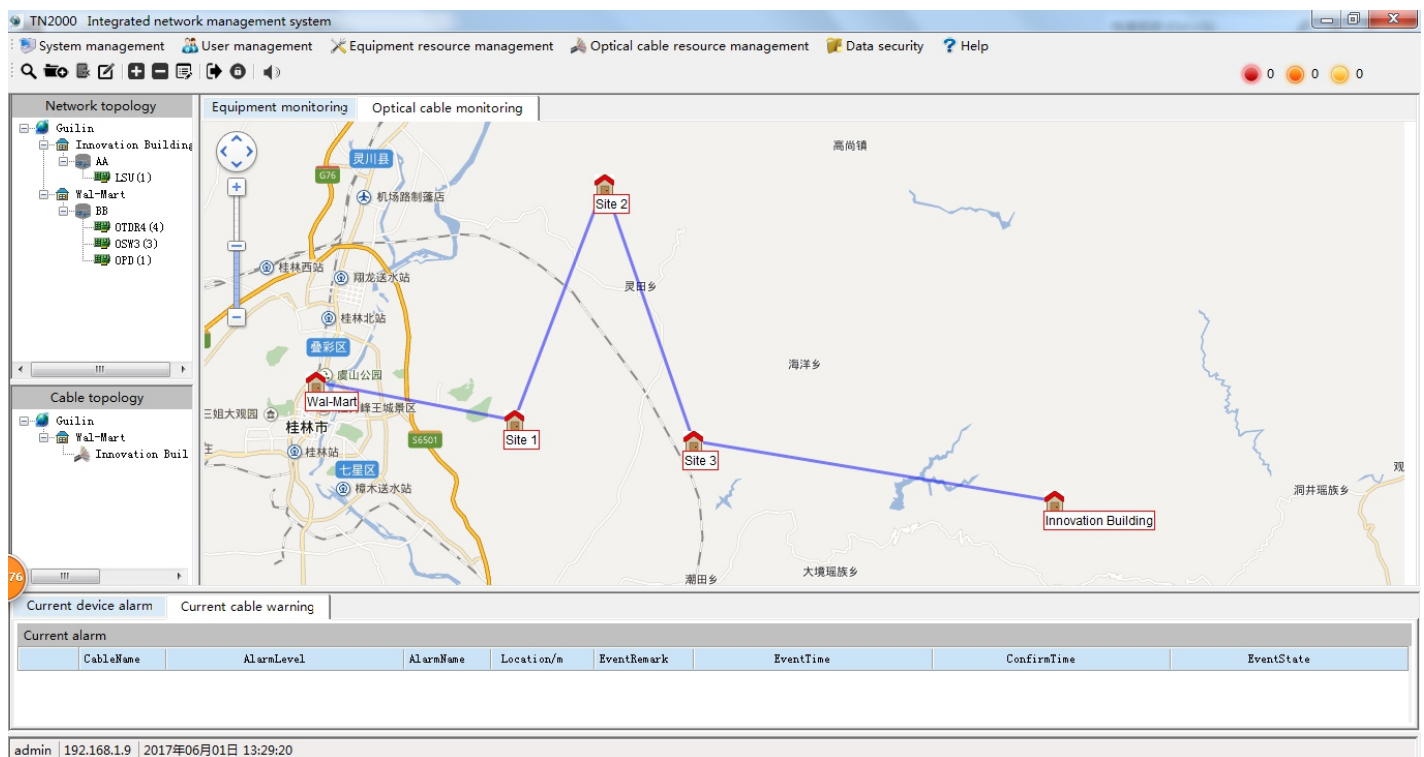
The fiber cable monitoring and management system is a resources management and optical fiber cable monitoring for the integration of large-scale management software. The system integrated of the current mature GIS technology, the vivid graphical display interface, more intuitive to make fault location. The System offer the basic information management, RTU monitoring management, RTU configuration management, query statistics, report management, and other functions.

Optical cable monitoring management system



User name:

password:



FF-1015

Optical Power Meter

FF-1015 Mini Optical Power Meter has compact structure and stable performance. It ensures high measuring precision of 850nm, 980nm, 1300nm, 1310nm, 1490nm, 1550nm and 1625nm wavelengths.

Combined usage with Optical Laser Source, it could accurately measure the loss of fiber, cable and other passive optical devices.

Specification

Model#	FF-1015A	FF-1015C
Wavelength (nm)	850/980/1300/1310/1490/1550/1625	
Detector	InGaAs (300um)	
Working Range(dBm)	- 70~+10	- 50~+26
Accuracy(dB)	0.35dB±1nW	
Resolution	±0.01dB/0.1%nW	
Units	dB/dBm/nW	
Optical Connector type	2.5mm Universal Connector	
Battery	Rechargeable Lion Battery	
Auto Power Off	10mins	
Operating time (h)	13	
Operation (°C)	- 20°C~+60°C	
Storage (°C)	- 25°C~+70°C	
Size(mm)/weight	127x45x20(87g)	



Features

- Compact and portable design
- Both SM and MM mode supported
- dB/dBm/nW units supported
- Auto power off
- Frequency detection supported
- Micro USB power charging
- Low battery indication
- User re-calibration supported
- Match with FC/SC/ST connectors

ORDERING INFORMATION

FF-1015A Optical Power Meter
FF-1015B Optical Power Meter

The Kit Includes: Optical Power Meter, USB cord, User Manual, Calibrated Report

FF-3215

Optical Power Meter

FF-3215 Handheld Optical Power Meter is newly designed fiber optic tester. It aims to apply in fiber network installation, fiber network engineering acceptance and fiber network maintenance.

Combined usage with FF-3115 handheld optical light source, it offers a quick and accurate testing solution on both SM and MM fibers.



Specification

Model#	FF-3215A	FF-3215C
Wavelength (nm)	850/1300/1310/1490/1550/1625	
Detector	InGaAs	
Working Range(dBm)	- 70~+6	- 50~+26
Uncertainty (dB)	$\pm 0.15(3.5\%)$	
linearity (dB)	± 0.02	
Frequency ID(Hz)	270,330,1K,2K	
Date storage capacity	1000	
Communication Port	USB	
Optical Connector type	FC/SC/ST interchangeable	
Battery	3*AA 1.5V or Lithium battery	
Power Supply (V)	8.4	
Operating time (h)	200	
Operation (°C)	- 10°C~+60°C	
Storage (°C)	- 25°C~+70°C	
Size(mm)/weight	186*100*50(240g)	

Features

- Automatic wavelength identification and switching
- Automatic frequency identification
- Intelligent backlight control
- Data storage up to 1000 test records
- USB communication port for data Download
- Reference power level can be set up
- User self calibration function
- Auto-off function
- Low battery indication

ORDERING INFORMATION

FF-3215A Optical Power Meter
FF-3215C Optical Power Meter

The Kit Includes: Optical Power Meter, 3pcs of 1.5V batteries or Lithium Battery, AC Adaptor, User Manual, and Soft carrying case



FF-3216

Optical Power Meter

FF-3216 Handheld Optical Power Meter is newly designed fiber optic tester. It aims to apply in fiber network installation, fiber network engineering acceptance and fiber network maintenance.

Combined usage with FF-3116 handheld optical light source, it offers a quick and accurate testing solution on both SM and MM fibers.

Compared with usual power meters, FF-3216 has more great functions/features of automatic wavelength identification, switching and intelligent backlight control. Also FF-3216 features good appearance, good touch feeling and considerate humanity design.



Specification

Model#	FF-3216A	FF-3216C
Wavelength (nm)	850/1300/1310/1490/1550/1625	
Detector	InGaAs	
Working Range(dBm)	- 70~+6	- 50~+26
Uncertainty (dB)	$\pm 0.15(3.5\%)$	
linearity (dB)	± 0.02	
Frequency ID(Hz)	270,330,1K,2K	
Date storage capacity	1000	
Communication Port	USB	
Optical Connector type	FC/SC/ST interchangeable	
Battery	3*AA 1.5V	
Power Supply (V)	8.4	
Operating time (h)	200	
Operation (°C)	- 10°C~+60°C	
Storage (°C)	- 25°C~+70°C	
Size(mm)/weight	180*90*45(250g)	

Features

- Automatic wavelength identification and switching
- Automatic frequency identification
- Intelligent backlight control
- Data storage up to 1000 test records
- USB communication port for data Download
- Reference power level can be set up
- User self calibration function
- Auto-off function
- Low battery indication

ORDERING INFORMATION

FF-3216A Optical Power Meter
FF-3216C Optical Power Meter

The Kit Includes: Optical Power Meter, 3pcs of 1.5V batteries, AC Adaptor, User Manual, Cotton swabs and Soft carrying case

FF-7209

Optical Power Meter with Multi Functions

FF-7209 Smart Multi Meter has compact structure and stable performance. It ensures high measuring power level of 850nm, 980nm, 1300nm, 1310nm, 1490nm, 1550nm and 1625nm wavelengths.

The multi meter is with 4 functions,

- Optical Power Meter (OPM)
- Visual Fault Locator (VFL)
- LED Light
- RJ45 Cable Tester

Specification

Model#	FF-7209A	FF-7209B	FF-7209C	FF-7209D
Wavelength (nm)	850/980/1300/1310/1490/1550/1625			
Detector	InGaAs			
Working Range(dBm)	- 70~+6	- 50~+26	- 70~+6	- 50~+26
Accuracy(dB)	0.35dB±1nW			
Resolution (dB)	±0.01			
Optical Connector type	2.5mm Universal Port			
VFL Wavelength	650nm			
VFL Output Power	1mW	1mW	15mW	15mW
Auto Power Off	10mins			
Battery	2*AA 1.5V or Lithium ion Battery			
Operating time	48 Hours			
Operation Temp.	- 10°C~+60°C			
Storage Temp.	- 25°C~+70°C			
Size(mm)/weight	118*60*30(140g)			

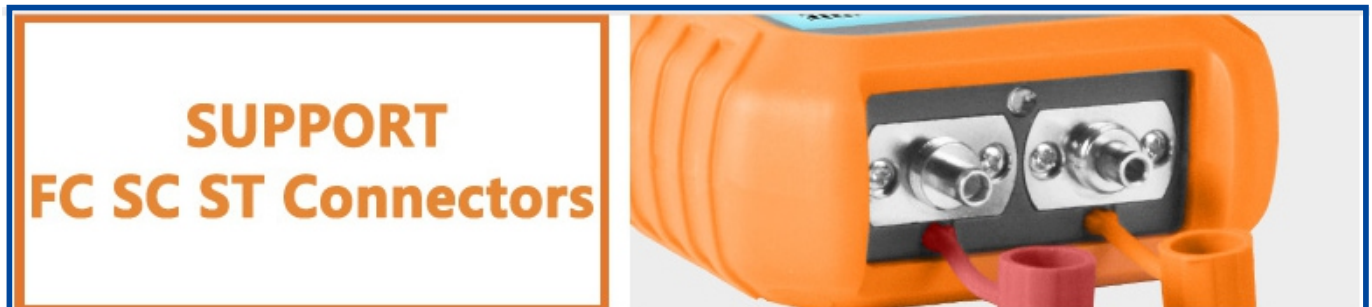


Features

- Imported sensor head
- 2.5mm universal interface (support FC/SC/ST connectors)
- Low power consumption
- Linear optical power and logarithmic power display
- Automatic measuring range adjust and power remains indication
- Relative value measurement
- Compact and portable design

ORDERING INFORMATION

FF-7209A Optical Power Meter
 FF-7209B Optical Power Meter
 FF-7209C Optical Power Meter
 FF-7209D Optical Power Meter



FF-3213 Series PON Power Meter

FF-3213 PON power meter is a small size, low loss and good quality handed-held optical power meter. It is designed for testing, installation and maintenance of FTTX PON network, which can be used for APON, BPON, EPON and GPON network.

FF-3213 has two output ports for ONU and OLT/Video, which supports CW/burst upstream detection at 1310nm and downstream signal at 1490/1550nm. It can directly show the status of pass, warning or failure by threshold testing. FF-3213 is the ideal tool for PON setting and maintenance.



Specification

Detector	InGaAs
Unit	dB/dBm/xW
Resolution (dB)	0.01dB
Uncertainty (dB)	+/- 0.5dB
Linearity (dB)	+/- 0.1dB
Operation Voltage (V)	DC 3.3V~5.5V
Power Supply	3pcs of 1.5V battery
Continuously Operation	90 hours
Operation Temperature	-10°C ~ +60°C
Storage Temperature	-25°C ~ +70°C
<i>1310 upstream measurement</i>	
Testing Range (dBm)	-35dBm ~ +10dBm
Isolation @1490/1550	>40dB
Burst Mode Testing Error	<+/-0.5dB
<i>1490 downstream Measurement</i>	
Testing Range (dBm)	-40dBm ~ +12dBm
Isolation @1310/1550	>40dB
<i>1550 Downstream Measurement</i>	
Testing Range (dBm)	-40dBm ~ +25dBm
Isolation @1310/1490	>40dB

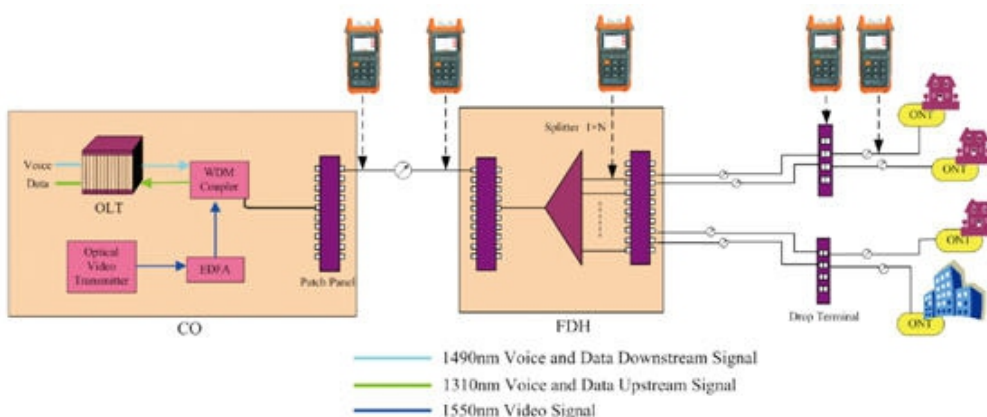
Features

- Handed-held, Easy-to-carry
- P/F testing and normal testing mode
- Two ports of "ONU" & "OLT/Video"
- Support 1310nm upstream CW/burst signal and 1490nm/1550nm downstream signal
- For APON, BPON, EPON and GPON
- Threshold programmable
- Huge data storage capability
- USB integrated

ORDERING INFORMATION

FF-3213N PON Power Meter
FF-3213PRO PON Power Meter

The Kit Includes: PON Power Meter, 3 pcs of AA batteries, Carrying Bag, User Manual, USB Cable, CD, Calibrated Report



FF-3226A

CWDM Power Meter (18 Channels)

FF-3226A CWDM Power Meter is specially designed for CWDM system, covering wavelength from 1270~1610nm. It measures and monitors optical power and attenuation value of 18 channels from wavelength 1270nm to 1610nm wavelength.

All calibrated wavelengths will be tested simultaneously and all test results will show on the LCD screen.

This CWDM power meter features simple operation, quick response and high measurement accuracy which becomes an ideal tester in CWDM system installation and maintenance.



Specification

Wavelength	1270~1610 nm
Number of Channels	18
Wavelength Resolution	20nm
Measuring Wavelength	1270/1290/1310/1330/1350/1370/1390/ 1410/1430/1450/1470/1490/1510/1530/ 1550/1570/1590/1610nm
Dynamic Range	-40 ~ +10dBm
Resolution	0.01dB
Optical Interface	FC/PC (SC,LC,ST available)
Operation Temperature	-10 to +60 °C
Power Charging	Rechargeable Battery / AC power adapter
Time of Operating	10 hours
Dimension	220mmx110mmx70mm
Weight	850g
Power Supply	8.4V
Dimensions	180*90*36.5mm
Weight	420g (excl. batteries and rubber)

Features

- Friendly interface & easy operation
- Save and upload test results via USB port
- Columnar graphics or list mode to display test data
- Color TFT-LCD display, high resolution 320*240
- Built-in clock and can edit test fiber number
- Quick start operation, requiring no warmup time
- Light weight

ORDERING INFORMATION

FF-3226A CWDM Power Meter

The Kit Includes: FF-3226A CWDM Power Meter, USB cable, AC Adaptor, User Manual, CD, Cotton Swabs, Soft Calibrated Report, Carrying Case

FF-3115

Optical Light Source

Handheld Laser Source are mainly for fiber-optic network site installation, acceptance and maintenance of fiber optic cable, optical passive components of the transmission and loss measurement needs of the new design and development of products.

The light source can provide 1 to 4 wavelengths of stable output for customers choice.



Specification

Calibrated Wavelength(nm)	850/1300/1310/1490/1550/1625 (specify on requests)
Applicable fiber	SM, MM
Laser type	FP-LD
Output Power(dBm)	-5
Short term stability	+/- 0.05dB/15min
Long term stability	+/- 0.15dB/8h
Modulation	CW, 270, 1K, 2K Hz
Fiber Port	FC/PC (SC, ST available)
Alkaline Battery	3*AA 1.5V or Lithium battery
Power Supply (V)	8.4
Battery Operating time	45 hours
Operation Temperature	0 to +50°C
Storage Temperature	-40 to +70°C
Size(mm)/weight	100*50*186mm/ 240g

Features

- Support CW and a variety of modulation light output
- Output optical power adjustable, Adjustment range 6dB, step 1dB(Optional)
- Support automatic shutdown
- Backlight intelligent control

ORDERING INFORMATION

FF-3115A	1310/1550nm
FF-3115B	850/1300nm
FF-3115D	850/1300/1310/1550nm

The Kit Includes: FF-3115 Optical Light Source, 3pcs of 1.5V batteries or Lithium battery, User Manual, Cotton swabs and Carrying case



FF-3116

Optical Light Source

FF-3116 Handheld Adjustable Light Source is newly designed fiber optic light source. It applies in fiber network installation, fiber network engineering acceptance and fiber network maintenance.

Combined usage with FF-3216 handheld optical power meter, it offers a quick and accurate testing solution on both SM and MM fibers. The FF-3116 provides 1 to 4 wavelengths and output power can be adjustable according to customers' requests. Also the FF-3116 features good appearance, comfortable touch feeling and considerate humanity design.



Specification

Calibrated Wavelength(nm)	850/1300/1310/1490/1550/1625 (specify on requests)
Applicable fiber	SM, MM
Laser type	FP-LD
Output Power(dBm)	-7 (can be adjustable)
Adjustable step (dBm)	<0.5
Stability(30min,20°C)	0.15dB
Modulation	CW, 270,330,1K,2K Hz
Fiber Port	FC/PC (SC, ST available)
Alkaline Battery	3*AA 1.5V
Power Supply (V)	8.4
Battery Operating time	45 hours
Operation Temperature	-10 to +60°C
Storage Temperature	-25 to +70°C
Size(mm)/weight	180*90*45mm/ 250g

Features

- Tone generation, 270HZ, 330HZ, 1KHZ, 2KHZ
- Output power is adjustable from -12 to -5 dBm, step 0.5 dbm
- Output power value displays on LCD
- Intelligent backlight control (light intensity can be adjusted properly according to ambient light, which greatly reduced power consumption)
- AA alkaline and AC adapter for power supply
- Low battery indication

ORDERING INFORMATION

FF-3116A	1310/1550nm
FF-3116B	850/1300nm
FF-3116C	1310/1490nm
FF-3116D	850/1300/1310/1550nm

The Kit Includes: FF-3116 Optical Light Source, 3pcs of 1.5V batteries, User Manual, Cotton swabs and Carrying case

FF-3122

CWDM Light Source

FF-3122 Handheld Adjustable CWDM Light Source is newly designed fiber optic tester. It applies in fiber network installation, fiber network engineering acceptance and fiber network maintenance.

The FF-3122 features good appearance, comfortable touch feeling and considerate



Specification

Wavelength(nm)	FF-3122A
	1290/1310/1330/1350/1370/1390/1410/1430nm
	FF-3122B
	1450/1470/1490/1510/1530/1550/1570/1590nm
Output Power(dBm)	-8 ~ -18dBm
Adjustable step (dBm)	0.01
Stability(30min, 20°C)	<0.1dB
Modulation(Hz)	CW 270 330 1K 2K
Fiber Port	FC/PC (SC/ST available)
Battery Working Time	120 hours
Operation Temperature	-10 to +60 °C
Storage Temperature	-25 to +70 °C
Dimension(mm)	180*90*36.5
Weight (g)	420

ORDERING INFORMATION

FF-3122A CWDM Light Source
FF-3122B CWDM Light Source

The Kit Includes: Optical Light Source, 3pcs of 1.5V Batteries, AC Adaptor, User Manual, Cotton Swabs and Soft Carrying Case

FF-3209

Optical Multi-meter

FF-3209 Handheld Optical Multimeter integrates the functions of an intelligent optical power meter module and a highly stable light source module in one unit.

It can also provide data storage and upload functions. It is widely used in installation, measurement and maintenance of DDN, Telecom and CATV networks.



Specification

Model#	FF-3209A	FF-3209B
Optical Power Meter Module		
Detector Type	InGaAs	
Testing Range(dBm)	-70~+6	
Resolution(dB)	0.01	
Uncertainty	±0.25	
linearity (dB)	±0.1	
Frequency ID Range	10K	
Optical Light Source Module		
Wavelengths(nm)	1310/1550	1310/1490/1550
Ouput Power(dBm)	-5	
Stability (30min,20)	0.1dBm	
ModulationFrequencies	CW,270,1K,2K Hz	
General Specifications of Multi Meter		
Power Supply	3 pcs 1.5V Alkaline Batteries/Mini USB 5V Adapter	
Battery Operating Time	50 hours (Power Meter & Light Source)	
Auto-off time	10 mins	
Communication Port	USB	
Operating Temperature	-10~+60 °C	
Storage Temperature	-25~+70 °C	
Dimension	175X90X44.5mm	

Features

- Users could write their own software by the communication protocol provided
- Automatic wavelength of light source switching
- Frequency identification.
- Simple function mode switching
- High stability of the output power
- Data storage function, up to 1000 test records
- USB communication port for saved testing records download

ORDERING INFORMATION

FF-3209A 1310/1550nm

FF-3209B 1310/1490/1550nm

The Kit Includes: FF-3209 Multimeter, Mini USB cable, 5V USB Adapter, 3pcs of 1.5V Alkaline Batteries, CD, User Manual, Cotton swabs and Soft carrying case

FF-3209E

Optical Multi-meter (3 Functions in 1 Device)

The Handheld multi-meter (3 functions in 1 device) integrates light source, visual fault locator and accurate optical power meter into one device, eliminating the inconvenience of carrying two instruments to the making testing at site.

The FF-3209E is an accurate, durable and efficient testing tool for installation, operation and maintenance of fiber optic network measurement and maintenance of DDN, Telecom and CATV networks.



Specification

Model#	FF-3209E
<i>Optical Power Meter Module</i>	
Detector Type	InGaAs
Testing Range(dBm)	-70~+10dBm
Uncertainty	±0.2dB(5%)
Wavelength	850/980/1300/1310/1490/1550nm
Display Resolution	±0.1
Frequency ID Range	0.01dB
<i>Optical Light Source Module</i>	
Wavelengths(nm)	1310/1550
Output Power(dBm)	-7dBm
Output Resolution	±10 nW(5%)
<i>Visual Fault Locator</i>	
Wavelength	650nm
Output Power	10mW
<i>General Specifications of Multi Meter</i>	
Operating Temperature	-10~+60 °C
Storage Temperature	-25~+70 °C
Auto-off time	10mins
Power Supply	0.1dBm
Battery Operating Time	>15 Hours
Screen	2.4TFT Coloful LED
Size	172×82×33mm
Battery	AAA Batteries or Lithium ion Battery

Features

- User calibration supported
- FC SC connectors comes together with the instrument
- Auto shutdown function for power saving
- High stable laser source, CW mode and modulation mode supported
- 2.4TFT colorful LCD screen
- With rechargeable lithium battery or AAA batteries
- Data can be uploaded to PC via Rs232 or USB(Optional)

ORDERING INFORMATION

FF-3209E 1310/1550nm

The Kit Includes: FF-3209E Multimeter, Mini USB cable, 5V USB Adapter, CD, User Manual, Cotton swabs and Soft carrying case

FF-VFL-A Series

Visual Fault Locator

This Visual Fault Locator (VFL) is specially designed for field workers who need an efficient and economical tool for fiber tracing, fiber routing and continuity checking in optical networks. The VFL can find break points, poor connection point, bending or cracking in fiber optic cables; and it can find faults located in an OTDR dead zone and also can be used for end-to-end visual fiber identification.

The VFL launches 650nm visible light into a fiber. When the light encounters a break or sharp bend, it scatters, and the scattered light can be observed emerging from the cable. More importantly, The VFL can locate break points in short patchcords, which an OTDR cannot detect due to their operating dead zone.

The Visual Fault Locator can be operated in either continuous wave mode (CW mode) or in pulsed mode. Pulsed mode aids in locating faults under high ambient light conditions and improve battery life. It also could be used in checking connector quality.

Specification

Model#	VFL-A1	VFL-A5	VFL-A10	VFL-A20	VFL-A30
Wavelength	650nm				
Emitter Type	FP-LD				
Output Power	1mW	5mW	10mW	20mW	30mW
Detecting Range	5km	8km	12km	16km	20km
Optical Connector	2.5mm universal connector, 1.25 adapter optional				
Operating Mode	CW/3Hz/9Hz				
Power Supply	2 pcs of 1.5V AAA batteries				
Battery Life (CW)	13Hours	8Hours	6Hours	5Hours	3Hours
Battery Life (3Hz)	19Hours	17Hours	10Hours	7Hours	5Hours
Battery Life (9Hz)	23Hours	20Hours	12Hours	10Hours	6Hours
Working Temp.	-35°C~+70°C; <90%RH°C				
Storage Temp.	-35°C~+70°C; <90%RH°C				
Dimension	Ø13 x 181mm				
Weight	106g (without battery)				



Features

- Finding fiber breakpoint, poor connections, bending or cracking
- End-to-end visual fiber identification
- Constant & stable output power
- Long battery life
- Operates either in CW or Pulsed
- Pocket size and light weight

ORDERING INFORMATION

FF-VFL-A1	1mW VFL
FF-VFL-A5	5mW VFL
FF-VFL-A10	10mW VFL
FF-VFL-A20	20mW VFL
FF-VFL-A30	30mW VFL

The Kit Includes: VFL, Two AAA batteries, User Manual, 1.25mm Adapter (Optional)

FF-VFL-B Series

Visual Fault Locator

FF-VFL-B Series Mini Visual Laser Source totally complies with the human engineering. It's small in size, easy to operate, portable and integrated with a launching indicator.

A Visual Laser Source is usually used to inspect the damaged or broken point of a optical fiber, cable, patchcord and etc. If the inspected fiber does have a defect, user could find the visual laser at the broken or damaged point.

FF-VFL-B Series Mini Visual Laser Source is suitable for both single mode and multimode fibers. The performance of the visual laser source will act a little different on different fiber coat and color.



Features

- Finding fiber breakpoint, poor connections, bending or cracking
- End-to-end visual fiber identification
- Constant & stable output power
- Long battery life
- Operates either in CW or Pulsed
- Pocket size and light weight

Specification

Model#	VFL-B5	VFL-B10	VFL-B20	VFL-B30	VFL-B50
Wavelength	650nm				
Emitter Type	FP-LD				
Output Power	5mW	10mW	20mW	30mW	50mW
Detecting Range	5km	12km	16km	20km	35km
Optical Connector	2.5mm universal connector, 1.25 adapter optional				
Operating Mode	CW/2Hz				
Power Supply	2 pcs of 1.5V AAA batteries				
Battery Life (CW)	13Hours	6Hours	5Hours	3Hours	2Hours
Battery Life (2Hz)	19Hours	10Hours	7Hours	5Hours	4Hours
Working Temp.	-35°C~+70°C; <90%RH°C				
Storage Temp.	-35°C~+70°C; <90%RH°C				
Dimension	Ø13 x 181mm				
Weight	106g (without battery)				

ORDERING INFORMATION

FF-VFL-B5 5mW VFL
FF-VFL-B10 10mW VFL
FF-VFL-B20 20mW VFL
FF-VFL-B30 30mW VFL
FF-VFL-B50 50mW VFL

The Kit Includes: VFL, Two AAA batteries, User Manual, Carrying Case, 1.25mm Adapter (Optional)

FF-3306B

Optical Fiber Identifier

FF-3306B Optical Fiber Identifier can quickly identify the direction of transmitted fiber and display the relative power without damage of bended fiber. Once traffic present, intermittently audible tone is activated.

FF-3306B optical fiber identifier also recognize the modulation like 270Hz, 1kHz and 2kHz. When they are used to detect the frequency, continuously audible tone is activated. There are four adapter heads available: Ø0.25, Ø0.9, Ø2.0 and Ø3.0. FF-3306B optical fiber identifier is powered by a 9V alkaline battery.



Specification

Identified WL Range	800-1700nm
Identified Signal Type	CW, 270Hz±5%, 1kHz±5%, 2kHz±5%
Detector Type	Ø1mm InGaAs 2pcs
Adapter Type	Ø0.25 (Applicable for Bare Fiber) Ø0.9 (Applicable for Ø0.9 Cable) Ø2.0 (Applicable for Ø2.0 Cable) Ø3.0 (Applicable for Ø3.0 Cable)
Signal Direction	Left & Right LED
Singe Direction	-46~10(1310nm) -50~10(1550nm)
Test Range	(dBm, CW/0.9mm bare fiber)
Power Test Range	-50~+10
Signal Frequency	270, 1k, 2k Hz
Frequency Test Range	-30~0dBm (270Hz, 1KHz), -25~0dBm (2KHz)
Insertion Loss	0.8dB (1310nm), 2.5dB (1550nm)
Alkaline Battry	9 V
Operating Temperature	-70 °C to +50 °C
Storage Temperature	-95 °C to +60 °C
Dimension	196x30.5x27mm
Weight	200g

Features

- Easy-to-use with "ONE KEY" operation.
- Efficiently identifies traffic direction and frequency tone (270, 1K, 2K Hz) with audible warning.
- Displays relative core power value
- More accurate test with sunshade
- Easy-to-replace adaptors
- Durable metal housing and quality construction
- Lower power indication

ORDERING INFORMATION

FF-3306B Optical Fiber Identifier

The Kit Includes: Optical Fiber Identifier, 4pcs of adapter heads, Sunshade, Alkaline battery, User Manual, Cotton Stick, Soft Carrying case

FF-3306D

Optical Fiber Identifier

FF-3306D Optical Fiber Identifier is an important tool for optical maintenance, which is used for nondestructive fiber identification work, can be detect in any location of both SM and MM fiber. Meanwhile it also has Visual Fault Locator module with fault location function. It is the ideal instrument for online test.

Functions

- Indicate the signal directions and power in fiber;
- Indicate the signal presence or absence(Live or dark fiber);
- Efficiently identifies the traffic direction and frequency tone (270Hz, 1KHz, 2KHz) with audible warning;
- Displays the relative core power ;
- Easy-to-replace adaptors;
- Lower power indication ;
- Build in VFL function.

Specification

Identified WL Range	750-1700nm
Insertion Loss	1.0dB
Fiber Type	SM & MM
Identified Signal Type	CW, 270Hz±5%, 1kHz±5%, 2kHz±5%
Display Type	LED
Adapter Type	Universal Holder for 250um/0.9mm/2.0mm/3.0mm fiber cables
Detector Type	1mm InGaAs
Signal Direction	Left & Right LED
Power Test Range	-35 to +10 dBm
Signal Frequency	270, 1k, 2k Hz
Power Supply	2 pcs of AA battery
Battery Life	> 60H
VFL Wavelength	650nm
VFL Output Power	10mW
Operating Temperature	-10 °C to +60 °C
Storage Temperature	-25 °C to +70 °C



Features

- Suitable for 0.25/0.9/2.0/3.0mm Easy test directly, convenient and efficient.
- Identifies 3 common test tones.
- Small and Practical. No need to replace the chucks.
- Identifies dominant traffic direction, audible alarm.
- Approximate core power reading.
- Low false detection & insertion loss.
- Very easy to operate.
- Battery low indication.

ORDERING INFORMATION

FF-3306D Optical Fiber Identifier

The Kit Includes: Optical Fiber Identifier, Alkaline battery, User Manual, Soft Carrying case

FF-3306C & FF-3306CT

Optical Fiber Finder

FF-3306C Optical Fiber Identifier is an important tool for optical maintenance, which is used for nondestructive fiber identification work. The function is to detect in any location of both SM and MM fiber.

Meanwhile, combined with FF-3306CT Optical Signal Generator, it can realize low-frequency signal online injection, and find a particular fiber online without modulation signal in optical fiber signal .

This tester is designed for central office or data center to identify patch cables.



Specification

FF-3306C	
Identified WL Range	800-1700nm
Identified Signal Type	CW, 270Hz±5%, 1kHz±5%, 2kHz±5%
Detector Type	Ø1mm InGaAs 2pcs
Adapter Type	Ø0.25 (Applicable for Bare Fiber) Ø0.9 (Applicable for Ø0.9 Cable) Ø2.0 (Applicable for Ø2.0 Cable) Ø3.0 (Applicable for Ø3.0 Cable)
Signal Direction	Left & Right LED
Singe Direction	-46~10(1310nm) -50~10(1550nm)
Test Range	(dBm, CW/0.9mm bare fiber)
Power Test Range	-50~+10
Signal Frequency	270, 1k, 2k Hz
Frequency Test Range	-30~0dBm (270Hz, 1KHz), -25~0dBm (2KHz)
Insertion Loss	0.8dB (1310nm), 2.5dB (1550nm)
Alkaline Battry	9 V
Operating Temperature	-70 °C
Storage Temperature	-95 °C
Dimension	196X30.5X27mm
Weight	200g
FF-3306CT	
Signal types	1Hz low-frequency signal
Signal mode	Mechanical vibration
Insertion Loss	<1dB @ 1310nm
Fiber Type	G657A1 G657A2 G655 G652D
fiber diameter	0.9/2/3mm
Weight	230g

Application

- Maintenance in Telecom
- Maintenance CATV
- Premise Distribution System
- Machine room cable maintenance
- Equipped for scientific, laboratory, teaching instrument, etc

ORDERING INFORMATION

FF-3306C&3306CT **Fiber Finder**

The Kit Includes: FF-3306C&3306CT Optical Fiber Finder, Alkaline battery, User Manual, Soft Carrying case

FF-3303A/B

Optical Variable Attenuator

FF-3303A/B handheld optical variable attenuator is used for continuously variable optical signal attenuation. Attenuator is used in the laser system for online testing, therefore, FF-3303A/B can be used in the digital system of communication devices (such as PHD, SDH) and also in the system of adopting analog modulation(CATV).

Specification

Fiber Type	9/125um SM
Optical Connector	FC/PC (SC ST available)
Calibrated wavelengths	1310/1490/1550/1625/1650nm
Measurement Range	0~30dB @ FF-3303A 0~60dB @ FF-3303B
Resolution	0.3dB
Minimize Insertion Loss	<1dB
Repeating	±0.2dB
Attenuating Accuracy	±0.8dB
Batteries	2 pcs of 1.5V AA Battery
Auto Turn off Time	10 mins
Operation temperature	-10 °C~+60 °C
Storage temperature	-25 °C~+70 °C,0~85% (non-condensation)
Size	190x100x48mm
Weight	450g



Features

- stepwise attenuating
- Provide with function of displaying dB and dBm attenuating value
- 10 minutes Auto-off function can be activate and deactivate with keypad operation
- Portable, rugged, lightweight; Easy to use.

ORDERING INFORMATION

FF-3303A Variable Attenuator

FF-3303B Variable Attenuator

The Kit Includes: FF-3303A/B Attenuator, Protective Rubber Boot, Rechargeable battery, Power Supply Adaptor, Instruction Manual and Cotton Swabs and Rigid hard carrying case

FF-3303PRO

Optical Variable Attenuator

FF-3303PRO handheld optical variable attenuator is used for continuously variable optical signal attenuation. Attenuator is used in the laser system for online testing, therefore, FF-3303PRO can be used in the digital system of communication devices (such as PHD, SDH) and also in the system of adopting analog modulation(CATV).

Specification

Fiber Model	9/125um SM
Optical Connector	FC/PC (SC ST available)
Calibrated wavelengths	1310/1490/1550/1625nm
Measurement Range	2.5~60dB
Resolution	0.05dB
Minimize Insertion Loss	<2.5dB
Linearity	±0.5dB
Repeating	±0.2dB
Attenuating Accuracy	±0.8dB
Back Reflection	Typical value 40dB
Max input	20dBm
Displaying type	lattice 128*64 black and white
Rechargeable batteries	7.4V
Power supply	7~8.5V
Operation temperature	0~40
Storage temperature	-10~60 ,0~85% (non-condensation)
Weight	450g



Features

- stepwise attenuating by circumgyrated dial: attenuating step 0.05dB
- Provide with function of displaying dB and dBm attenuating value
- 10 minutes Auto-off function can be activate and deactivate with keypad operation
- After instruments off, the system will have the memorizing of the value and the attenuating step, in order to restore the system back to the previous shut down state when open the instruments next time
- Portable, rugged, lightweight; Easy to use.

ORDERING INFORMATION

FF-3303PRO Variable Attenuator

The Kit Includes: FF-3303PRO Attenuator, Protective Rubber Boot, Rechargeable battery, Power Supply Adaptor, Instruction Manual and Cotton Swabs and Rigid hard carrying case

FF-4103N

Optical Talk Set

FF-4103N Optical Talk Set is an intelligent and efficient instrument that combines the functions of both a digital optical phone and a stabilized light source in one set.

It is widely used in operations of installation, optical testing, maintenance and fiber attenuation value testing in data network, CATV and Telecommunication network.

FF-4103N Talk Set can carry out full-duplex communication with high quality connection without distance limit.



Specification

Wavelength	1310/1550nm
Emitter Type	FP-LD
Distance	100km
Dynamic Range	33dB
Output Power	-5 to -7 dB
Modulation	CW,270,1K,2K (Hz)
Stability(30min,20°C)	0.1 dB
Power Supply	3pcs of 1.5V Alkaline Batteries/8.4V Power Adaptor
Battery Operating Time	5 hours
Optical Connector	FC/PC
Operating Temperature	-10 ~ +60 °C
Storage Temperature	-25 ~ +70 °C
Dimension	198X102X50mm
Weight	310g

Features

- Full-duplex digital communication with high quality conversation connection and low background noise
- Together with Optical Clip-on Coupler, enables online communications available
- Combining functions of both a digital optical phone call and a stabilized light source.
- Large LCD display with backlight
- Low battery power indication

ORDERING INFORMATION

FF-4103N Optical Talk Set

The Kit Includes: Optical Talk Set (pair), Headset, 3 pcs 1.5V Alkaline Batteries, 8.4V Power Supply Adaptor, User Manual, Cotton swabs and soft carrying case.

FF-3308

Insertion and Return Loss Tester

FF-3308 handheld return loss tester is used to measure return loss in the field fiber optic linking, for the purpose of adjusting the quality of optical fiber end-face, and to make sure the fiber optic communication is in good condition.

FF-3308 handheld return loss tester can realize measurement of Return Loss, Insertion Loss, Output power, and also can be used as the laser source. Moreover, it has the data storage function of 500 measurement items.



Specification

Return Loss Testing	
Wavelength(nm)	1310/1550
Puls Width(nm)	5
Displaying range(dB)	-70 to 0
Accuracy(dB)	±0.5
Optical Connector	FC/APC
Resolution(dB)	0.01
Insertion Loss Testing	
Wavelength(nm)	800-1700
Calibrated wavelength	850/1300/1310/1490/1550/1625nm
Uncertainty(dB)	±0.25
Displaying Range(dBm)	-70 to +6
Communication Port	USB
Alkaline battery	3xAA,1.5V
Display	LCD
Operation Temperature	-10 +60 °C
Storage Temperature	-25 +70°C
G.W.	380g
Size	175 x 90 x 44.5mm

Features

- Variety of functional test patterns (RL.IL.OPM.OLS)
- Support USB power supply function.
- Interface simple, easy to operate.

Application

- Variety of functional test patterns (RL.IL.OPM.OLS)
- The test data uploading is stored.
- Support USB power supply function.
- Interface simple, easy to operate.

ORDERING INFORMATION

FF-3308 IL& RL Tester

The Kit Includes: Insertion & Return Loss Tester, Protective Rubber Boot, Rechargeable battery, Power Supply Adaptor, Instruction Manual, Cotton Swabs and Rigid hard carrying case

FF-3304N

Optical Fiber Ranger

Optical Fiber Ranger is the most portable test instrument in the industry. It adopts OTDR technical principles and integrates the powerful analysis software, which enables the fiber ranger detect fiber faults location more accurate and easy.

Specification

Operating Wavelength	1550nm
Fiber Type	9/125um SM Fiber
Optical Connector Type	FC/PC
Detector Type	InGaAs
Peak Power of laser	60mW
Max.Display Distance	60km (1dB)Reflection Event 20km (2.5dB) None-reflection Event
Measurement Unit	m
Ref. Event Dead Zone	15m
Accuracy(Ref.Event)	$\pm(2m+2*10^4 *Distance)$
Wavelength of VFL	650nm
Output Power of VFL	1mW
Power Supply	Alkaline Battery (3pcs of AA 4.5V Batteries)
Battery Operating Time	5000 measurements
Working Temperature	-5~40
Storage Temperature	-10~60
Humidity	0~85%(Non-condensation)
Dimensions	190*100*50mm
Weight(g)	450



Features

- Portable, rugged, lightweight; Easy to use.
- More accurate testing results and better repeatability.
- Up to 8 fiber faults can be detected in each measurement.
- Automatic Pulse Width Control design to ensure a convenient operation.
- Easy to identify the faults location.
- Built-in visual fault locator (VFL), conveniently to find the faults in dead zone.
- Dust, water and shock proof, designed for field use
- Long battery life, up to 5000 measurements operation.

ORDERING INFORMATION

FF-3304N Optical Fiber Range

The Kit Includes: Optical Fiber Ranger, USB Cable, CD, Black Carrying Bag, Battery

FF-3313

PON Terminal Tester

FF-3313 PON Terminal Tester is newly designed fiber optic tester. It aims at PON network installation, PON network maintenance. It can show 7 states of ONT and OLT. It can find problem of PON network easily.

Specification

PON Terminal Tester module			
Test mode	Online/Break/Rogue cats/ONT Bad/ONT Fatal/No power/Fall off (7 states)		
Insertion Loss	<1.5dB		
Optical Interface	FC in default, SC ST for options		
PON OPM module	1310nm upstream	1490nm	1550nm
Testing Range (dBm)	-35 to +10	-40 to +12	-40 to +25
OPM Uncertainty	<0.5dB		
Calibration Wavelength	1310/1490/1550/1625nm		
Display resolution	0.01dB		
Optical Power Meter module			
Calibration Wavelength	1310/1490/1550/1625nm		
Probe type	InGaAs		
Detection range	-70 to +6dBm		
Uncertainty	+/- 0.5dB		
VFL module			
Wavelength	650nm		
Output optical power	> 1mW		
Light Source module			
Wavelengths	1310/1550nm		
Output optical power	0 dBm		
General			
Monitor	Colorful TFT		
Power Supply	3 AA1.5V alkaline batteries		
Interface	Mini USB		
Battery Life	>10 Hours		
Working temperature	-5 to +40 °C		
Storage temperature	-10 to +70 °C		
Weight	423g		
Size	192×102×50mm		



Features

Feature:

- Self-patent for PON network terminal analysis and troubleshooting
- Intelligent troubleshooting of optical network terminal resources occupied or idle
- Smart to determine the light cat is not turned on, the end of the fiber fracture and the optical connector off
- Support return loss detection, qualitatively determine the optical path, optical connector installation quality; escort high-speed optical communications
- Fully support PON optical power meter function
- Support 1310nm and 1550nm stable light source output mode
- Support standard optical power meter mode
- Support red light (visual fault location) mode
- Support Chinese / English language switch
- Support threshold setting
- Support alkaline batteries, rechargeable batteries, AC adapter power supply
- Intelligent power management and power detection capabilities
- Support date and time settings
- Support power saving mode

ORDERING INFORMATION

FF-3313 PON Terminal Tester

The Kit Includes: FF-3313 PON Terminal Tester, Operation manual, Cotton swab, Certificate, Patchcord SC / PC-SC / PC, Adapter (FC/ SC/ ST) PC, USB cable(mini 5pin to 4pin), PC software, Electronic manual document

FF-6700

Optical Fiber Cable Identifier

FF-6700 Optical Cable Identifier can accurately identify the specific cable from a bunch of aerial, duct, or direct buried cables by connecting it to one fiber with FC/APC connector in the cable and knocking the cables.

When knocking the specific cable, FF-6700 Optical Cable Identifier will transform mechanical vibration to video and sound signal, which will help find the target cable. It could display the distance from the knocking point to the testing point.



Specification

Model#	FF-6700A	FF-6700B	FF-6700C
Min. Output Power	-15dBm	-3dBm	+9dBm
Max. Distance	20km	50km	80km
Fiber Number	single fiber		
Wavelength	1310/1550nm		
SNR	40dB		
VFL Distance	10km		
Fiber Type	SM		
Optical Connector	FC/APC		
Display	5.6 inch touch screen		
Input Mode	TIF touch screen + button		
Output Mode	video: active display of real-time waveform audio: dual channel audio output		
Power Supply	DC12V/5A		
Lithium Battery	7.4V, 7.5Ah, continuous working time 30h		
Power	4.5w		
Dimension	255H*155W*72L mm		
Net Weight	1.5kg (including battery)		
Operating Temperature	0 to +50 °C		
Storage Temperature	-20 to +70 °C		

Features

- No need to cut the cable, easy and quick
- High SNR
- Low power consumption
- High dynamic range, up to 80km
- Various communication and storage interfaces

ORDERING INFORMATION

FF-6700A Optical Cable Identifier
FF-6700B Optical Cable Identifier
FF-6700C Optical Cable Identifier

The Kit Includes: AC/DC adapter, headphone, adapter, patchcord, coupler, test report, carrying bag, user manual

FF-5016

10/100/1000M Ethernet Tester

FF-5016 Ethernet Tester is a portable, functional, convenient Ethernet Tester. It can detect various network errors, including connection failure, slow speed, package loss, IP conflict, malicious attack etc.

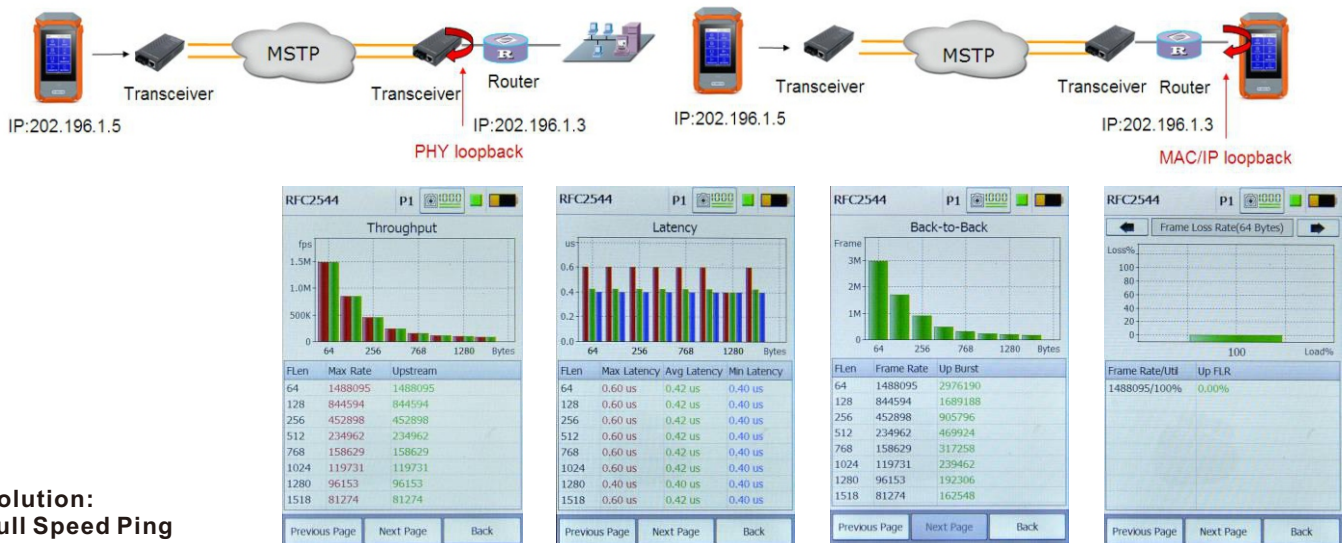
Specification

- 3.5 Touch Screen 10/100/1000 M (Fiber / Copper) Interface + Optic Power Meter
- RFC2544 (Throughput, Latency, Frame Loss, Back-to-back)
- Y.1564
- Bandwidth Test
- BERT (Layer 1, Layer 2, Layer 3)
- PHY, MAC, IP loopback
- Connectivity Test: Ping, Tracert, ARP Scan, IP lookup etc.
- Data Storage and Easy Update

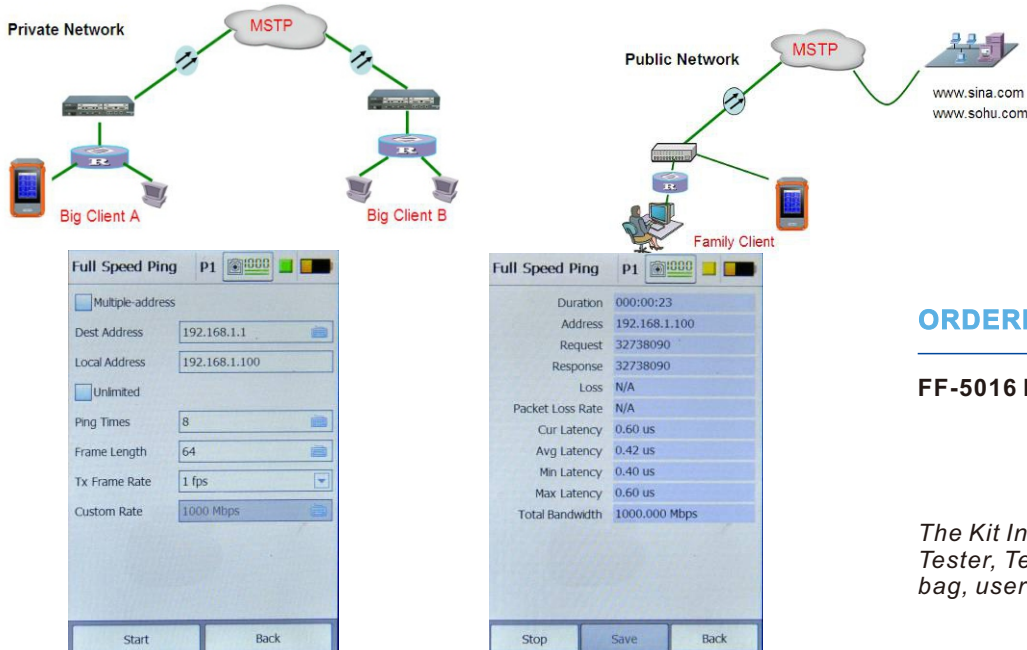


Application VIP Clients and Public Clients question about the network transmission speed.

Solution:RFC2544 Test



Solution: Full Speed Ping



ORDERING INFORMATION

FF-5016 Ethernet Tester

The Kit Includes: FF-5016 Ethernet Tester, Testing Accessories, carrying bag, user manual

FF-612

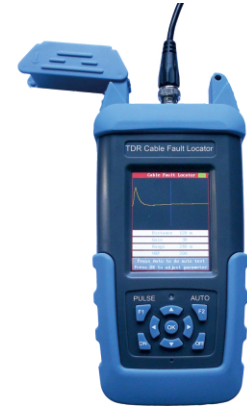
TDR Cable Fault Locator

This cable fault locator is designed for easy of use, portable, light weight and easy for carry.

It takes the time domain reflectometer (TDR) for measuring the exact fault location such as the broken line, cross faults, earthing, poor insulation and poor contact of the lead covered cables as well as plastic cables.

Once proper wave velocity set, test results will be obtained within 2 seconds after pressing Auto Key.

It is an effective tool to reduce troubleshooting time, improve work efficiency and reduce labor intensity of line maintenance staff. It also can be used in line projects acceptance and inspection of electrical cables.



Features

- No test dead zone
- Fast test speed and accurate test distance
- Portable and easy to carry
- Large colorful LCD display;
- humanized operation interface; six function keys can do all the tests.
- High-energy Li battery, continuous work 10 hours

ORDERING INFORMATION

FF-612 TDR Cable Fault Locator

Carry case, Re-chargeable battery and charger/adaptor, Test Line, User Manual, CD, U-disk

Specification

Max range	8 km
Highest resolution	1m
Dead Zone:	0 m
Power consumption	1W
Weight	0.42kg
Dimension	200×90×43mm
Working temperature	-15~+45 °C
Storage temperature	-20~+55 °C
USB storage	Transmit wave forms to U disk, and analyze the wave form on computer

FF-300DQ

TV Signal Level Meter

FF-300DQ TV Signal Level Meter is designed to provide features of easy operating which are most widely used and favored by professionals in CATV industry. It can be used to measure accurately analogue channels, digital channels efficiently and effectively with high accuracy rate. It supports C/N, level, channel power measurement, voltmeter function, spectrum analysis and so on.

Specification

<i>Channel/Frequency Index</i>	
Frequency Range	5MHz~862MHz
Resolution	10KHz
Bandwidth	280KHz
Frequency Step	50KHz
<i>Channel Type</i>	
Analog TV	TV
Digital TV	16/32/64/128/256 QAM
<i>Analog Power Level Testing</i>	
Measuring Range	25dBuV-120dBuV
Precision	±1.5dB
Resolution	0.1dB
Detection Method	Average value detection
Input Impedance	75 Ohm
<i>Digital Power Level Testing</i>	
Measuring Range	40dBuV-110dBuV
Precision	±2.5dB
<i>Voltage Testing</i>	
Input Range	0~100V (AC/DC)
Precision	±2V
Resolution	0.1V
<i>Digital Channel</i>	
Modulation Mode	Comply with DVB-C/ITU J83-A
QAM Mode	16/32/64/128/256QAM
Symbol Rate	1MS/S-7MS/S
Bandwidth	Set by user
MER	19-35dB
BER	1.0E-2~1.0E-8
<i>Carrier-Noise Ratio(C/N)</i>	
Precision	±2dB
Resolution	0.1dB
<i>Spectrum Analysis</i>	
Frequency Range	5MHz-862MHz
Power Levels Range	20dBV-120dBV
Testing Bandwidth	4.8, 20, 40MHz
Power Levels Range	20dBV-120dBV



Features

- Accurate QAM testing: digital average power, MER, BER
- Support multiple DVB mode: 16QAM, 32AM, 64QAM, 128QAM, 256QAM
- Single channel/Frequency simulated power levels testing
- Video and audio signal power levels testing
- V/A testing, show the frequency of video and audio, field intensity and power level difference simultaneously.
- C/N testing, slope testing
- QAM View includes BER, MER, and constellation

ORDERING INFORMATION

FF-300DQ TV Signal Level Meter

The Kit Includes: carrying bag, AC/DC adapter, battery, software, USB cable

FF-650NM

Bench-top 650nm Visual Fault Locator

The bench-top four-channel Visual light source adopts the latest integrated circuit design, and draws on the advantages of domestic and foreign instruments to meet needs of global customers. It is widely used in fiber optic cable and optical passive device detection



Specification

Wavelength	650nm
Output Power	10mW
Outport	FC/UPC
Fiber Type	MM (62.5/125)
Power Supply	AC 90-260V 50HZ
Dimension	260×120×305mm
Working temperature	-10~+50 °C
Storage temperature	-20~+65 °C
Weight	2.6kg

Features

- Central wavelength stability
- High output power stability
- Multimode fiber output
- Simple interface and easy operation

ORDERING INFORMATION

FF-650NM Bench-top VFL

The Kit Includes: FF-650NM, AC/DC adapter, Power Cable

FF-3327 Series

Bench-top Insertion and Return Loss Tester

The Bench-top Insertion/Return Loss Testing Meter provides a high reliable and stable performance. It is a multi-functional optical testing meter which is integrated with stable laser source, optical power meter, insertion loss tester and return loss tester. This testing meter is suitable for optical communication project as well as the research and manufacturing of optical active and passive components.



Specification

Model	FF-3327A	FF-3327B
Return Loss		
Working Wavelength	1310/1550nm±10nm	850/1300nm±10nm
Applicable Fiber	9/125um	50/125um or 62.5/125um
Connector Type	FC/APC	FC/UPC
Output Power	≥-3dBm	≥-10dBm
Output Stability	±0.005 (15min@25°C)	±0.01 (15min@25°C)
Detecting Range	0~75dB	0~55dB
Testing Accuracy	±0.3 (0~65dB)	±0.5 (0~45dB)
Display Resolution	0.01dBm/dB	
Insertion Loss		
Detector Type	InGaAs	
Detector Size	2.0mm	
Calibration Wavelength	850/1300/1310/1550nm	
Testing Range	-75dBm to +3dBm	
Linearity	±0.04 (+3~-50dBm)	
Testing Mode	Linearity/Non-linearity	
General		
Display	Color LCD	
Communication Port	USB 2.0 / Rs232 (optional)	
Power Supply	90~260V AC	
Relative Humidity	0~85% (non-condensing)	
Dimension	280×260×120mm	
Weight	3.15kg	
Working Temperature	0~40°C	
Storage Temperature	-25~+70°C	

Features

- Bench-top, selectable modular type structure
- Stable laser source
- Using high precise optical detector
- User can easily switch among three testing modes: optical power meter mode, return loss mode and insertion loss mode
- Linear optical power and logarithm optical power display

ORDERING INFORMATION

FF-3327A SM I.L. & R.L. Tester

FF-3327B MM I.L. & R.L. Tester

*The Kit Includes: FF-3323 Insetion and return loss tester, Power cord, interchangeable adapter (FC/SC/ST), FC/APC-FC/APC patchcord, FC/PC adapter, manual, cleaning swabs.
[Options] CD disc, USB cable, RS232 serial cable, foot switch*

FF-CL1400

Pipeline and Cable Locator

FF-CL1400 Pipeline and Cable Locator consists of a Transmitter, a Receiver and Accessories, used in the underground pipeline & cable route accurate locating, the burial depth measuring, long distance tracing, and insulation fault point detecting. We adopted multi coil electromagnetism technology in FF-CL1400 Pipeline and Cable Locator, enhanced the precision of the pipeline and cable location and the burial depth, and the goal pipeline identification capability. It could accurately carry on tracing and location to the goal pipeline and cable in the crowded pipelines and cables.

FF-CL1400 Pipeline and Cable Locator is widely used in the telecommunication, mobile, electric power, water supply, natural gas, physical prospecting, petrochemical and city construction, etc.



FF-CL1400 Pipeline& Cable Locator
FF-CL1400A (w/ Fault Finding holder)
FF-CL1400B (w/ GPS)

Functions

1. Detect the route of underground pipeline and cable
2. Measure the burial depth of underground pipeline and cable
3. Detect and locate the insulation fault point of the underground pipeline and cable
4. Identify the goal pipeline and cable under multiple underground pipelines and cables situation

Specification

<i>Transmitter</i>	
Signal Frequency for Injection	480Hz, 7.7KHz, 31KHz, 61KHz
Signal Frequency for Induction	31KHz, 61KHz
Signal Frequency for Clamping	31KHz
Signal Frequency for Fault Finding	480Hz
Output Voltage	0-400Vp-p adjust according to the insulation condition
Output Wave Shape	sine wave
Power Supply	11.1VDC 4.4AH Li-battery
Maximum Output Power	10W
<i>Receiver</i>	
Power Loss	< 1W
Power Supply	11.1VDC 1.8AH Li-battery
Max. Burial Depth for Detecting	4.5 meters (normal condition)
Tolerance of burial Depth for Detecting	$\pm 0.05H \pm 5\text{cm}$ ("H" is pipeline burial depth)
Tolerance of Route for Detecting	$\leq 5\text{cm}$
The Effective Length under Detecting Pipeline Route and Depth with Injection Method	$\geq 10\text{Km}$ (normal condition)
The Effective Length under Detecting Pipeline Route and Depth with Induction method	$\geq 3\text{Km}$ (normal condition)
The Effective Length under Detecting Pipeline Route and Depth with Clamping method	$\geq 6\text{Km}$ (normal condition)
Insulated Fault Detecting	$\geq 2\text{ M}\Omega$
<i>Weight and Dimension</i>	
Transmitter	3.4kg/348×239×175mm
Receiver	2.6kg/648×260×130mm
Fault Finding Holder (Optional)	1.5kg/525×672×25mm
Entire Machine	14kg/790×250×420mm

FF-700AP

Fiber Optic Inspection Probe

FF-700AP features USB function to connect the laptop or PC directly. It includes image sensor inside the probe to realize real-time inspection, without any additional power cord and driver.

All spots, scratches and defects around end face can be easily figured out.



Specification

Magnification Ability	400x
Resolution	1μm
View of Field	0.40*0.31mm
CCD Sensor	1/3, 600Line
LxWxH Size	165*28*40mm
Weight	0.15kg
Storage Temperature	-18°C ~ 35°C
Standard Tips	1x tip for SC/PC bulkhead 1x tip for FC/PC bulkhead 1x tip for LC/PC bulkhead 1x tip for all 2.5mm connectors

Features

- Single way to get focus control, stir the wheel with fingers simply to have loop control with back or forward movement.
- Precise cone contact to reach 98% alignment consistency.
- 400× Magnification Ability, less more 1um Resolution.
- Digital sensor inside the probe to access the laptop or PC directly.
- Stable for more than 8 hrs continuous work with less than 3% failure.

ORDERING INFORMATION

FF-700AP Inspection Probe

The Kit Includes: Inspection Probe, Tip for Adapter SC/PC, Tip for Adapter FC/PC, Tip for Adapter LC/PC, Tip for 2.5mm connectors, USB cable

FF-700AH

Fiber Optic Inspection Probe

FF-700AH features unparalleled advantages of probe adjustment and alignment, displaying high definition and clear image for inspection. It includes a Probe and 3.5inch display for the whole set.

The probe is a high performance inspection probe. Compared with traditional tools, its unique single-way focus control greatly simplifies the work. No matter left or right hand, forward or reverse operation, it can quickly get the end face inspected and have image displayed easily in one-way. It tailors the fiber operator and manufacturer for special quick, comfort end face testing, committing to serve you the best.



Features

- Single way to have focus control, stir the wheel with fingers simply to have loop control with back or forward movement.
- Precise cone contact to reach 98% alignment consistency.
- 400× Magnification Ability, less more 1um Resolution.
- Digital sensor inside the probe to access the laptop or PC directly.
- Stable for more than 8 hrs continuous work with less than 3% failure.

ORDERING INFORMATION

FF-700AH Probe&Display

The Kit Includes: Inspection Probe, Display, Tip for Adapter SC/PC, Tip for Adapter FC/PC, Tip for Adapter LC/PC, Tip for 2.5mm connectors, USB cable

Specification

Probe	
Magnification Ability	400X
Resolution	1μm
View of Field	0.40*0.31mm
CCD Sensor	1/3, 600Line
LxWxH Size	165*28*40mm
Weight	0.8 Kg
Storage Temperature	-18°C ~ -35°C
Standard Tips	1x tip for SC/PC bulkhead 1x tip for FC/PC bulkhead 1x tip for LC/PC bulkhead 1x tip for all 2.5mm connectors
Display	
Display Pixel	230000
Battery Volume	3500 mAh
Working Hours	9 hours
Weight	1 Kg

FF-730AW

Fiber Optic Inspection WIFI

WIFI optical fiber inspection probe transmits pictures to mobile phone through WIFI signal and display, easy to carry and clearly judge the condition of the optical fiber end, for example scratches and dirt. WIFI optical fiber inspection probe is built-in independent WIFI signal, with high-definition CCD and lens displays the image on the mobile phone. The whole series adapters can satisfy all kinds of optical fiber inspect demands.

Features

1. Longer use life and better imaging quality

Inner structure is newly designed to get longer use life, no matter how bad the environment is, the internal optical component will not deteriorate and the imaging quality is good.

2. Use WIFI signal, the connection is convenient and stable

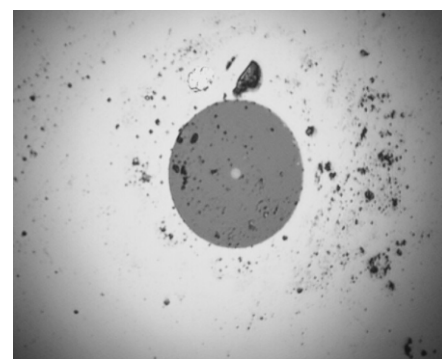
Through WIFI signal connect to mobile phone, which is accord with modern society intelligent work mode and has stable connectivity. No matter factory environment or engineering site, our inspection probe always shows a stable and clear image.

3. Clear image acquisition software

The image signal transmitted to mobile phone will display clearly through developed image display software, which is easier to check different fiber ends inspection conditions and is satisfy with various test environments.

Specification

Model#	FF-730AW
Magnification	200x
Resolution Ratio	0.5μm
Focusing Mode	Manual
Video Signal Format	WIFI signal transmission
Display	Mobile screen display
Storage Temperature	-20 ~ +50°C
Work Temperature	-10 ~ +50°C
Power Dissipation	3W
Work time (one charge)	≥5 hours
Dimensions	210mm*56mm*50mm
Weight	0.5Kg



Features

- WiFi connection to PC
- Android App and iOS (Apple) App
- Available several connector & adaptor types Tips
- External Interface : USB
- Save inspected images
- Real-time Recording in field through smart phone
- Built-in rechargeable battery
- No need exterior Wireless AP or Module
- Anti-slip Grip design& Easy Focus
- Complied with RoHS
- CE/FCC approved

ORDERING INFORMATION

FF-730AW Inspection Probe WIFI

The Kit Includes: Handset (included WiFi), USB Cable, Tip for female SC/PC, Tip for female LC/PC, Tip for male SC/PC, FC/PC, ST/PC, Tip for male LC/PC, UserManual



FF-760AW

Fiber Optic Inspection WIFI & USB

The Fiber Optic Inspector/ Microscope is communicated with Apple iOS and Android Smartphone(WiFi) as well as PC/Laptop(USB) and it is very useful device to inspect fiber optic ferrule in field.

The inspector/ Microscope is no need exterior wireless AP or Module.

Available Applications

- Fiber Optic System/Sub-system with Fiber Networks
- Fiber Optic Module included Transceivers, SFP. etc
- Test Equipment and Distribution Patch Panels
- Fiber Optic Components like Attenuator, Inside Adaptors

Specification

Model#	FF-760AW
Magnification	400x
Resolution	<1.0μm
Field of View	X: 0.3487mm Y: 0.2632mm
Laser Source	Blue LED
Focus Method	Unidirectional manual
Focus Time	1~5 seconds
Snapshot Button	yes
WiFi & USB Switch	Support
Communication Port	Micro USB
Connection Standard	WiFi 802.11 and USB2.0
Wireless Frequency	2.4GHz
Wireless Distance	20m
Phones Compatible	Android 4.4 and above; IOS 8.0 and above
Voltage	5V
Battery	3100mHA Lithium battery
Charging Time	≤5h
Testing Time	≥5h
Dimension	19*5*3cm
Weight	0.175kg
Working Temperature	-10°C~50°C
Storage Temperature	-20°C~60°C
Humidity	<90% (non-condensing)



Features

- Wifi / USB quick switch for dual use
- USB digital support in Windows/ Linus/ Mac
- Wifi support in Android and iOS
- Image capture feature to save time
- Built-in lithium rechargeable battery for 5hr
- 98% consistent alignment to centralize end face
- 400× magnification, <1μm resolution
- LED button for light source control
- CE/CEM/RoHS Certified
- External Interface: micro USB
- No need exterior Wireless AP or Module

ORDERING INFORMATION

FF-760AW Inspection Probe WIFI

The Kit Includes: Inspection Probe, Tip for Adapter SC/PC, Tip for Adapter FC/PC, Tip for Adapter LC/PC, Tip for 2.5mm connectors, USB cable, Tip for female LC/PC, Manual

FF-800AP

Fiber Optic Inspection Probe

The fiber inspector includes Pass/Fail Software according to IEC 61300-3-35 and it is very useful device to inspect fiber optic connectors in field.

You can use it to inspect the connector installed inside hardware device and capture the image to your computer.



Specification

Magnification	400x
Filed of Vision	400um x 300um
Focus	Manual, Maximum 2mm in and out
CCD	1/4" Sharp CCD sensor
Power Supply	Computer USB Electric Power
USB	Video Capture with Software for Windows
Handset (without Tip)	185mm (L) x 24mm (T)
Weight	150g
Video Output	NTSC (default) or PAL
Standard Tips	1x Tip for female SC/PC and FC/PC 1x Tip for female LC/PC

Features

- Included Pass/Fail Software according to IEC 61300-3-35
- Very useful device to inspect Fiber Optic Connectors in field
- One handed operation
- Simply Portable
- Low Price but good capacity
- Available several adaptor types Tips (Both Female / Male Tip)
- Electric Power by USB
- Save Tested Analysis Report on PC by USB device
- Control the display size
- Easy and usage by setup
- Anti-slip Grip design & Easy Focus
- Complied with RoHS
- CE/FCC approved

ORDERING INFORMATION

FF-800AP Inspection Probe

The Kit Includes: Inspection Probe (included USB) Software, Tip for female SC/PC and FC/PC Tip for female LC/PC, User Manual

FF-900AW

Fiber Optic Inspection WIFI

The Fiber Optic Inspector/ Microscope is communicated with Apple iOS and Android Smartphone(WiFi) as well as PC/Laptop(USB) and it is very useful device to inspect fiber optic ferrule in field.

The inspector/ Microscope has Pass/Fail Analysis Software and it is no need exterior wireless AP or Module.

Available Applications

- Fiber Optic System/Sub-system with Fiber Networks
- Fiber Optic Module included Transceivers, SFP. etc
- Test Equipment and Distribution Patch Panels
- Fiber Optic Components like Attenuator, Inside Adaptors

Specification

Magnification	400x
Field of Vision	400umx300um
Focus	Manual, Max.2mm in and out
WIFI	2.4GHz WiFi IEEE 802.11b/g/n
Power of Charger	110/220V@50/60Hz Charger or USB Cable
Battery	3.7V 1300mA Rechargeable Lithium Battery
Battery Runnin Time	Approx. 4 hours (continuous usage)
USB Cable	mini 5-pin to USB 2.0 for Windows
Software for PC	Pass/Fail Analysis to IEC 61300-3-35
Standard Tips	1x Tip for female SC/PC and FC/PC 1x Tip for female LC/PC
Software for Cellphone	Android App & iOS Apple App
Dimension	185mm x24mm / 170g



Features

- WiFi and USB connection to PC
- Android App and iOS (Apple) App
- Pass/Fail SW to IEC 61300-3-35
- Available several connector & adaptor types Tips
- External Interface : mini 5-pin type
- Save inspected images and reports
- Real-time report in field through smartphone
- Built-in rechargeable battery
- No need exterior Wireless AP or Module
- Anti-slip Grip design& Easy Focus
- Complied with RoHS
- CE/FCC approved

ORDERING INFORMATION

FF-900AW Inspection Probe WIFI

The Kit Includes: Handset (included WiFi), AC Battery Charger incl. USB to mini 5-pin cable, Software (Pass/Fail Analysis), Tip for female SC/PC and FC/PC, Tip for female LC/PC, Manual

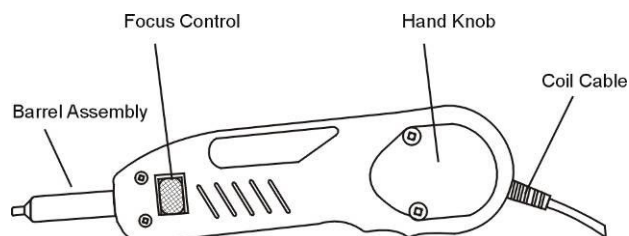
FF-600AH

Fiber Optic Inspection Probe & Display

Probe

The hand-held probe is a portable, video microscope used to inspect fiber optic terminations. More specifically, it is used to inspect hand-to-reach connectors that are installed on the "backside" of patch panels or inside hardware devices. It eliminates the need to access the backside of patch panels or disassemble hardware devices prior to inspection.

The probe utilizes an analog CCD, which outputs an NTSC or a PAL signal. The signal is routed through a 4-pin connector that routes power into the probe, and the video signal out of the probe. The default setting of magnification is 250x. When the figure shows on monitor, screw the focus control to make it clearest.

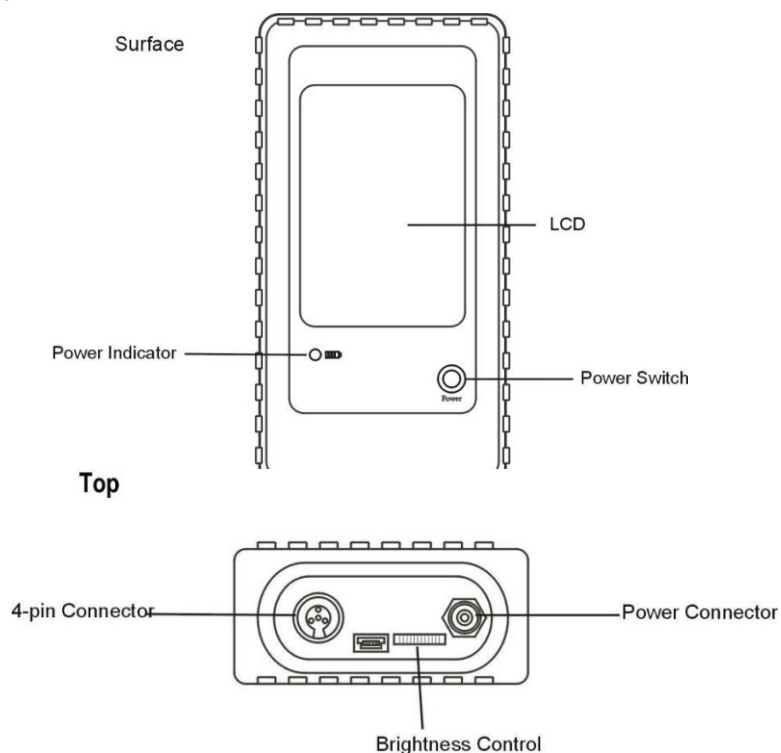


Display

When the "Power Switch" is turned on, pressing "Camera" would help you take a photo for the inspection.

If you need to check the data saved in the SD card, you can either connect the monitor via USB wire to your computer or take the SD card out of the SD slot and read it with card reader we offered.

The monitor can be powered by an output 110-240V DC/AC or a rechargeable Li-ion battery equipped inside. Video input is dedicated to PAL/NTSC formatted probe. All of the display's controls are built into the handle for easy access.



Features

- Convenient using both for male and female adapters;
- Widely used in DWDM, SDH, SONET etc.
- Magnification: 250* via 3.5220,000 pixels TFT LCD

ORDERING INFORMATION

FF-600AH Probe & Display

The Kit Includes: Inspection Probe, Display, Li-ion Battery, Power Charger Wire, Carrying Case, 2.5mm Male Tips, for testing FC/ SC/ ST/ E2000 (UPC) male connectors, 1.25mm Male Tips, for testing LC/MU (UPC) male connectors, 2.5mm Female Tips, for testing FC/ SC/ ST/ E2000 (UPC) bulkhead, 1.25mm Female Tips, for testing LC/UPC bulkhead

FF-500AH

Fiber Optic Inspection Probe & Display

FF-500AH Fiber Microscope is used to inspect end-face of fiber optic connectors. It magnifies 125um fibers 400 times, enlarging picture through a video signal to the display where the status of fiber end-face is showed clearly.

Not only portable and easily in-hand, FF-500AH Fiber Microscope is also multi-functional. It can detect simplex and duplex fiber ends located in both male and female connectors. Also, working stable is another feature. It eliminates the need to find solutions for hard-to-reach areas inspection, which can detect connectors even installed on the backside of patch panels or inside hardware devices, providing a completely convenience for checking .

Specification

<i>Probe</i>	
Magnification	400X
Definition	<1μm
View of field	X: 0.3165 Y: 0.285
Focus way	Single-way
Focus speed	2-6s
Alignment	>98%
Output	Dual pins AV port
Standard Tips	1x SC-PC-F Tip 1x FC-PC-F Tip 1x LC-PC-F Tip 1x 2.5-M Tip
Weight	110g
Size(mm)	L:180,W:22,H:56
<i>Display</i>	
Screen size	2.7inch/ 960x240
Enlarged Size	22mm
Picture	Single-framed 640x480JPG
Timer	5/15/30mins selections
Batteries	Li-ion1800mAh
TF Storage	Support 32G
Input/Output	AV /USB2.0
Size(mm)	L:78, W:22, H:56



Features

Probe

- Consistent alignment, simple to use
- Unidirectional focusing, quick and accurate imaging
- 400X magnification, clear image

Display

- Small, light, and portable
- Changeable high capacity batteries
- Photo, video and record tested fiber
- Brightness and Contrast adjustable

ORDERING INFORMATION

FF-500AH Probe & Display

The Kit Includes: Inspection Probe, Display, SC-PC-F Tip, FC-PC-F Tip, LC-PC-F, 2.5-M Tip, 8G-TF Reader, 2xLi-ion Battery, Power Charger Wire, Earphone Cord, Carrying Case

FF-400AH

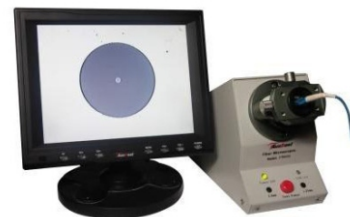
Fiber Optic bench-top Microscope

FF-400AH is kind of bench-top microscope, specializing in the fiber end face inspection with diameter of 1.25mm and 2.5mm connectors of patch cord. Finished, Semi-finished, PC and APC all types can be tested. It is 400 × magnification, with resolution of 0.5μm.

Its bench body let the patch cord inserted directly to the microscope, simply and fast improves the testing efficiency, making it best for the batch test in assembly line; High Definition LED display is with super-high resolution. It tailors the manufacturer for the specific need, offering a high-value-to-low-cost inspection service.

Specification

<i>Host</i>	
Resolution(μm)	400X/0.5um
X/Y Adjustment(mm)	X-axis:4mm Y-axis:3.5mm
Service Life	Coaxial Blue LED, 50000 hrs
Standard Tips	1.25mm tips for LC/PC, MU/PC connectors 2.5mm tips for FC/PC, SC/PC, ST/PC connectors
<i>LED Display</i>	
Display size(mm)	26*22 (10.4 Inch)
Size L*W*H (mm)	230*92*145
Image Size(mm)	400X; 80mm
Total Weight(Kg)	1.58



Features

- Spots/Scratches can be clearly checked and resolution reaches 0.5um.
- Clamps are available for assorted testing with PC and APC endface.
- Smooth focus control, simple operation, stable testing results.
- X/Y-axis adjustment for both horizontal and vertical control, broaden the view of field and stabilize image always in central.
- HD 10.4 Inch LED Display for distinct and clear image shown.
- Average light spot in display gets feature of same resolution between fiber core and ceramic end face with little testing errors.

ORDERING INFORMATION

FF-400AH Bench-top Microscope

The Kit Includes: Host, Display, 1.25mm tip, 2.5mm tip, 12v power cord, 5-pin aviation connector, Pass/fail software (Option)

FF-FOC

Bulkhead & Ferrule Cleaner

We provides high quality Ferrule Mate Cleaner for $\phi 1.25/\phi 2.5/\phi 2.0$ optical ferrule. The cleaner is composed of special cleaning reel, extendable nuzzle and guide cap of specified size. The cleaner meet rigorous requirements of cleaning solution.

The cleaner is an easy-to-use option for cleaning ferruled connectors in adapters. Simply insert the Cleaner into an adapter and push until an audible "click" is heard. The Cleaner uses the mechanical push action to advance an optical grade cleaning tape while the cleaning tip is rotated to ensure the fiber end-face is effectively, but gently, cleaned. The Cleaner is a must-have for field technicians. Small enough to fit in a shirt pocket and a great addition to cleaning kits.

Specification

<i>2.5mm Bulkhead & Ferrule Cleaner</i>	
Dimention	80x13x13mm
Weight	0.1kg
Connector Type	All 2.5mm Connectors, SC FC ST...
Cleaning Cycles	800 cycles
<i>1.25mm Bulkhead & Ferrule Cleaner</i>	
Dimention	80x13x13mm
Weight	0.1kg
Connector Type	All 1.25mm Connectors, LC MU E2000...
Cleaning Cycles	500 cycles
<i>2.0mm Bulkhead & Ferrule Cleaner</i>	
Dimention	80x13x13mm
Weight	0.1kg
Connector Type	MIL PRF2.0mm Terminus& SMPTE 304M/358M
Cleaning Cycles	800 cycles



ORDERING INFORMATION

FF-FOC20 $\phi 2.0$ mm Cleaner
 FF-FOC25 $\phi 2.5$ mm Cleaner
 FF-FOC125 $\phi 1.25$ mm Cleaner

FF-CLEP Series

Bulkhead & Ferrule Cleaner (Short)

The Fiber Optic Cleaner is designed to specially work well with the female bulkhead adapters and male connectors. It cleans the ferrule end faces removing dust, oil, and other debris without nicking or scratching the end face.

Applications

Connector inside adapter

1. Remove guide cap from the device
2. Insert tip of cleaner into adapter
3. Push the outer shell to start cleaning the connector end face. A click sound indicates end of cleaning process.
4. Close cover after use.

Connector plugs alone

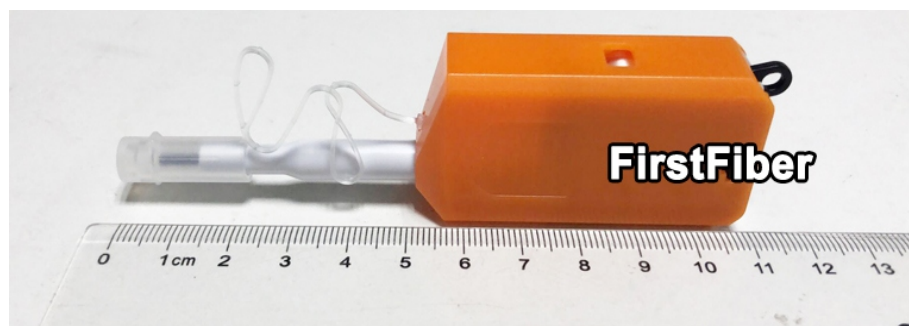
1. Open the cover on the guide cap
2. Insert connector into the guide cap
3. Push the outer shell to start cleaning the connector end face. A click sound indicates end of cleaning process.
4. Close cover after use.

Note:

1. Be careful not to slant the cleaner while inserting into the guide cap.
2. Do not overly exert force during insertion as this may cause damage to both connectors and the cleaner.
3. If pushing outer shell is inhibited, remove cleaner from adapter and ensure that there is no sizable debris inhibiting the cleaning process.

Features

- Working for 1.25/2.5mm connector
- Easy to operate
- Compatible with connectors and bulkhead
- Very short 110x30x18mm
- Over 800 times for standard usages



ORDERING INFORMATION

- FF-CLEP-25-M ϕ 2.5mm Cleaner
FF-CLEP-125-M ϕ 1.25mm Cleaner

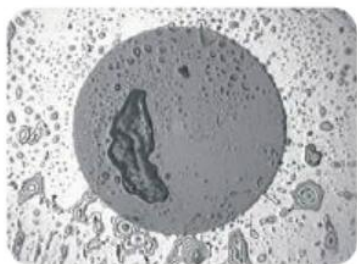
FF-CLE-ELE

Electric Fiber Ferrule Cleaner

FF-CLE-ELE is a high performance electric cleaner suitable for cleaning FC/SC/ST/E2000 type with diameter of 2.5mm and LC/MU type with diameter of 1.25mm. The operation is simple. According to the type of fiber connector to be cleaned, select the cleaning rod and adapter head, insert the cleaning rod into the product to be cleaned, press the switch, and it only takes 2-5s to remove the stains on the fiber connector.

FF-CLE-ELE-1.25/2.5 fiber optic ferrule end face electrical cleaner
Electrical cleaner is used for 2.5/1.25mm adapter, SFP, or ODC Plug/socket cleaning.

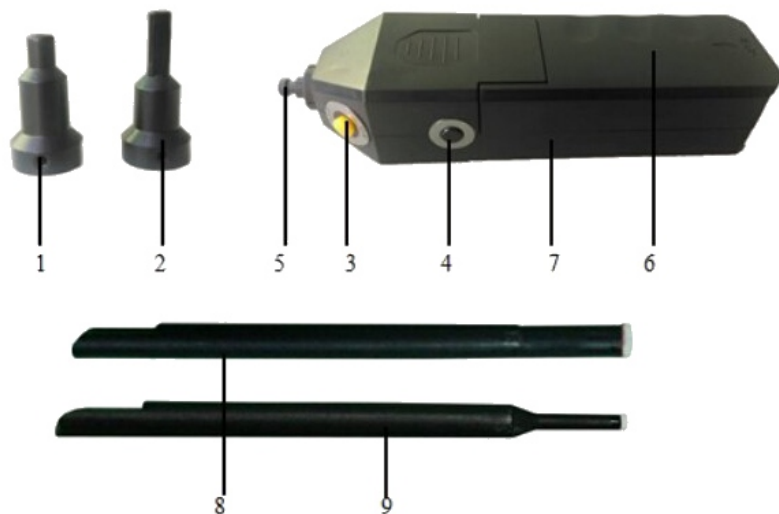
Performance



Before cleaning



After cleaning



- | | |
|--------------------------------------|-------------------------|
| 1) 2.5mm adapter | 2) 1.25mm adapter |
| 3) button for keep working | 4) Power ON & OFF |
| 5) Axis of rotation | 6) Battery compartments |
| 7) Housing with electrical machinery | |
| 8) Cleaning rod for 2.5mm | |
| 9) Cleaning rod for 1.25mm | |



ORDERING INFORMATION

FF-CLE-ELE Electric Cleaner

TYPE A/B

Optical Connector Cleaning Cassette

- Easy to replace tape cartridge
- The tape can be replaced very easily by a "drop-in" cartridge.
- One push operation
- Available for both left hand and right handed operators.
- Anti-static properties
- Has excellent anti-static properties for static sensitive applications and can avoid reattachment of dust to the ferrule after cleaning.

Specification

TYPE A	
Ferrule	2.5mm
Cleans per reel	more than 400 times
Connectors	SC, FC, ST, DIN, D4
Dimention	125x85x35mm
Weight	150g
TYPE B	
Ferrule	1.25mm
Cleans per reel	more than 400 times
Connectors	MU, LC, MT, MPO, MT-RJ(without pins)
Dimention	125x85x35mm
Weight	150g



ORDERING INFORMATION

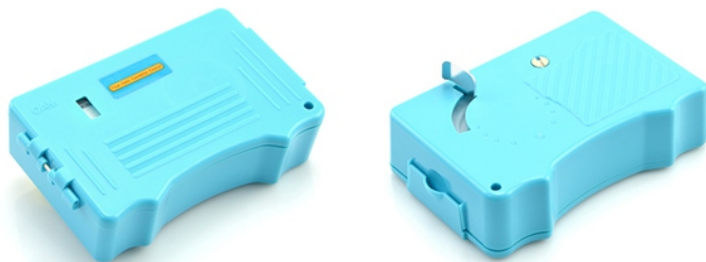
Type A 2.50 Connector Cleaner
 Type B 1.25 Connector Cleaner
 A/B-R Replacement reel blue

FF-OAM

Optical Connector Cleaner

The fiber connetor cleaner is kind of professional cleaning kit for optical fiber ends and connectors, which helps in reducing light signal return loss.

- Safe and environment friendly: designed for helping all operators consistently achieve high quality cleaning without alcohol
- Easy using & widely applicable: Palm-sized and lightweight. Often used in engineering lab, on production line, and in field
- Economical: Cleaning tape is replaceable and cost effective
- Wide usability: Used for SC, FC, ST, D4, LC, DIN fiber connectors.



ORDERING INFORMATION

FF-OAM Connector Cleaner
 FF-OAM-1 Replacement Reel

<i>Cleaning Stick</i>	
Diameter	2.5mm/1.25mm
connector type	SC,FC, ST, DIN, D4,MU, LC
Working Temperature	10 °C~ 60 °C
Storage Temperature	4 °C~ 60 °C
Humidity	20% ~ 80% R.H.
Size	2.5mm*145mm/ 1.25mm*100mm
<i>Cleaning IPA wipes</i>	
Connector type	SC,FC,ST,DIN,D4,MU,LC,etc
Working temperature	10°C ~ 60°C
Storage temperature	4 °C ~ 60 °C
Humidity	20% ~80% R.H
<i>Kimwipes</i>	
Layer number	single layer
Color	white
Package	280 pieces/box
Fiber mode	single mode & multi-mode
Fiber type	G.652, G.657, OM1, OM2, OM3, OM4,etc
Connector type	SC, FC, ST, LC, etc
<i>Alcohol Dispenser Bottle</i>	
Volume	250ml
Color	white
Material of Bottle	HDPE
Lock	Twist-lock
Operating Temperature	-40~+85°C
Storage Temperature	-40~+85°C
<i>FF-404 Fiber Scriber</i>	
Fiber type	Single fiber
Bare fiber diameter	125um
Blade Material	Tungsten steel
<i>FF-404B Fiber Scriber</i>	
Fiber type	Single fiber
Bare fiber diameter	125um
Blade Material	Ruby



ORDERING INFORMATION

FF-CS125 Cleaning Stick
 FF-CS250 Cleaning Stick
 FF-IPA Cleaning IPA wipes
 FF-KIM Cleaning Tissue
 FF-ACH250 Alcohol Bottle
 FF-404 Fiber Scriber
 FF-404B Fiber Scriber

FF-FC700

High Precision Fiber Cleaver

FirstFiber provides high precision optical fiber cleaver. It is used to cleave fiber for mechanical or fusion splicing operation. Both full size and mini fiber cleavers are available.

The full size fiber cleaver contains a great stability. It is a very reliable cleaver for the construction of optical network and FTTx applications. It provides a great portability and precision of cleaving angle.

The fiber cleaver contains a 12-position blade. This could proceed with 36,000 times single fiber cleaves, or 3,000 times 12-fiber ribbon cleaves.

Specification

Model#	FF-FC700
Fiber Type	Single Fiber
Coating Diameter	250um/900um
Bare Fiber Diameter	125um
Cleave Angle Capability	Typically <0.5° (single mode fiber)
Cleave Length	Fiber Diameter 250um/900um: 9~16mm/10~16mm
Blade Lifetime	36,000 times
Dimension	60W*76D*57H (mm)
Weight	420g



ORDERING INFORMATION

FF-FC700 Fiber Cleaver
FF-FC700BL Replacement Blade

FF-FC800

High Precision Fiber Cleaver

FF-FC800 High Precision Fiber Cleaver is a new generation product; it's an extremely light and reliable cleaver for the construction of optical network. Designed for excellent portability, FF-FC800 High Precision Fiber Cleaver is ideal for FTTx applications. The attached hexagonal wrench on the bottom allows you to adjust cleaver anytime and everywhere, enhancing the working efficiency greatly. With the special hand wrist strap, users should worry about accidental dropping no more.

Specification

Model#	FF-FC800
Fiber Type	Silicon
Coating Diameter	250um/900um
Bare Fiber Diameter	125um
Cleave Angle Capability	Typically <1° (single mode fiber)
Cleave Length	Fiber Diameter 250um/900um: 9~16mm/10~16mm
Blade Lifetime	36,000 times
Dimension	52W*52D*51H (mm)
Weight	268g



ORDERING INFORMATION

FF-FC800 Fiber Cleaver
FF-FC800BL Replacement Blade

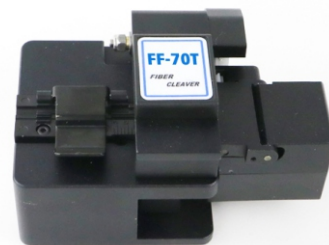
FF-70T

Half Automatic Fiber Cleaver

FF-70T is a standard high precision single mode fiber cleaver. It can be used to cleave the bare fiber to $<0.5^\circ$ cleaving surface. This fiber cleaver is used together with optical fiber fusion splicer. It can also be used to prepare the fiber tip for high precision optical coupling, mechanical splicing, etc.

Features

- | | |
|---|---|
| 1) 48000 cutting times | 5) Two step fiber cleaving |
| 2) Suitable for 0.125mm fiber | 6) $<0.5^\circ$ cleaving angle |
| 3) cut-off-fiber collection automatically | 7) Simple and easy replacement of blade |
| 4) Adsorption bin for easily clearance | 8) 16 cutting location for each blade |



Specification

Model#	FF-70T
Fiber Type	Single Fiber
Coating Diameter	250um/900um
Bare Fiber Diameter	125um
Cleave Angle Capability	Typically $<0.5^\circ$ (single mode fiber)
Blade Lifetime	1.0°@36, 000 times, 0.5°@15, 000 times;
Dimension	96W x 79D x 56H(mm)
Weight	450g

ORDERING INFORMATION

FF-70T Fiber Cleaver

FF-80T

Full Automatic Fiber Cleaver

The FF-80T fiber cleaver is available with a single fiber adapter for 250 to 900 micron coated single fibers. It is a simple operation for the user to remove or install the single fiber adapter and alternate between mass and single fiber cleaving. Built on a robust high-quality platform, the cleaver is ideal for use with fusion splicing or other precision applications, setting a new standard for flexibility and performance. An optional fiber scrap collector can be installed with the cleaver to help maintain loose scraps, resulting from the cleaving process. The scrap collector works to automatically grab and store the scrap fibers as the cleaver's lid is raised, following a completed cleave.

Features

- | | |
|---|---|
| 1) 78000 cutting times | 6) Adsorption bin for easily clearance |
| 2) Suitable for 0.125mm fiber | 7) Two step fiber cleaving |
| 3) Blade rotated automatically | 8) $<0.5^\circ$ cleaving angle |
| 4) cut-off-fiber collection automatically | 9) Simple and easy replacement of blade |
| 5) Protection cover lock easily | 10) 16 cutting location for each blade |



Specification

Model#	FF-80T
Fiber Type	Silicon
Coating Diameter	250um/900um
Bare Fiber Diameter	125um
Cleave Angle Capability	Typically $<0.5^\circ$ (single mode fiber)
Cleave Length	23~30mm
Blade Lifetime	78,000 times
Dimension	103W x 93D x 47H (mm)
Weight	340g

ORDERING INFORMATION

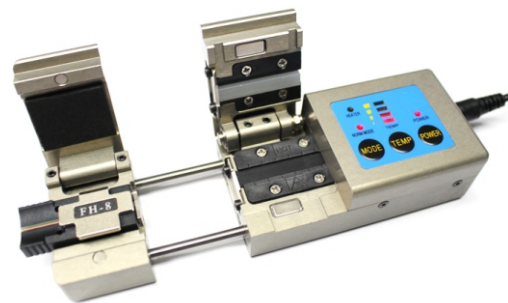
FF-80T Fiber Cleaver

FF-FOTS-R250

Thermal Cable Stripper

Method of operation

1. both ends of the power adapter connected to AC power and thermal stripping power supply interface;
2. the optical fiber according to user needs stripping the fiber length into the fixture
3. to be installed fixture into the fixture of the good fiber mat
4. open hot stripping power supply, press the power button for about one second until the power indicator light;
5. temperature transferred to the 2 or 3rd gear;
6. hot stripping pressure fiber cover to cover in turn covered and left;
7. waiting for the heat indicator reaches the preset temperature indicator turns green;
8. Stripping fiber: hand hold down the right part of the uniform, the left hand force pull to the left part;
9. left cover, followed by open pressure-fiber cover, remove the fixture with a fiber, please note that each peel after do not forget to remove the coating peeling;
10. with a purity of more than 99 percent of the alcohol-soaked gauze clean the fiber direction of the arrow
11. with a finger flick fiber top, so that the fiber does not overlap neatly arranged
12. hold down the power button 4-5 seconds after the release, the power LED is off, turn off the power, unplug the power adapter.



Features

- 1) small, lightweight, easy to use and reliable, longitudinal peel, peel force is small
- 2) blade durable and easy to replace,
- 3) using linear bearing guide and thermal stripping to ensure no damage on fiber, easy to strip coating

ORDERING INFORMATION

FF-FOTS-R250 Thermal Stripper

- FH-1 1 Core Fixture
- FH-2 2 Cores Fixture
- FH-4 4 Cores Fixture
- FH-8 8 Cores Fixture
- FH-12 12 Cores Fixture

FF-FOTS-R250C

Thermal Cable Stripper (Built-in Battery)

Method of operation

1. both ends of the power adapter connected to AC power and thermal stripping power supply interface;
2. the optical fiber according to user needs stripping the fiber length into the fixture
3. to be installed fixture into the fixture of the good fiber mat
4. open hot stripping power supply, press the power button for about one second until the power indicator light;
5. temperature transferred to the 2 or 3rd gear;
6. hot stripping pressure fiber cover to cover in turn covered and left;
7. waiting for the heat indicator reaches the preset temperature indicator turns green;
8. Stripping fiber: hand hold down the right part of the uniform, the left hand force pull to the left part;
9. left cover, followed by open pressure-fiber cover, remove the fixture with a fiber, please note that each peel after do not forget to remove the coating peeling;
10. with a purity of more than 99 percent of the alcohol-soaked gauze clean the fiber direction of the arrow
11. with a finger flick fiber top, so that the fiber does not overlap neatly arranged
12. hold down the power button 4-5 seconds after the release, the power LED is off, turn off the power, unplug the power adapter.



Features

- 1) small, lightweight, easy to use and reliable, longitudinal peel, peel force is small
- 2) blade durable and easy to replace,
- 3) using linear bearing guide and thermal stripping to ensure no damage on fiber, easy to strip coating

ORDERING INFORMATION

FF-FOTS-R250C Thermal Stripper

- FH-1 1 Core Fixture
- FH-2 2 Cores Fixture
- FH-4 4 Cores Fixture
- FH-8 8 Cores Fixture
- FH-12 12 Cores Fixture

8PK-326

Fiber Optical Stripper

- The biggest hole for stripping 1.6~3mm jacket to expose 600~900um buffer
- The second hole for stripping 600~900um buffer to expose 250um coating
- The smallest hole for stripping 250um coating to expose 125um cladding



ORDERING INFORMATION

8PK-326 Fiber Optic Stripper

FF-402

Fiber Optical Stripper

- For stripping 250um buffer coating to expose 125um cladded fiber
- Second hole for stripping 2-3mm fiber jackets
- 140um diameter hole and V-opening in blade allows removal of 250um buffer coating from 125um fiber
- Pre-set at the factory - no adjustments needed
- Will not scratch or nick glass fiber
- Length: 165mm; weight: 113g



ORDERING INFORMATION

FF-402 Fiber Optic Stripper

FF-403

Kevlar Scissors

- To cut Kevlar strength member in fiber optic cable
- Ergonomic design, comfortable for handling
- One micro-serrated blade reduces slippage for more positive cutting action
- Dimension: 142*75*18mm



ORDERING INFORMATION

FF-403 Kevlar Scissors

FF-412

Fiber Optical Stripper

- The biggest hole for stripping 1.6~3mm jacket to expose 600~900um buffer
- The second hole for stripping 600~900um buffer to expose 250um coating
- The smallest hole for stripping 250um coating to expose 125um cladding



ORDERING INFORMATION

FF-404 Fiber Scriber

FF-405

FTTH Flat Drop Cable Stripper

- Super tiny design, much more portable
- Designed with multiple licensed technologies
- Suitable for both steel and Kevlar strength member
- Composed with high quality metal blade, more durable
- High precision cable guide hole, special for FTTH indoor cable



ORDERING INFORMATION

FF-405 FTTH Drop Cable Stripper

FF-406

Optical Cable Sheath Stripper

- Both across and lengthwise stripping are available
- Designed with multiple licensed technologies, more professional
- Using unilateralism ratchet wheel
- Do one-off strip for the fiber cable Ø10~Ø30mm
- Compact design, durable and time saving



ORDERING INFORMATION

FF-406 Fiber Cable Sheath Stripper

KMS-K

Longitudinal Cable Sheath Stripper

- Impact resistant plastic material
- Safe and simple handling
- No risk of injuries
- Adjustable slitting depth
- Compact design, durable and time saving
- Double bladed knife made from hardened special steel



ORDERING INFORMATION

KMS-K Longitudinal Sheath Stripper

GT-160

Round Cable Slitter

- Used for removing outer sheath (PVC & Plenum types) of fiber optic cable
- Adjustable cutting depth for insulation from .12" (3mm) to 1.26" (32 mm) thick
- Includes spare blade
- High quality, light weight



ORDERING INFORMATION

GT-160 Round Cable Slitter

LY-25-9

Cable Slitter

- Strips and slits 0.18 IN to 1.0 IN (4.5-25mm) diameter round cables
- Adjustable cutting depth
- Swivel blade for circular, longitudinal and spiral cuts
- Cable holding clip with integrated edge for removing slit insulation
- Laser-trimmed, stainless-steel blade for long-term use
- Slits PVC, Teflon and THHN
- Application : Perfect For Armored Cable
- Material: Stainless Steel Blade
- Weight : 4.700 OZ (133.000 GM)
- Product Dimension: 135x24x24mm



ORDERING INFORMATION

LY-25-9 Fiber Cable Slitter

45-162/163

Buffer Tube Stripper

- Adjustable blades can be set for any depth in order to ensure nick-free strips
- Use with twisted-pair wire, tightly wrapped stranded cables, CATV cable, CB antenna cable, SO, SJ, SJT, and other types of flexible power cords
- Includes three straight and one round blade



ORDERING INFORMATION

45-162 Buffer Tube Stripper 1/8"
45-163 Buffer Tube Stripper 1/8~7/32"

ACS-12

Armored Cable Slitter

- Professional grade tool, ideal for slitting corrugated copper, steel or aluminum armor layer on Fiber Feeder, Central Tube, Stranded Loose Tube fiber optic cables and other armored cables
- Versatile design allows jacket/ shield slitting on nonfiber optic configurations
- Tool slits outer polyethylene jacket and armor in one operation
- Performs longitudinal slitting and circumferential (ringing) for end stripping
- Blade rotates 90 degrees by activating blade lever, allowing easy mid-span preparation (ringing and slitting)
- Adjustable from 0.315" (8 mm) to 1.125" (28.6 mm) cable O.D.
- Adjustable blade depths to accommodate different cable coverings
- "Roller" style cable follower provides cable stability and allows for easier tool movement along the cable



ORDERING INFORMATION

ACS-12 Armored Cable Slitter

FF-407/408

Mid-Span Access Tool

- Fiber optic cable jacket splitter is an efficient and indispensable tool for fiber optic cable termination
 - It easily slits the PVC cable jacket into two halves before crimping, in both field and plant applications with the advantages of time savg and consistency
- Model# FF-407*
- Tool size(mm):50×40×20; Weight: 35g
 - Cable can be processed:
a.(Ø1.5~Ø1.9mm); b.(Ø2.0~Ø2.4mm); c.(Ø2.5~Ø2.9mm); d.(Ø3.0~Ø3.3mm)
- Model# FF-408*
- Tool size(mm):50×40×20; Weight: 65g
 - Cable can be processed:
a. Ø4.5mm; b. Ø6.0mm; c. Ø7.0mm; d. Ø8.0mm; e. Ø11.0mm.
- Step by step instructions*
- 1. Choose appropriate groove according to the diameter of the cable
 - 2. Put the cable into the groove, pay attention to the blade's position on the cable with the length to be slit in mind
 - 3. Close the splitter and hold it firmly with one hand, then pull the cable out with the other hand
 - 4. Check the processed segment of the cable, there should be two rips on the jacket which completely separate the jacket into two halves.



ORDERING INFORMATION

FF-407 Mid-span Access Tool
FF-408 Mid-span Access Tool

FF-409

Automatic electrician threading device

The FF-409 automatic cable threading device can be used for both fiber cable and electric cable. It helps save manpower and make workers finish their work efficiently and easily. The device help man insert lead cable into tube and then pull it back, so that cables expected to be deployed will arrive its right place quickly.

Lead cable Length	15m/20m/30m/50m Optional
Cable threading Speed	40m/min (Normal)
Stepless variable speed	Yes, controllable by users
Pulling force	1300N
Battery	88VF, 10000 MAH
Weight	3.2kg
Working Temperature	-30°C to +70°C
Stock Temperature	-50°C to +70°C



ORDERING INFORMATION

FF-409 Automatic Threading Device

FF-4900A

Optical Fiber Preparation Kit

FF-4900A Optical Fiber Preparation Kit provides a variety of required tools to prepare optical fibers for cleaving, splicing or connector termination. All these tools are provided in a rugged tool case with specified pockets for tools, connectors and many other items.

FF-4900A tool kit includes

- 1 5-IN-1 Fiber optic stripper
- 1 KEVLAR Scissor
- 1 Mid-Span Access Tool (Ø1.5~Ø3.3mm)
- 1 Ideal 45-162 Grey buffer tube stripper up to 1/8"
- 1 Fiber Round Cable Stripper Ø4.5~Ø29mm)
- 1 Optical Fiber Field Cleaver
- 1 Pocket Visual Fault Locator
- 1 6" Side Cutting Pliers
- 1 Needle Nose Pliers
- 1 Screwdriver Multi-Bit 6 In 1
- 1 2.5mm Foam Tipped Fiber Optic Swab, 50 per tube
- 120 FBT Fiber Optic Cleaning Cube, 120wipes
- 1 MENDA 250ml Alcohol Dispensing Bottle w/Locked
- 1 LED Flashlight with Zoom Lens
- 1 Utility knife
- 1 Black Marker
- 1 Portable Carry Bag (230×160×150mm)



ORDERING INFORMATION

FF-4900A Fiber Optic Tool Kit

FF-4306B

Fiber Optic Fusion Splicing Tool Kit

FF-4306B tool kits is ideal for optical fiber fusion splicing. It includes necessary tools for cable sheath removal and fusion splicing.

FF-4306B tool kit includes

- 1 5-IN-1 Fiber optic stripper
- 1 KEVLAR Scissor
- 1 45-162 Grey Buffer Tube Stripper
- 1 Rotary Cable Stripper
- 1 4 Bits Screwdriver
- 1 6"Needle Nose Pliers 135mm
- 1 6"Side Cut Pliers 130mm
- 1 1/2"Nut Screwdriver
- 1 Koachy KC-105 Fiber Optic Cleaner
- 1 FBT Fiber Optic Cleaning Cube, 120wipes
- 1 MENDA 250ml Alcohol Dispensing Bottle w/Locked
- 65 V-Groove and Fusion Splice Mirror Cleaning Swabs
- 100 Fusion Splice Sleeve 60mm
- 1 11" × 19.6" Anti-static Work Mat
- 1 3M PVC Electrical Tape
- 1 Precision tweezers
- 1 2M Tape Measure
- 1 Black Marker
- 1 Utility knife
- 1 Deluxe Portable Carry Bag (230×160×150mm)



ORDERING INFORMATION

FF-4306B Fiber Optic Tool Kit

FF-4305B

Fiber Optic Fusion Splicing Tool Kit

FF-4305B tool kit is ideal for optical fiber fusion splicing. It includes all necessary tools for cable sheath removal and fusion splicing.

FF-4305B tool kit includes

- 1 Fiber optic stripper
- 1 KEVLAR Scissor
- 1 Fiber Jacket Stripper
- 1 Rotary Cable Stripper
- 1 45-163 Blue buffer tube stripper
- 1 Optical Fiber Precision Cleaver
- 1 Fiber Continuity Tester
- 1 Longitudinal Fiber Cable Slitter
- 1 Round Cable Slitter
- 1 8" Steel Wire Rope Cutter
- 1 6" Needle Node Pliers 135mm
- 1 6" Side Cut Pliers 130mm
- 1 4 Bits Screwdriver
- 1 FBT Fiber Optic Cleaning Cube, 100wipes
- 5 99.7% IPA Cleaning Wipes (Pre-Moistened)
- 1 100ml Alcohol Dispensing Bottle
- 100 60mm Fusion Splice Protection Sleeves, 100 pieces/bag
- 1 2M Tape Measure
- 1 Precision Steel tweezers
- 1 Fiber Optic Disposal Unit
- 1 Utility Knife
- 1 Black Marker
- 1 Deluxe Carrying Tool Case (370×265×138mm)



ORDERING INFORMATION

FF-4305B Fiber Optic Tool Kit

FF-4900B

Field Quick Termination Tool Kit

FF-4900B Fiber Quick Termination Tool Kit is designed for the technician to temporarily solve network outages until a permanent solution can be scheduled.

FF-4900B tool kit includes

- 1 5-IN-1 Fiber optic stripper
- 1 KEVLAR Scissor
- 1 Optical Fiber Field Cleaver
- 1 Pocket Visual Fault Locator
- 1 400x Fiber Optic Inspection Microscope
- 120 FBT Fiber Optic Cleaning Cube, 120wipes
- 50 2.5mm Foam Tipped Fiber Optic Swab, 50 per tube
- 100 4"×4" Lint-Free Cleaning Wipes
- 1 MENDA 250ml Alcohol Dispensing Bottle w/Locked
- 1 11" ×19.6" Anti-static Work Mat
- 1 Safety Glasses
- 1 Black Marker
- 1 Portable Carry Bag (230×160×150mm)



ORDERING INFORMATION

FF-4900B Fiber Optic Tool Kit

FF-4003

Fast Connector Tool Kit

The FAST Connector Tool Kit provides all necessary installation tools for fiber preparation of 250um or 900um fibers applied to all most of FAST connectors. No epoxy, polishing film, or other consumables are required, and there is no need for electrical power, allowing installers to get in and out of installation sites.

FF-4003 tool kit includes

- 1 Auto-Reset High Precision Cleaver
- 1 Pocket Visual Fault Locator
- 1 LC Adapter of VFL
- 1 Tri-hole Fiber Optic Stripper
- 1 Kevlar Scissors
- 1 Flat Drop Optic Cable Stripper HW-9FS
- 120 FBT Optical Fiber Cleaning Cube, 120 wipes/box
- 1 250ml Alcohol dispensing bottle with locked
- 1 Fiber Optic Disposal Unit
- 1 Black Marker
- 1 Deluxe Carrying Tool Case (370×265×138mm)



ORDERING INFORMATION

FF-4003 Fiber Optic Tool Kit

FF-4900C

Field Quick Termination Tool Kit

FF-4900C Fiber Quick Termination Tool Kit is designed for the technician to temporarily solve network outages until a permanent solution can be scheduled.

FF-4900C tool kit includes

- 1 Fiber Optic Stripper
- 1 Kevlar Scissors
- 1 Fiber Scriber
- 1 Fiber Jacket Stripper
- 1 Universal Connector Crimper
- 1 45-162 Buffer Tube Stripper
- 1 Round Cable Jacket Stripper
- 1 400x Deluxe Fiber Optic Microscope with 2.5mm adapter
- 1 1.25mm adapter (LC/MU) for the above Microscope
- 1 Piano Wire
- 1 4-in-1 Pen-size Magnetic Screwdriver
- 1 Tweezers
- 1 24 Port Connector Heat Oven (AC110V or AC220V)
- 5 EPO-TEK 353ND Epoxy
- 10 Epoxy Injection Syringe (3ml)
- 1 5um polish Film - 10 sheets
- 1 1um polish Film - 10 sheets
- 1 0.5um polish Film - 10 sheets
- 1 2.5mm Universal Polish Puck (SC/ST/FC)
- 1 1.25mm Polish Puck (LC/MU)
- 1 5.9" Rubber Polish Pad
- 1 5.9" Glass Polish Plate
- 1 Black Work Mat
- 10 IPA Fiber Cleaning Wipes
- 1 Kimwipes (280 pieces/box)
- 1 Cleaning Swab
- 1 250ml Alcohol Dispenser Bottle
- 1 3M Insulation Tape
- 1 Utility Knife
- 1 Utility Component Box
- 1 Marker Pen



ORDERING INFORMATION

FF-4900C Fiber Optic Tool Kit

FF-4750

Inspection and Cleaning Tool Kit

FF-4750 Fiber Optic Inspection & Cleaning Tool Kit includes all necessary tools for fiber optic connector inspection and cleaning. This tool Kit is used for visual fault locating, connector inspection and cleaning quickly.

FF-4750 tool kit includes

- 1 Carrying Bag
- 1 Visual Laser Source, with 2.5mm adapter, 1mW
- 1 400X Fiber Optic Inspection Microscope with 1.25mm and 2.5mm adapters
- 1 Alcohol Dispenser Bottle
- 1 Fiber Cleaning Wipes, 100×100mm, 50pcs/pack
- 1 1.25mm One-click Fiber Optic Connector Cleaner
- 1 2.5mm One-click Fiber Optic Connector Cleaner
- 1 Optical Fiber Cassette Cleaner
- 1 Emergency Flashlight



ORDERING INFORMATION

FF-4750 Fiber Optic Tool Kit

FF-4651

Testing and Cleaning Tool Kit

Fiber Optic Testing & Cleaning Tool Kit includes all necessary simple tools for fiber optic testing and cleaning. This tool kit is used for fiber loss testing, visual fault locating, connector inspection and cleaning, etc.

FF-4651 tool kit includes

- 1 Carrying Case 370×265×138mm
- 1 1.25mm One-click Fiber Optic Connector Cleaner
- 1 2.5mm One-click Fiber Optic Connector Cleaner
- 1 Tri-hole Fiber Optic Stripper, 1.6~3mm, 600~900um and 250um
- 1 Black Marker
- 1 45-162 Buffer Tube Stripper
- 1 Kevlar Scissors
- 1 Visual Laser Source
- 1 400X Fiber Optic Inspection Microscope
- 1 Optical Fiber Cassette Cleaner
- 1 Light Source, 1310/1550nm, -5dBm±3dB, with SC and FC adapter
- 1 Power Meter, -70~+10dBm, with SC and FC adapters



ORDERING INFORMATION

FF-4651 Fiber Optic Tool Kit

Single Mode

9/125μm Simplex Patchcords

We provide high precise optical patchcord for the construction of optical network. We give user a wide selection of patchcord's connectors, including ST, FC, SC, LC and etc. with PC, UPC or APC polishing. Patchcord is composed of highgrade connectors and the ferrule is made of zirconia. Customer is able to order the common type patchcord we offered as well as the special type customized according to customer's special application.

FC-FC SIMPLEX

FC/UPC-FC/UPC 0.9mm
FC/UPC-FC/UPC 2.0mm
FC/UPC-FC/UPC 3.0mm
FC/APC-FC/APC 0.9mm
FC/APC-FC/APC 2.0mm
FC/APC-FC/APC 3.0mm

SC-SC SIMPLEX

SC/UPC-SC/UPC 0.9mm
SC/UPC-SC/UPC 2.0mm
SC/UPC-SC/UPC 3.0mm
SC/APC-SC/APC 0.9mm
SC/APC-SC/APC 2.0mm
SC/APC-SC/APC 3.0mm

ST-ST SIMPLEX

ST/UPC-ST/UPC 0.9mm
ST/UPC-ST/UPC 2.0mm
ST/UPC-ST/UPC 3.0mm
ST/APC-ST/APC 0.9mm
ST/APC-ST/APC 2.0mm
ST/APC-ST/APC 3.0mm

LC-LC SIMPLEX

LC/UPC-LC/UPC 0.9mm
LC/UPC-LC/UPC 2.0mm
LC/UPC-LC/UPC 3.0mm
LC/APC-LC/APC 0.9mm
LC/APC-LC/APC 2.0mm
LC/APC-LC/APC 3.0mm

FC-LC SIMPLEX

FC/UPC-LC/UPC 0.9mm
FC/UPC-LC/UPC 2.0mm
FC/UPC-LC/UPC 3.0mm
FC/APC-LC/APC 0.9mm
FC/APC-LC/APC 2.0mm
FC/APC-LC/APC 3.0mm

FC-ST SIMPLEX

FC/UPC-ST/UPC 0.9mm
FC/UPC-ST/UPC 2.0mm
FC/UPC-ST/UPC 3.0mm
FC/APC-ST/APC 0.9mm
FC/APC-ST/APC 2.0mm
FC/APC-ST/APC 3.0mm

ST-LC SIMPLEX

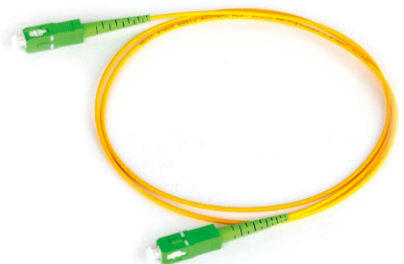
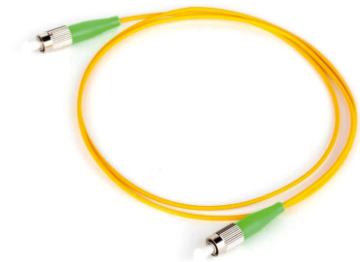
ST/UPC-LC/UPC 0.9mm
ST/UPC-LC/UPC 2.0mm
ST/UPC-LC/UPC 3.0mm
ST/APC-LC/APC 0.9mm
ST/APC-LC/APC 2.0mm
ST/APC-LC/APC 3.0mm

FC-SC SIMPLEX

FC/UPC-SC/UPC 0.9mm
FC/UPC-SC/UPC 2.0mm
FC/UPC-SC/UPC 3.0mm
FC/APC-SC/APC 0.9mm
FC/APC-SC/APC 2.0mm
FC/APC-SC/APC 3.0mm

FC-ST SIMPLEX

FC/UPC-ST/UPC 0.9mm
FC/UPC-ST/UPC 2.0mm
FC/UPC-ST/UPC 3.0mm
FC/APC-ST/APC 0.9mm
FC/APC-ST/APC 2.0mm
FC/APC-ST/APC 3.0mm



Single Mode

9/125μm Duplex Patchcords

We provide high precise optical patchcord for the construction of optical network. We give user a wide selection of patchcord's connectors, including ST, FC, SC, LC and etc. with PC, UPC or APC polishing. Patchcord is composed of highgrade connectors and the ferrule is made of zirconia. Customer is able to order the common type patchcord we offered as well as the special type customized according to customer's special application.



FC-FC DUPLEX

FC/UPC-FC/UPC 2.0mm
FC/UPC-FC/UPC 3.0mm
FC/APC-FC/APC 2.0mm
FC/APC-FC/APC 3.0mm

SC-SC DUPLEX

SC/UPC-SC/UPC 2.0mm
SC/UPC-SC/UPC 3.0mm
SC/APC-SC/APC 2.0mm
SC/APC-SC/APC 3.0mm

ST-ST DUPLEX

ST/UPC-ST/UPC 2.0mm
ST/UPC-ST/UPC 3.0mm
ST/APC-ST/APC 2.0mm
ST/APC-ST/APC 3.0mm

LC-LC DUPLEX

LC/UPC-LC/UPC 2.0mm
LC/UPC-LC/UPC 3.0mm
LC/APC-LC/APC 2.0mm
LC/APC-LC/APC 3.0mm

FC-LC DUPLEX

FC/UPC-LC/UPC 2.0mm
FC/UPC-LC/UPC 3.0mm
FC/APC-LC/APC 2.0mm
FC/APC-LC/APC 3.0mm

FC-ST DUPLEX

FC/UPC-ST/UPC 2.0mm
FC/UPC-ST/UPC 3.0mm
FC/APC-ST/APC 2.0mm
FC/APC-ST/APC 3.0mm

ST-LC DUPLEX

ST/UPC-LC/UPC 2.0mm
ST/UPC-LC/UPC 3.0mm
ST/APC-LC/APC 2.0mm
ST/APC-LC/APC 3.0mm

FC-SC DUPLEX

FC/UPC-SC/UPC 2.0mm
FC/UPC-SC/UPC 3.0mm
FC/APC-SC/APC 2.0mm
FC/APC-SC/APC 3.0mm

SC-LC DUPLEX

SC/UPC-LC/UPC 2.0mm
SC/UPC-LC/UPC 3.0mm
SC/APC-LC/APC 2.0mm
SC/APC-LC/APC 3.0mm

Multi Mode OM1

62.5/125μm Duplex Patchcords

We provide high precise optical patchcord for the construction of optical network. We give user a wide selection of patchcord's connectors, including ST, FC, SC, LC and etc. with PC, UPC or APC polishing. Patchcord is composed of highgrade connectors and the ferrule is made of zirconia. Customer is able to order the common type patchcord we offered as well as the special type customized according to customer's special application.



FC-FC DUPLEX

FC/UPC-FC/UPC 2.0mm

FC/UPC-FC/UPC 3.0mm

SC-SC DUPLEX

SC/UPC-SC/UPC 2.0mm

SC/UPC-SC/UPC 3.0mm

ST-ST DUPLEX

ST/UPC-ST/UPC 2.0mm

ST/UPC-ST/UPC 3.0mm

LC-LC DUPLEX

LC/UPC-LC/UPC 2.0mm

LC/UPC-LC/UPC 3.0mm

FC-LC DUPLEX

FC/UPC-LC/UPC 2.0mm

FC/UPC-LC/UPC 3.0mm

FC-ST DUPLEX

FC/UPC-ST/UPC 2.0mm

FC/UPC-ST/UPC 3.0mm

ST-LC DUPLEX

ST/UPC-LC/UPC 2.0mm

ST/UPC-LC/UPC 3.0mm

FC-SC DUPLEX

FC/UPC-SC/UPC 2.0mm

FC/UPC-SC/UPC 3.0mm

SC-LC DUPLEX

SC/UPC-LC/UPC 2.0mm

SC/UPC-LC/UPC 3.0mm

Multi Mode OM2

50/125μm Duplex Patchcords

We provide high precise optical patchcord for the construction of optical network. We give user a wide selection of patchcord's connectors, including ST, FC, SC, LC and etc. with PC, UPC or APC polishing. Patchcord is composed of highgrade connectors and the ferrule is made of zirconia. Customer is able to order the common type patchcord we offered as well as the special type customized according to customer's special application.



FC-FC DUPLEX

FC/UPC-FC/UPC 2.0mm

FC/UPC-FC/UPC 3.0mm

SC-SC DUPLEX

SC/UPC-SC/UPC 2.0mm

SC/UPC-SC/UPC 3.0mm

ST-ST DUPLEX

ST/UPC-ST/UPC 2.0mm

ST/UPC-ST/UPC 3.0mm

LC-LC DUPLEX

LC/UPC-LC/UPC 2.0mm

LC/UPC-LC/UPC 3.0mm

FC-LC DUPLEX

FC/UPC-LC/UPC 2.0mm

FC/UPC-LC/UPC 3.0mm

FC-ST DUPLEX

FC/UPC-ST/UPC 2.0mm

FC/UPC-ST/UPC 3.0mm

ST-LC DUPLEX

ST/UPC-LC/UPC 2.0mm

ST/UPC-LC/UPC 3.0mm

FC-SC DUPLEX

FC/UPC-SC/UPC 2.0mm

FC/UPC-SC/UPC 3.0mm

SC-LC DUPLEX

SC/UPC-LC/UPC 2.0mm

SC/UPC-LC/UPC 3.0mm

Multi Mode OM3

50/125μm Duplex Patchcords

We provide high precise optical patchcord for the construction of optical network. We give user a wide selection of patchcord's connectors, including ST, FC, SC, LC and etc. with PC, UPC or APC polishing. Patchcord is composed of highgrade connectors and the ferrule is made of zirconia. Customer is able to order the common type patchcord we offered as well as the special type customized according to customer's special application.



FC-FC DUPLEX

FC/UPC-FC/UPC 2.0mm

FC/UPC-FC/UPC 3.0mm

SC-SC DUPLEX

SC/UPC-SC/UPC 2.0mm

SC/UPC-SC/UPC 3.0mm

ST-ST DUPLEX

ST/UPC-ST/UPC 2.0mm

ST/UPC-ST/UPC 3.0mm

LC-LC DUPLEX

LC/UPC-LC/UPC 2.0mm

LC/UPC-LC/UPC 3.0mm

FC-LC DUPLEX

FC/UPC-LC/UPC 2.0mm

FC/UPC-LC/UPC 3.0mm

FC-ST DUPLEX

FC/UPC-ST/UPC 2.0mm

FC/UPC-ST/UPC 3.0mm

ST-LC DUPLEX

ST/UPC-LC/UPC 2.0mm

ST/UPC-LC/UPC 3.0mm

FC-SC DUPLEX

FC/UPC-SC/UPC 2.0mm

FC/UPC-SC/UPC 3.0mm

SC-LC DUPLEX

SC/UPC-LC/UPC 2.0mm

SC/UPC-LC/UPC 3.0mm

Multi Mode OM4

50/125μm Duplex Patchcords

We provide high precise optical patchcord for the construction of optical network. We give user a wide selection of patchcord's connectors, including ST, FC, SC, LC and etc. with PC, UPC or APC polishing. Patchcord is composed of highgrade connectors and the ferrule is made of zirconia. Customer is able to order the common type patchcord we offered as well as the special type customized according to customer's special application.



FC-FC DUPLEX

FC/UPC-FC/UPC 2.0mm

FC/UPC-FC/UPC 3.0mm

SC-SC DUPLEX

SC/UPC-SC/UPC 2.0mm

SC/UPC-SC/UPC 3.0mm

ST-ST DUPLEX

ST/UPC-ST/UPC 2.0mm

ST/UPC-ST/UPC 3.0mm

LC-LC DUPLEX

LC/UPC-LC/UPC 2.0mm

LC/UPC-LC/UPC 3.0mm

FC-LC DUPLEX

FC/UPC-LC/UPC 2.0mm

FC/UPC-LC/UPC 3.0mm

FC-ST DUPLEX

FC/UPC-ST/UPC 2.0mm

FC/UPC-ST/UPC 3.0mm

ST-LC DUPLEX

ST/UPC-LC/UPC 2.0mm

ST/UPC-LC/UPC 3.0mm

FC-SC DUPLEX

FC/UPC-SC/UPC 2.0mm

FC/UPC-SC/UPC 3.0mm

SC-LC DUPLEX

SC/UPC-LC/UPC 2.0mm

SC/UPC-LC/UPC 3.0mm

2x3mm Flat FTTH Drop Patch Cords

We provide high precise optical patchcord for the construction of optical network. We give user a wide selection of patchcord's connectors, including ST, FC, SC, LC and etc. with PC, UPC or APC polishing. Patchcord is composed of highgrade connectors and the ferrule is made of zirconia. Customer is able to order the common type patchcord we offered as well as the special type customized according to customer's special application.

Specification

Connector Type	SC/FC/ST/LC/MU/SMA905
Polish Type	UPC/APC
Working Wavelength	1310~1650
Strength Member	Steel/FRP(Fiberglass-reinforced Plastic)
Sheath Material	LSZH
Fiber Insertion Loss	<0.2dB
Connector I.L.	<0.4dB
Connector Return Loss	UPC/APC
Repeatability	<0.2dB@500times
Bending Radius	>15mm
Tensile Strength	<8kg/100mm
Working Temperature	-20~+80 °C
Storage Temperature	-20~+80 °C
Working Humidity	<90% RH
Sheath Diameter	2x3.1mm
Sheath Color	White/Black/Customization
Connector Length	50
Fiber Length	Customization

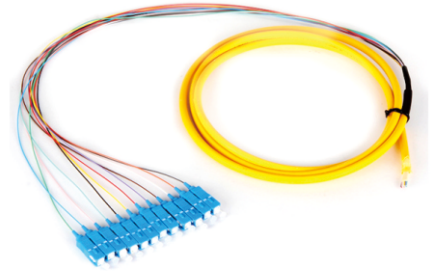


Bunch Type

Fanout Patchcord

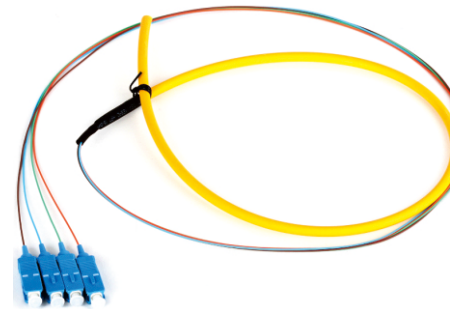
We provide high precise optical patchcord for the construction of optical network. We give user a wide selection of patchcord's connectors, including ST, FC, SC, LC and etc. with PC, UPC or APC polishing. Patchcord is composed of highgrade connectors and the ferrule is made of zirconia. Customer is able to order the common type patchcord we offered as well as the special type customized according to customer's special application.

Bunch type patchcord has a brief apperance for the brief look of many patchcords, it's often used in big project. It can be used in FTTx construction, optical network constuction, LAN, WAN and metro networks, CATV



Specification

Connector Type	SC/FC/ST/LC/MU/E2000/MTRJ/DIN
Polish Type	UPC/APC
Fiber Type	SM/MM
Fiber Count Available	4/6/8/12/24
Sheath Material	LSZH
Insertion Loss	<0.4dB
Return Loss	UPC:>55dB; APC>60dB
Repeatability	<0.2dB@500times
Bending Radius	>30mm
Tensile Strength	15kg/100mm
Working Temperature	-20~+80 °C
Storage Temperature	-20~+80 °C
Working Humidity	<90% RH
Sheath Color	2x3.1mm
Connector Length	50mm
Fiber Length	Customization



Flexible Type

Armored Patchcord

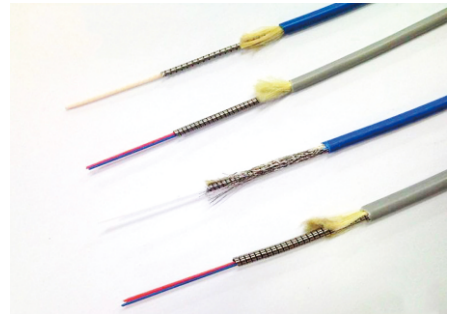
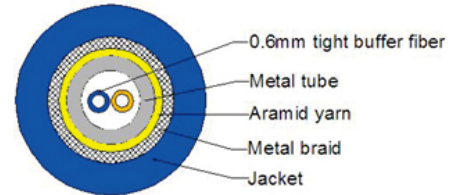
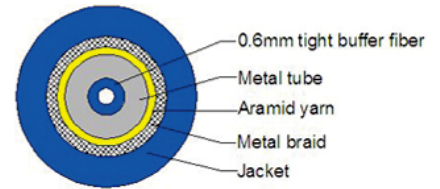
Flexible Armored patchcords can be laid in all kinds of harsh environments. It has stainless steel tube to protect optical fibers and provides better security for the whole system.

Structures:

- Armored cable offers 0.6mm tight buffer fibers.
- Kevlar yarn member offers high strength.
- Armored cable has a flexible steel armored tube to increase the cable's twist resistance.
- Good performance of torsion, tensile strength, pressure, and anti-rodent

Application:

- Ideal for use in vertical cabling of buildings and LAN
- Ideal for use in backbone network, and connect from outdoor to indoor directly
- Infrastructure cabling, especially in extremely harsh environmental condition for construction



Cables

Fiber Count	Cable Diameter (mm)	Cable Diameter (mm)	Crush Resistance (N/100mm)	Bending Radius (mm)	Cable Weight (kg/km)
1	2.85	2.85	3,000	25	18
2	3.2	3.2	3,000	25	20
4	6.4	6.4	3,000	65	70
6	6.4	6.4	3,000	65	75
8	7.4	7.4	3,000	75	80
10	7.4	7.4	3,000	75	82
12	7.4	7.4	3,000	75	85

Specification

Mode	SM			MM
Polishing	PC	UPC	APC	PC
Insertion Loss	≤0.3dB	≤0.3dB	≤0.3dB	≤0.3dB
Return Loss	≥45dB	≥50dB	≥60dB	≥35dB
Interchangeability	≤0.2dB			
Salt Spray	≤0.2dB			
Repeatability	≤0.1dB (1,000 times)			
High Temperature	≤0.2dB (+85°C 168 hours)			
Low Temperature	≤0.2dB (-40°C 168 hours)			
Temperature Cycle	≤0.2dB (-40°C~85 °C 21 cycles 168 hours)			
Humidity	≤0.2dB (95% 75°C 168 hours)			
Durability	≥1,000 matings			
Vibration	≤0.1dB (10-55Hz 1.5mm)			
Falling	≤0.2dB (1.5m high, 8 times)			

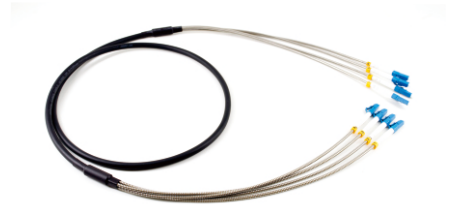
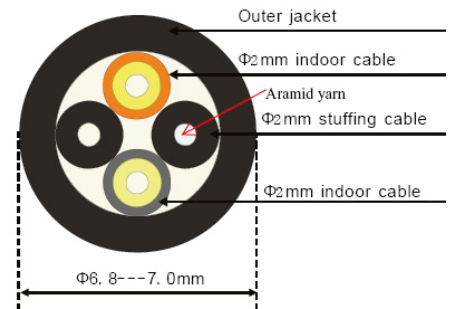
FTTA CPRI

Outdoor Patchcord

A FTTA/ Base Station patch cord is used as: 3G 4G base station, Aerospace& Defence, Equipment diagnosis, FO sensor, FTTA ,FTTP, FTTX, WIMAX, BBU, RRU, RRH, LTE.

Features

- Good mechanical and environmental characteristics;
- Flame retardant characteristics meet the requirements of relevant standards;
- The mechanical characteristics of jacket meet the requirements of relevant standards;
- Soft, flexible, water blocked, UV resistant, easy to lay and splice, and with big capacity data transmission;
- Meet various requirements of market and clients



Specification

<i>Single Mode Fiber</i>	
Attenuation	1310nm≤0.4dB/km
Dispersion	1550nm≤0.3dB/km
Zero dispersion wavelength	1285~1330nm≤3.5Ps/nm.km
Zero dispersion slope	1300~1324Nm
Fiber cutoff wavelength	≤0.095Ps/nm.km
Mode field diameter	≤1260Nm
Mode field concentricity	9.2±0.5Um
Cladding diameter	≤0.8Um
Cladding non-circularity	125±1.0um
Coating/cladding concentricity error	≤1.0%
Coating diameter	≤12.5Um
Coating diameter	245±10um
Proof test	≥100kpsi
<i>Multi Mode Fiber</i>	
Attenuation	≤3.5dB/km @850 nm
Cladding diameter	≤1.5dB/km @1300 nm
Cladding non-circularity	125±1.0um
Coating/cladding concentricity error	≤1.0%
Coating diameter	≤12.5Um
Coating diameter	245±10um
Proof test	≥100kpsi
<i>Connectors</i>	
Connector Type	LC/ST/SC/FC
Polish Type	APC/UPC
Insertion Loss	≤0.2dB @SM, ≤0.3dB @MM
Return Loss	≥50dB @ SM, ≥60dB @MM
Fiber Length	1m, 2m..... any length optional.

MPO-MPO

Trunk Cable Assemblies

Trunk Cable Assemblies consist of 12~144F fiber optic cable and 12F MPO-MPO, MTP-MTP or MPO-LC connectors. Trunk Cable Assemblies if with pulling eye are designed to be quickly pulled and connected to plug and play Modules for high performance and high density fiber connections.

Features

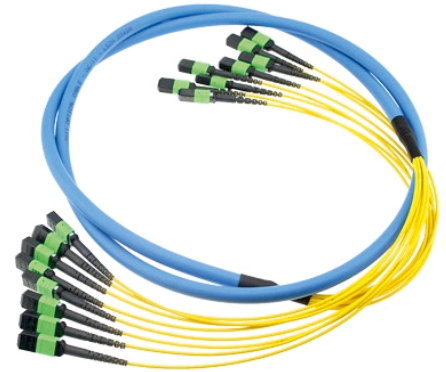
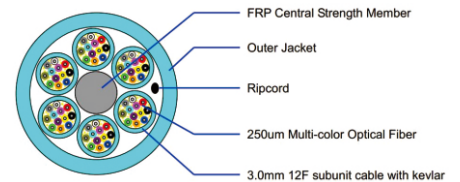
- Available from 12 to 144F fiber optic cable
- Optional pulling eye design to fit for different installation environment
- Round & mini-core cable structure to eliminate bend sensitivity
- Available in multi-mode (OM1 62.5/125um, OM2/OM3/OM4 50/125um in 10/40/100G) and single mode (G652D, G657A1, etc.) fiber types

Applications

- Backbone installation
- High Density Fiber Management
- DACS
- LAN/WAN Premises

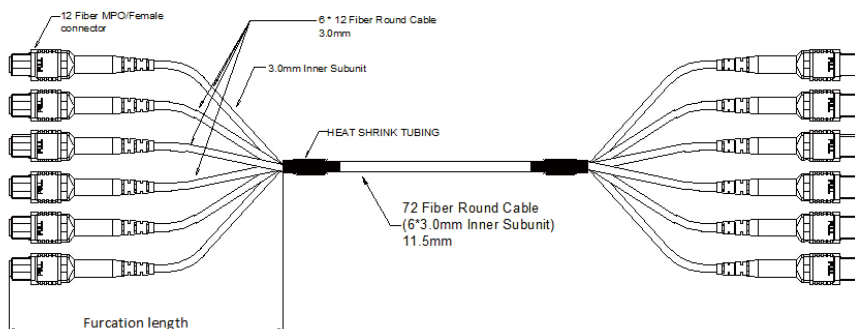
Standard

- TIA/EIA 604-5, IEC 61754, Telcodia GR-1435-CORE, GR-326-CORE, RoHS
- Low smoke (IEC 61304), Zero Halogen (IEC 60754-1), Fire retardant (IEC 60332-3C), Corrosion resistance (IEC 60754-2)



Mechanical Performance

Fiber	Fanout Length (cm)	Impact Resistance of Pulling Eye (N/cm)	Static Bending Radius (mm)	Dynamic Bending Radius (mm)
12	60~100	100	10D	20D
24	60~100	100	10D	20D
48	60~100	100	10D	20D
72	60~100	100	10D	20D
96	60~100	100	10D	20D
144	60~100	100	10D	20D



MPO-MPO

Patch Cable Assemblies

Patch Cable Assemblies consist of 4F, 8F, 12F, 24F or 48F fiber optic cable and MPO-MPO or MTP-MTP connectors. They can be quickly connected to plug and play Modules for high performance and high density fiber connections.

Features

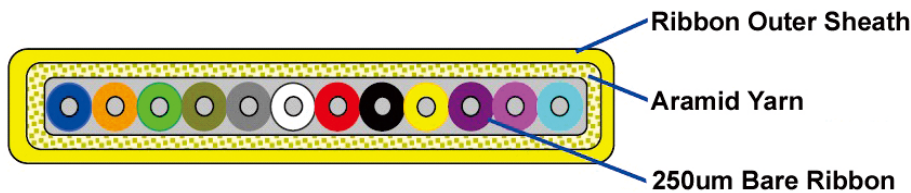
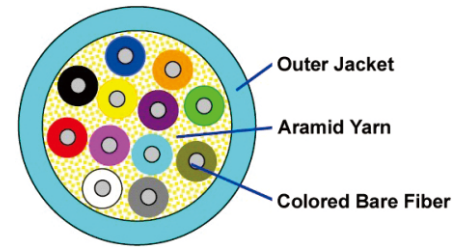
- MPO / MTP connector patchcord
- Available from 4 to 48F fiber optic cable
- Choices of different cable structure for different installation needs: round cable, ribbon cable and bare ribbon.
- Available in multi-mode (OM1 62.5/125um, OM2/OM3/OM4 50/125um in 10/40/100G) and single mode (G652D, G657A1, etc.) fiber types

Applications

- High Density Fiber Management
- DACS
- LAN/WAN Premises

Standard

- TIA/EIA 604-5, IEC 61754-7, Telcodia GR-1435-CORE Issue 2
- Low smoke (IEC 61304), Zero Halogen (IEC 60754-1), Fire retardant (IEC 60332-3C), Corrosion resistance (IEC 60754-2)



12-fiber MPO/F-MPO/F SM Ribbon Cable



12-fiber MPO/F-MPO/F OM3 Round Cable



12-fiber MPO/F-MPO/F SM Bare Ribbon Cable

MPO-LC/SC/ST/FC

Fanout Cable Assemblies

Fanout Cable Assemblies consist of 8F, 12F, 24F or 48F fiber optic cable, MPO or MTP connector, LC/SC/FC connector and a fanout kit. They can be quickly connected to plug and play Modules for high performance and high density fiber connections.

Features

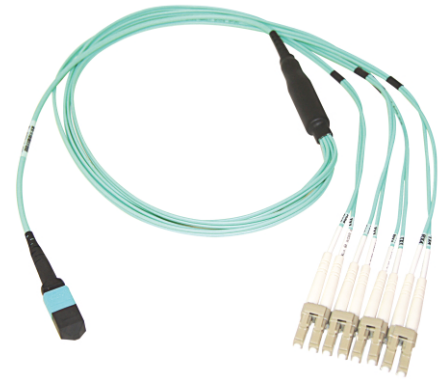
- 1.MPO / MTP-LC/SC/FC connectors patchcord in simplex or duplex channel
- 2.Available from 8 to 48F fiber optic cable
- 3.Choices of different cable structure for different installation needs: round cable, ribbon cable and bare ribbon.
- 4.Available in multi-mode (OM1 62.5/125um, OM2/OM3/OM4 50/125um in 10/40/100G) and single mode (G652D, G657A1, etc.) fiber types

Applications

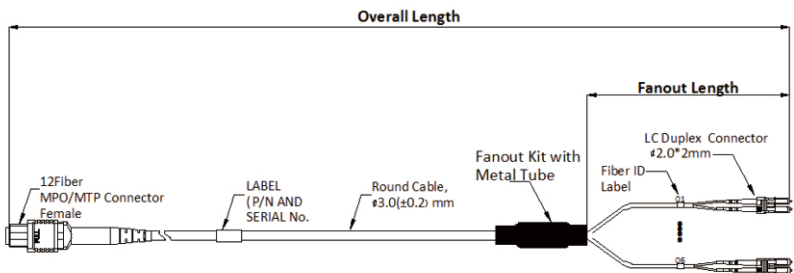
- 1.High Density Fiber Management
- 2.DACS
- 3.LAN/WAN Premises
- 4.For transition from trunk backbone assemblies to fiber rack system

Standard

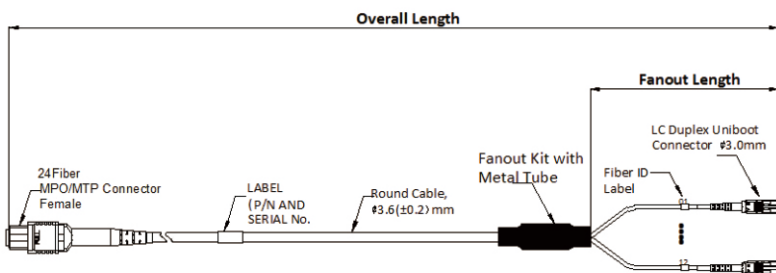
- 1.TIA/EIA 604-5, IEC 61754, Telcordia GR-1435-CORE Issue 2, Telcordia GR-326
- 2.Low smoke (IEC 61304), Zero Halogen (IEC 60754-1), Fire retardant (IEC 60332-3C), Corrosion resistance (IEC 60754-2)



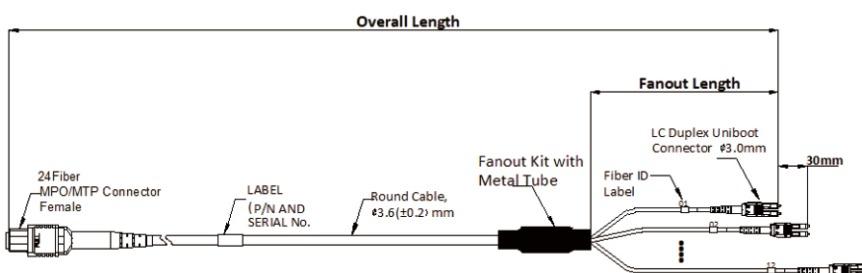
12 MPO to 6* LC Duplex Hybrid Cables



24 Fiber MPO to 12 LC Duplex Uniboot Hybrid Cable



24 Fiber MPO to 12 LC Duplex Uniboot Hybrid Cable Stagger



MPO-LC/SC

Cassette Modules

Cassette Modules consists of empty cassette module, MPO/MTP adapter, LC/SC adapter and MPO-LC/SC harness patchcord. Secure transmission between MPO/MTP and LC or SC discrete connectors are provided. They provide a quick, reliably high performance and efficient way to deploy up to 24 LC or 12 SC fiber ports in a single module. The Modules can be mounted in 1U or 4U 19" rack chassis.

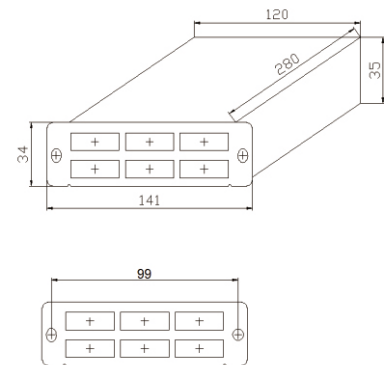
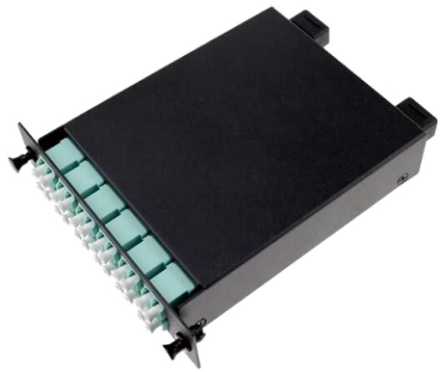
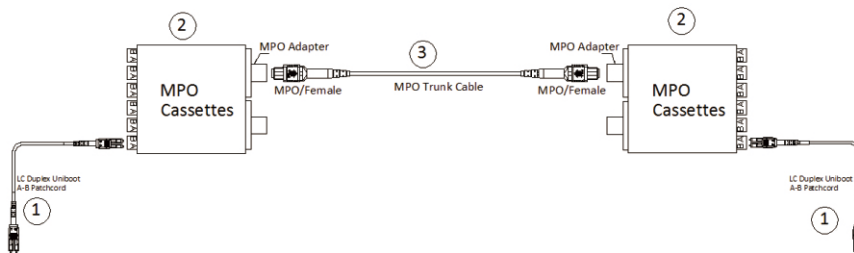
Feature

- High density design, plug-and-play installation
- Available in 12/24 fibers
- Modular system management, easy reconfiguration
- Cold rolled steel material
- Standard: IEC 61754, TIA/EIA 604-5

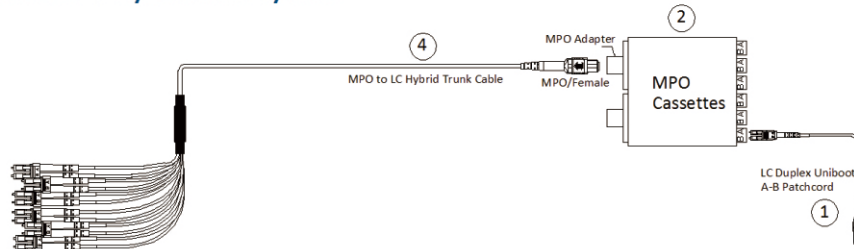
Application

- Data Centre Infrastructure
- High Density Fiber Management
- Telecommunications networks and Broadband

Cassette Based System:



Cassette to Hybrid Trunk System:



MPO-LC/SC

Optical Distribution Frame

Model	HDOR-1	HDOR-4
Size	482*380*44mm (1U)	482*560*174mm(4U)
Cassette Module Slot	4	12
Capacity	96 fibers	288 fibers
Net Weight	3kgs	4.5kgs
Packing Weight	3.3kgs	5kgs
Material	1.2mm cold rolled steel	1.2mm cold rolled steel
Material Coating	powder coating	powder coating
Color	black	black



Bare Fiber

PLC Optical Splitter

We provide a high precise PLC splitter for the construction of optical network. Compact design ensures low requirements of placing position and environment. It is especially suitable for tiny room installation and can be easily placed into different types of terminal boxes and distribution boxes, in favor of splicing and staying in tray without additional space reservation.

Features

- Compact design
- Low insertion loss and low PDL
- High reliability
- High channel counts
- Wide wavelength range
- Large operating and temperature range
- Customized packaging and configuration
- Full Telcordia GR1209/1221 qualifications



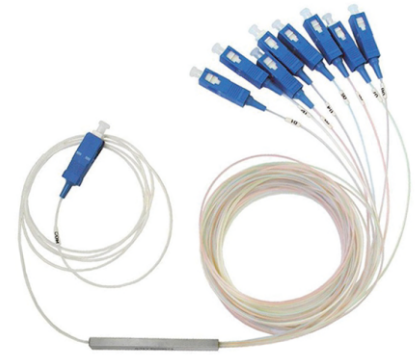
Specification

1×N (N>2) PLCS (Without connector) Optical parameters						
Parameters	1×2	1×4	1×8	1×16	1×32	1×64
Operation wavelength (nm)	1260~1650					
Insertion loss (dB) Max	4.0	7.4	10.7	13.9	17.2	21.5
Return loss (dB) Min	55	55	55	55	55	55
PDL (dB) Max	0.2	0.2	0.3	0.3	0.3	0.3
Directivity (dB) Min	55	55	55	55	55	55
WDL (dB)	0.4	0.4	0.4	0.5	0.5	0.5
Pigtail length (m)	1.2(±0.1) or customer specified					
Fiber type	250um bare fiber					
Operation temperature (°C)	-40~85					
Storage temperature (°C)	-40~85					
Dimension (L×W×H) (mm)	40×4×4	40×4×4	40×4×4	40×4×4	50×7×4	60×12×4
2×N (N>2) PLCS (Without connector) Optical parameters						
Parameters		2×4	2×8	2×16	2×32	2×64
Operation wavelength (nm)	1260~1650					
Insertion loss (dB) Max		7.6	11.0	14.8	17.9	21.5
Loss uniformity (dB) Max		1.2	1.5	1.8	2.0	2.0
Return loss (dB) Min		55	55	55	55	55
PDL (dB) Max		0.2	0.3	0.4	0.4	0.4
Directivity (dB) Min		55	55	55	55	55
WDL (dB)		0.4	0.4	0.5	0.5	0.5
Pigtail length (m)	1.2(±0.1) or customer specified					
Fiber type	250um bare fiber					
Operation temperature (°C)	-40~85					
Storage temperature (°C)	-40~85					
Dimension (L×W×H) (mm)		50×4×4	50×4×4	60×7×4	60×7×4	60×7×4

Micro Type PLC Optical Splitter

We provide a high precise Micro type PLC splitter for the construction of optical network. Compact design ensures low requirements of placing position and environment. It is especially suitable for tiny room installation and can be easily placed into different types of terminal boxes and distribution boxes, in favor of splicing and stay in tray without additional space reservation.

It can be easily applied in FTTx construction, optical network construction, CATV networks and etc.



Specification

1×N (N>2) PLCS (With connector) Optical parameters						
Parameters	1×2	1×4	1×8	1×16	1×32	1×64
Operation wavelength (nm)	1260~1650					
Insertion loss (dB) Max	4.1	7.4	10.5	13.8	17.1	20.4
Return loss (dB) Min	APC	55	55	55	55	55
	UPC	50	50	50	50	50
PDL (dB) Max	0.2	0.2	0.3	0.3	0.3	0.3
Directivity (dB) Min	55	55	55	55	55	55
WDL (dB)	0.4	0.4	0.4	0.5	0.5	0.5
Pigtail length (m)	1.2(±0.1) or customer specified					
Fiber type	SMF-28e with 0.9mm tight buffered fiber					
Operation temperature (°C)	-40~85					
Storage temperature (°C)	-40~85					
Dimension (L×W×H) (mm)	40×4×4	40×4×4	40×4×4	40×4×4	50×7×4	60×12×4
2×N (N>2) PLCS (With connector) Optical parameters						
Parameters		2×4	2×8	2×16	2×32	2×64
Operation wavelength (nm)	1260~1650					
Insertion loss (dB) Max		7.7	10.8	14.1	17.4	20.7
Return loss (dB) Min	APC	55	55	55	55	55
	UPC	50	50	50	50	50
PDL (dB) Max		0.2	0.3	0.4	0.4	0.4
Directivity (dB) Min		55	55	55	55	55
WDL (dB)		0.4	0.4	0.5	0.5	0.5
Pigtail length (m)	1.2(±0.1) or customer specified					
Fiber type	SMF-28e with 0.9mm tight buffered fiber					
Operation temperature (°C)	-40~85					
Storage temperature (°C)	-40~85					
Dimension (L×W×H) (mm)		50×4×4	50×4×4	60×7×4	60×7×4	60×12×6

Features

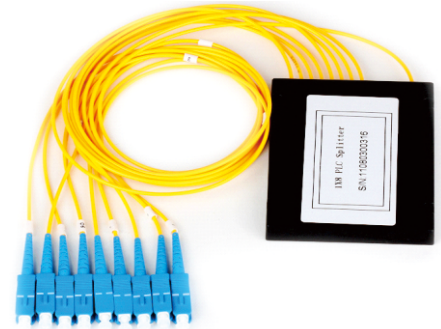
- Compact design
- Low insertion loss and low PDL
- High reliability
- High channel counts
- Wide wavelength range
- Large operating&temperature range
- Customized packing configuration
- Full Telcordia GR1209/1221 qualifications

Cassette Type

PLC Optical Splitter

We provide a high precise Micro type PLC splitter for the construction of optical network. Compact design ensures low requirements of placing position and environment. It is especially suitable for tiny room installation and can be easily placed into different types of terminal boxes and distribution boxes, in favor of splicing and stay in tray without additional space reservation.

It can be easily applied in FTTx construction, optical network construction, CATV networks and etc.



Specification

1×N (N>2) PLCS (With connector) Optical parameters						
Parameters	1×2	1×4	1×8	1×16	1×32	1×64
Operation wavelength (nm)	1260~1650					
Insertion loss (dB) Max	4.1	7.4	10.5	13.8	17.1	20.4
Return loss (dB) Min	APC	55	55	55	55	55
	UPC	50	50	50	50	50
PDL (dB) Max	0.2	0.2	0.3	0.3	0.3	0.3
Directivity (dB) Min	55	55	55	55	55	55
WDL (dB)	0.4	0.4	0.4	0.5	0.5	0.5
Pigtail length (m)	1.2(±0.1) or customer specified					
Fiber type	SMF-28e with 2.0/3.0mm tight buffered fiber					
Operation temperature (°C)	-20~65					
Storage temperature (°C)	-40~85					
Dimension (L×W×H) (mm)	100×80×	100×80×	100×80×	120×80×	140×114	140×114
	10	10	10	18	×18	×18
2×N (N>2) PLCS (With connector) Optical parameters						
Parameters	2×2	2×4	2×8	2×16	2×32	2×64
Operation wavelength (nm)	1260~1650					
Insertion loss (dB) Max	4.4	7.7	10.8	14.1	17.4	20.7
Return loss (dB) Min	APC	55	55	55	55	55
	UPC	50	50	50	50	50
PDL (dB) Max	0.2	0.2	0.3	0.4	0.4	0.4
Directivity (dB) Min	55	55	55	55	55	55
WDL (dB)		0.4	0.4	0.5	0.5	0.5
Pigtail length (m)	1.2(±0.1) or customer specified					
Fiber type	SMF-28e with 2.0/3.0mm tight buffered fiber					
Operation temperature (°C)	-20~85					
Storage temperature (°C)	-40~85					
Dimension (L×W×H) (mm)	100×70×9	100×70×9	100×70×9	120×80×18	140×114×18	140×114×18

Features

- Compact design
- Low insertion loss and low PDL
- High reliability
- High channel counts
- Wide wavelength range
- Large operating temperature range
- Customized packing configuration
- Full Telcordia GR1209/1221 qualifications

Insertion Module & LGX Box Type

PLC Optical Splitter

We provide a high precise insertion module & LGX Box PLC splitter for the construction of optical network. Low requirements of placing position and environment, compact insertion module & LGX box type design. It is small enough to place in indoor terminal box and ODF frame or optical fiber distribution box directly. PLC optical splitter offers uniform power splitting with low insertion loss, low PDL and high return loss. User can customize the optical splitting ratio for every output channel. The range of working wavelength is from 1260nm to 1650nm.

It can be easily applied in FTTx construction, optical network construction, CATV networks and etc.



Specification

1×N (N>2) PLCS (With connector) Optical parameters							
Parameters		1×2	1×4	1×8	1×16	1×32	1×64
Operation wavelength (nm)		1260~1650					
Insertion loss (dB) Max		4.1	7.7	11.0	14.0	17.2	21.3
Return loss (dB) Min	APC	55	55	55	55	55	55
	UPC	50	50	50	50	50	50
PDL (dB) Max		0.2	0.2	0.3	0.3	0.3	0.3
Directivity (dB) Min		55	55	55	55	55	55
WDL (dB)		0.4	0.4	0.4	0.5	0.5	0.5
Pigtail length (m)		1.2(±0.1) or customer specified					
Fiber type		SMF-28e with 2.0/3.0mm tight buffered fiber					
Operation temperature (°C)		-20~65					
Storage temperature (°C)		-40~85					
Dimension	Module	128×101×25	128×101×51	130×101×102	130×101×206		
(L×W×H) (mm)	LGX Box	158×130×29	158×130×58	158×130×87	158×130×174		
2×N (N>2) PLCS (With connector) Optical parameters							
Parameters		2×2	2×4	2×8	2×16	2×32	2×64
Operation wavelength (nm)		1260~1650					
Insertion loss (dB) Max		4.4	8.1	11.5	14.5	17.8	21.8
Return loss (dB) Min	APC	55	55	55	55	55	55
	UPC	50	50	50	50	50	50
PDL (dB) Max		0.2	0.2	0.3	0.4	0.4	0.4
Directivity (dB) Min		55	55	55	55	55	55
WDL (dB)			0.4	0.4	0.5	0.5	0.5
Pigtail length (m)		1.2(±0.1) or customer specified					
Fiber type		SMF-28e with 2.0/3.0mm tight buffered fiber					
Operation temperature (°C)		-20~85					
Storage temperature (°C)		-40~85					
Dimension	Module	128×101×25	128×101×51	130×101×102	130×101×206		

Features

- Compact design
- Low insertion loss and low PDL
- High reliability
- High channel counts
- Wide wavelength range
- Large operating&temperature range
- Customized packing configuration
- Full Telcordia GR1209/1221 qualifications

Tray Type

PLC Optical Splitter

We provide a high precise tray type PLC splitter for the construction of optical network. Compact design ensures low requirements of placing position and environment. It is similar with the tray encapsulation in optical fiber distribution disc and can be placed in ODF frame or optical fiber distribution box directly.

It can be easily applied in FTTx construction, optical network construction, CATV networks and etc.



Specification

1×N (N>2) PLCS (With connector) Optical parameters						
Parameters		1×4	1×8	1×16	1×32	1×64
Operation wavelength (nm)		1260~1650				
Insertion loss (dB) Max		7.7	11.0	14.0	17.2	21.3
Return loss (dB) Min	APC	55	55	55	55	55
	UPC	50	50	50	50	50
PDL (dB) Max		0.2	0.3	0.3	0.3	0.3
Directivity (dB) Min		55	55	55	55	55
Pigtail length (m)		1.0(±0.1) or customer specified				
Fiber type		SMF-28e with 0.9mm tight buffered fiber				
Operation temperature (°C)		-20~65				
Storage temperature (°C)		-40~85				
Dimension (L×W×H) (mm)		308×200×25/customization				
2×N (N>2) PLCS (With connector) Optical parameters						
Parameters		2×4	2×8	2×16	2×32	2×64
Operation wavelength (nm)		1260~1650				
Insertion loss (dB) Max		8.1	11.5	14.5	17.8	21.8
Return loss (dB) Min	APC	55	55	55	55	55
	UPC	50	50	50	50	50
PDL (dB) Max		0.2	0.3	0.4	0.4	0.4
Directivity (dB) Min		55	55	55	55	55
Pigtail length (m)		1.0(±0.1) or customer specified				
Fiber type		SMF-28e with 0.9mm tight buffered fiber				
Operation temperature (°C)		-20~65				
Storage temperature (°C)		-40~85				
Dimension (L×W×H) (mm)		308×200×25/customization				

Features

- Compact design
- Low insertion loss and low PDL
- High reliability
- High channel counts
- Wide wavelength range
- Large operating&temperature range
- Customized packing configuration
- Full Telcordia GR1209/1221 qualifications

Rack Mounted PLC Optical Splitter

We provide a high precise rack mounted type PLC splitter for the construction of optical network. Low requirements of placing position and environment, compact rack mount design. The dimension of 1U or 2U rack mount splitter can be customized based on the requirements of our client. It can be placed into ODF to process the standard operation.

It can be easily applied in FTTx construction, optical network construction, CATV networks and etc.



Specification

1×N (N>2) PLCS (With connector) Optical parameters						
Parameters		1×4	1×8	1×16	1×32	1×64
Operation wavelength (nm)		1260~1650				
Insertion loss (dB) Max		7.7	11.0	14.0	17.2	21.3
Return loss (dB) Min	APC	55	55	55	55	55
	UPC	50	50	50	50	50
PDL (dB) Max		0.2	0.3	0.3	0.3	0.3
Directivity (dB) Min		55	55	55	55	55
Pigtail length (m)		1.0(±0.1) or customer specified				
Fiber type		SMF-28e with 2mm cable or customization				
Operation temperature (°C)		-20~65				
Storage temperature (°C)		-40~85				
Dimension (L×W×H) (mm)		483×200×1U/483×200×2U/customization				
2×N (N>2) PLCS (With connector) Optical parameters						
Parameters		2×4	2×8	2×16	2×32	2×64
Operation wavelength (nm)		1260~1650				
Insertion loss (dB) Max		8.1	11.5	14.5	17.8	21.8
Return loss (dB) Min	APC	55	55	55	55	55
	UPC	50	50	50	50	50
PDL (dB) Max		0.2	0.3	0.4	0.4	0.4
Directivity (dB) Min		55	55	55	55	55
Pigtail length (m)		1.0(±0.1) or customer specified				
Fiber type		SMF-28e with 2mm cable or customization				
Operation temperature (°C)		-20~65				
Storage temperature (°C)		-40~85				
Dimension (L×W×H) (mm)		483×200×1U/483×200×2U/customization				

Features

- Compact design
- Low insertion loss and low PDL
- High reliability
- High channel counts
- Wide wavelength range
- Large operating temperature range
- Customized packing configuration
- Full Telcordia GR1209/1221 qualifications

FAOC Series

Field Assembly Fast Connector

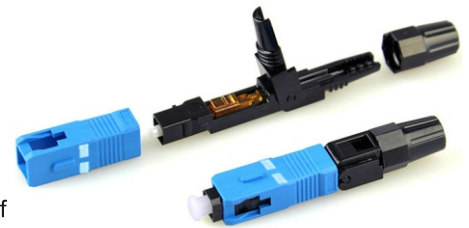
Field assembly connector is a frequently used passive component in optical construction field which is used to terminate optical fiber(generally,FTTx butterfly cable). It has already been applied in Optical Distribution Cabinet, Optical testing instrument and Optical transmission network . With the rising of FTTH construction around the world, the demand of field assembly connector will be enhanced year by year.

Features

- Suitable for FTTx butterfly type cable(both square and circle shape are available)
- Special Crimp Tool free design
- Low insertion loss (including optical adapter)
- Buckle design, easy to open and close
- Integrated with SC/APC ferrule
- Preset fiber and matching-fluid design ensure the performance
- Composed with high quality adaption fluid
- Easy in use

Specification

Connector type	SC/LC
Polishing mode	UPC/APC
Cable fixing type	Cable fixing buckle/screwing-up knob
Fiber diameter (um)	125
Tight buffered coating diameter (um)	9.0±0.3
Coating diameter (um)	250
Insertion loss (dB)	≤0.4 (including adapter)
Return loss (dB)	-40C~-+85C:
Succession reliability	>45
	Max loss increases 0.2dB after 500 times using (insertion and drawing)
Tensile force (N)	≥10N
Working Temperature °C	-40C~-+85C
Humidity	≤95% (+40C)



ORDERING INFORMATION

FF-FAOC05 Field Fast Connector



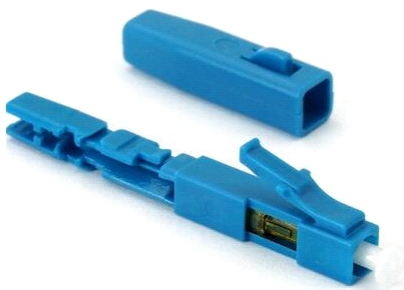
ORDERING INFORMATION

FF-FAOC06 Field Fast Connector



ORDERING INFORMATION

FF-FAOC07 Field Fast Connector



ORDERING INFORMATION

FF-FAOC09 Field Fast Connector



ORDERING INFORMATION

FF-FAOC10 Field Fast Connector



ORDERING INFORMATION

FF-FAOC08 Field Fast Connector



SC/UPC adapter



SC/APC adapter



SC OM1 OM2 adapter



SC OM3 adapter



SC adapter, Metal



SC/UPC adapter,
flangeless



SC OM1 OM2 adapter,
flangeless



SC/APC adapter,
flangeless



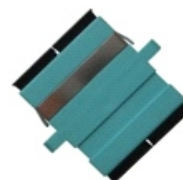
SC/UPC adapter,
Duplex



SC/APC adapter,
Duplex



SC OM1 OM2 adapter,
Duplex



SC OM3 adapter,
Duplex



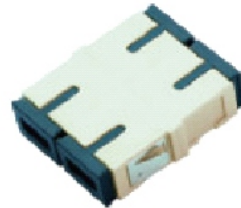
SC OM4 adapter,
Duplex



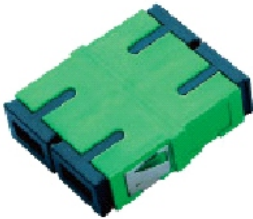
SC adapter, Metal,
Duplex



SC/UPC adapter,
Duplex, Flangeless



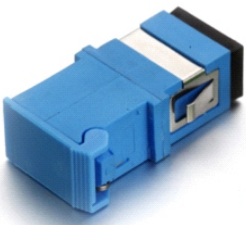
SC OM1 OM2 adapter,
Duplex, Flangeless



SC/APC adapter,
Duplex, Flangeless



SC/APC adapter,
auto shutter sideways
dust cap



SC/UPC adapter, auto
shutter sideways dust
cap, flangeless



SC/APC adapter, auto
shutter sideways dust
cap, flangeless



SC/UPC adapter,
auto shutter upward
dust cap



SC/APC adapter,
auto shutter upward
dust cap



SC/UPC adapter,
auto shutter upward
dust cap, flangeless



SC/APC adapter,
auto shutter upward
dust cap, flangeless



SC/UPC adapter,
auto shutter push
dust cap



SC/APC adapter,
auto shutter push
dust cap



SC/UPC adapter,
auto shutter push dust
cap, flangeless



SC/APC adapter,
auto shutter push dust
cap, flangeless



FC/UPC adapter,
square shape



FC/APC adapter,
square shape



FC/UPC adapter,
round shape
Big D type



FC/UPC adapter,
round shape
Small D type



FC/APC adapter,
round shape
Small D type



FC/APC adapter,
round shape
Big D type



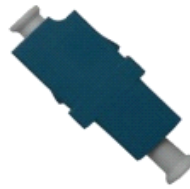
FC/UPC adapter,
rectangular shape



FC/APC adapter,
rectangular shape



FC/APC adapter
duplex



LC/UPC adapter



LC/APC adapter



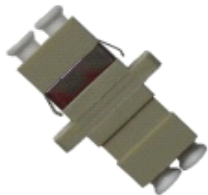
LC/UPC adapter,
OM1 OM2



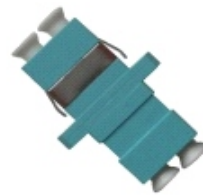
LC/UPC adapter,
Duplex



LC/APC adapter,
Duplex



LC/UPC adapter,
Duplex OM1 OM2



LC/UPC adapter,
Duplex OM3



LC/UPC adapter,
Duplex OM4



LC/UPC adapter,
Duplex, Flangeless



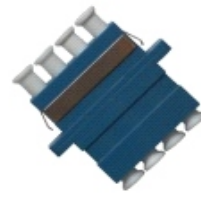
LC/UPC adapter,
Duplex OM1 OM2,
Flangeless



LC/APC adapter,
Duplex, Flangeless



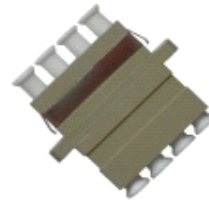
LC/UPC adapter
Duplex, Om4
Flangeless



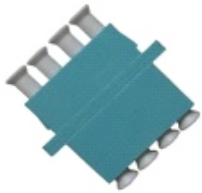
LC/UPC adapter,
Quadplex



LC/APC adapter,
Quadplex



LC/UPC adapter,
Quadplex, OM1 OM2



LC/UPC adapter,
Quadplex, OM3



LC/UPC adapter,
Quadplex, OM4



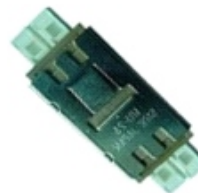
LC/APC adapter,
flangeless



ST adapter



MU adapter



MU adapter, Duplex



MPO adapter



MTRJ adapter

FF-PS-SF Series

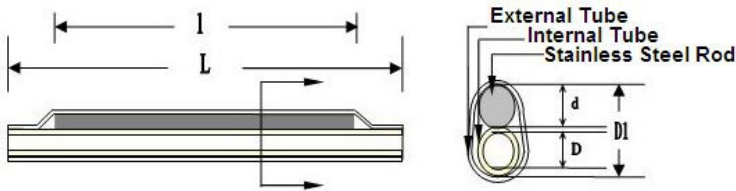
Fiber Heat Shrinkable Protective Sleeve (Single Fiber Cable)

Fiber Splice Protective Sleeves are designed to restore mechanical strength, environmental integrity and fiber optic transmission properties after fiber splicing. The single fiber protective sleeves realize the reinforcement by single stainless steel rod.

Features

- Customized length available - Color-coded outer tubes available - Splice point protection and intensity improvement
- External tube clearly shows the status of fiber joint - Outer tube in compliance with CHINA YD/T1024-1999
- Completed shrink in compliance with CHINA YD/T1024-1999
- Airproof performance keeps the splice point's good resistance of humidity and temperature

	External Tube	Internal Tube	Reinforcement
Material	XLPO	EVA	304 Steel
Working Temperature	-45 to 100°C		
Shrinking Temperature	90 to 110°C		



Model#	Stainless Steel Rod	Internal Tube	External Tube	Protective Sleeve
	Diameter(d)*Length(l)	Diameter(D)*Length(L)	Length(L)	Outer Diameter*Length
FF-PS-SF01	0.5x25mm	0.5x25mm	25	1.8x25mm
FF-PS-SF02	0.5x30mm	0.5x30mm	30	1.8x30mm
FF-PS-SF03	0.5x35mm	0.5x35mm	35	1.8x35mm
FF-PS-SF04	0.7x35mm	1.0x35mm	35	2.6x35mm
FF-PS-SF05	0.8x35mm	1.0x35mm	35	2.7x35mm
FF-PS-SF06	0.8x40mm	1.3x40mm	40	3.0x40mm
FF-PS-SF07	0.8x40mm	1.0x40mm	40	2.7x40mm
FF-PS-SF08	0.8x45mm	1.0x45mm	45	2.7x45mm
FF-PS-SF09	1.0x35mm	1.0x40mm	40	2.9x40mm
FF-PS-SF10	1.0x40mm	1.0x45mm	45	2.9x45mm
FF-PS-SF11	1.0x55mm	1.0x60mm	60	2.9x60mm
FF-PS-SF12	1.0x35mm	1.2x40mm	40	3.1x40mm
FF-PS-SF13	1.0x45mm	1.2x50mm	50	3.1x50mm
FF-PS-SF14	1.0x55mm	1.2x60mm	60	3.1x60mm
FF-PS-SF15	1.0x35mm	1.4x40mm	40	3.3x40mm
FF-PS-SF16	1.0x40mm	1.4x45mm	45	3.3x45mm
FF-PS-SF17	1.0x55mm	1.4x60mm	60	3.3x60mm
FF-PS-SF18	1.1x56mm	1.4x60mm	60	3.4x60mm
FF-PS-SF19	1.2x35mm	1.4x40mm	40	3.5x40mm
FF-PS-SF20	1.2x40mm	1.4x45mm	45	3.5x45mm
FF-PS-SF21	1.2x55mm	1.4x60mm	60	3.5x60mm
FF-PS-SF22	1.5x25mm	1.7x25mm	25	4.2x25mm
FF-PS-SF23	1.5x35mm	1.7x40mm	40	4.2x40mm
FF-PS-SF24	1.5x40mm	1.7x45mm	45	4.2x45mm
FF-PS-SF25	1.5x52mm	1.7x60mm	60	4.2x60mm
FF-PS-SF26	1.5x55mm	1.7x60mm	60	4.2x60mm

FF-PS-RD/RS Series

Fiber Heat Shrinkable Protective Sleeve (Ribbon Fiber Cable)

Fiber Splice Protective Sleeves are designed to restore mechanical strength, environmental integrity and fiber optic transmission properties after fiber splicing. Ribbon fiber protective sleeves use single or dual ceramic to realize the reinforcement function.

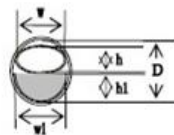
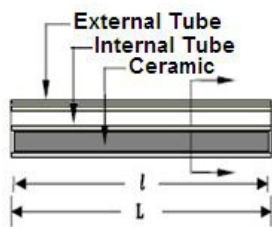
Features

- Customized length available
- Color-coded outer tubes available
- Splice point protection and intensity improvement
- External tube clearly shows the status of fiber joint
- Outer tube in compliance with CHINA YD/T1024-1999
- Completed shrink in compliance with CHINA YD/T1024-1999
- Airproof performance keeps the splice point's good resistance of humidity and temperature

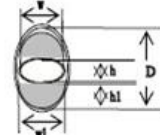
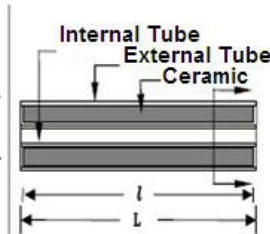
	External Tube	Internal Tube	Reinforcement
Material	XLPO	EVA	Ceramic
Working Temperature	-45 to 100°C		
Shrinking Temperature	90 to 110°C		



Single Ceramic Reinforcement



Dual Ceramic Reinforcement



Model#	Applied Ribbon Fiber	Ceramic	Internal Tube	External Tube	Protective Sleeve
		Width(w1)*Height(h1)	Width(W)*Height(H)	Length(L)	Outer Diameter*Length
FF-PS-RD40-12	8 to 12 fibers	3.9x1.9mm	5.0x3.0mm	40	7.6x40mm
FF-PS-RD40-06	≤6 fibers	3.0x1.3mm	3.3x2.0mm	40	5.5x40mm
FF-PS-RS40-12	8 to 12 fibers	3.9x1.9mm	5.0x3.0mm	40	5.5x40mm
FF-PS-RS40-06	≤6 fibers	3.0x1.3mm	3.3x2.0mm	40	4.0x40mm

FF-PS-DC Series

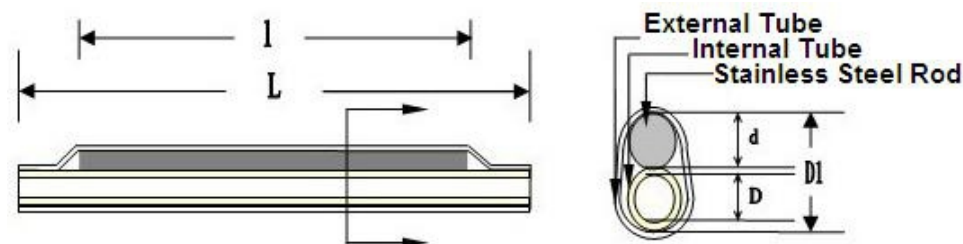
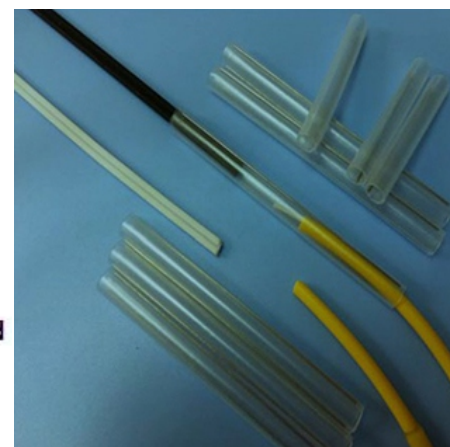
Fiber Heat Shrinkable Protective Sleeve (Flat Drop Cable)

Fiber Splice Protective Sleeves are designed to restore mechanical strength, environmental integrity and fiber optic transmission properties after fiber splicing. Drop cable protectives sleeves realize the reinforcement by single or dual stainless steel rod.

Features

- Customized length available
- Color-coded outer tubes available
- Splice point protection and intensity improvement
- External tube clearly shows the status of fiber joint
- Outer tube in compliance with CHINA YD/T1024-1999
- Completed shrink in compliance with CHINA YD/T1024-1999
- Airproof performance keeps the splice point's good resistance of humidity and temperature

	External Tube	Internal Tube	Reinforcement
Material	XLPO	EVA	304 Steel
Working Temperature	-45 to 100°C		
Shrinking Temperature	90 to 110°C		



Model#	Stainless Steel Rod	Internal Tube	External Tube	Protective Sleeve
	Diameter(d)*Length(l)	Diameter(D)*Length(L)	Length(L)	Outer Diameter*Length
FF-PS-DC01	1.0x55mm (single rod)	3.8x60mm	60	5.0x60mm
FF-PS-DC02	1.0x40mm (single rod)	3.8x45mm	45	5.0x45mm
FF-PS-DC03	1.0x55mm (dual rod)	3.8x60mm	60	6.0x60mm
FF-PS-DC04	1.0x40mm (dual rod)	3.8x40mm	45	6.0x45mm

FF-BFA Series

Bare Fiber Adapter

Bare fiber adaptor is a special hybrid adaptor. Unlike common adaptor, this adaptor is only for 0.25mm bare fiber(with tight buffered coating). Designed for bare fibers ensures widely applications in optical communication and testing equipment, optical distribution frame and etc. Special metal material ensures its durable and precision.

Specification

Insertion Loss	$\leq 0.2\text{dB}$
Interchangeability	$\leq 0.2\text{dB}$
Durability	≥ 1000 times
Repeatability	$\leq 0.1\text{dB}$
Working Temp	$-40\sim+75^{\circ}\text{C}$, humidity $\leq 95\%$



ORDERING INFORMATION

FF-BFA01 FC/UPC Bare Fiber Adapter
FF-BFA02 SC/UPC Bare Fiber Adapter
FF-BFA03 ST/UPC Bare Fiber Adapter
FF-BFA04 LC/UPC Bare Fiber Adapter
FF-BFA05 FC/APC Bare Fiber Adapter
FF-BFA06 SC/APC Bare Fiber Adapter
FF-BFA07 ST/APC Bare Fiber Adapter
FF-BFA08 LC/APC Bare Fiber Adapter

FF-BFR Series

Bare Fiber Reel

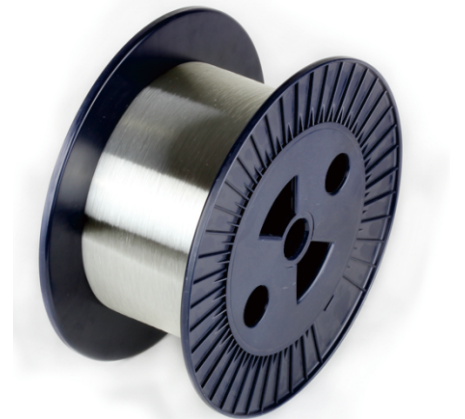
We provide bare fiber reel for testing project. Both G.652 and G.657A type bare fiber are available. The bare fiber reel delivers a good macrobending performance in the industry while maintaining compatibility with current optical fibers, equipment, practices and procedures. This full-spectrum single-mode optical fiber reel when subjected to smaller radii bends experiences virtually no signal loss.

Features

- Full-spectrum single mode fiber
- Small macrobending radii, comply with G.657A or G.652D standard
- Small attenuation value
- Suitable for any optical testing environment

Specification

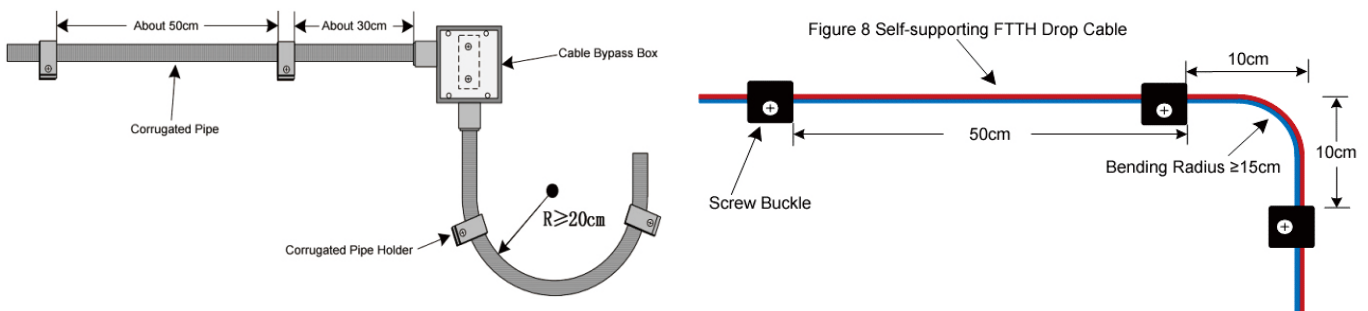
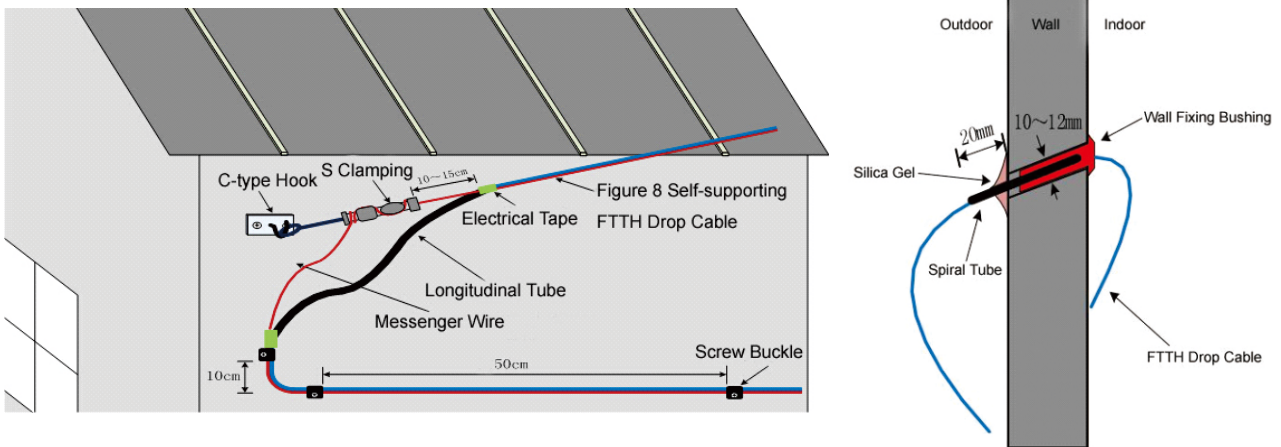
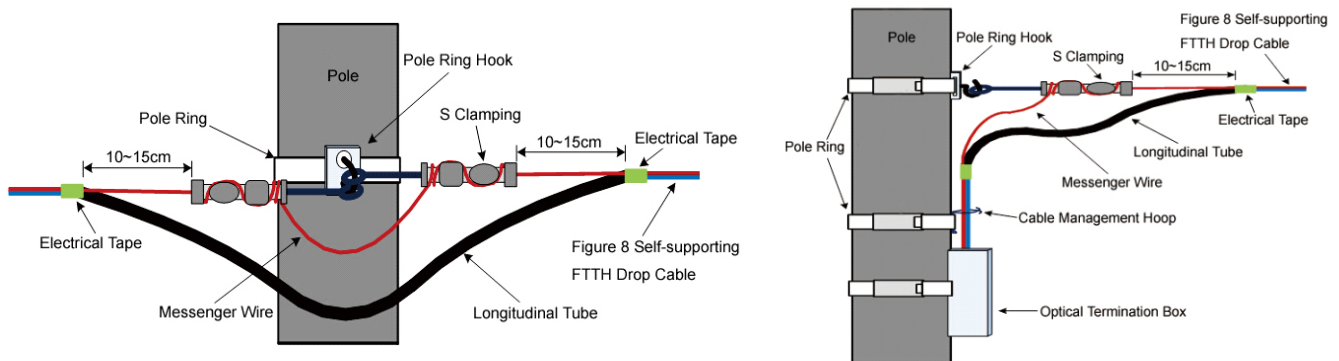
<i>Physical parameters</i>	
Fiber type	Single mode
Diameter of coated fiber	250um
Diameter of bare fiber	125um
Min macrobending radii	33mm(G.652D) / 15mm(G.657A)
<i>Typical attenuation value</i>	
1310nm wavelength	0.33~0.35dB/km
1490nm wavelength	0.21~0.24dB/km
1550nm wavelength	0.19~0.20dB/km
1625nm wavelength	0.21~0.23dB/km



FF-IAC Series

FTTH Cable Installation Accessories

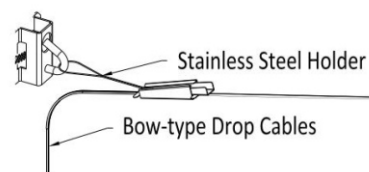
- Supporting Accessories are used for aerial and wall installation of Outdoor Figure 8 Self-supporting FTTH Drop Cable outdoor.
- Corrugated Pipes are used for wall installation of FTTH Drop Cable indoor and outdoor.
- Ducts are used for wall installation of FTTH Drop Cable indoor & horizontally.
- Screw Fixation Accessories are used for wall installation of FTTH Drop Cable indoor and horizontally, and wall installation of Outdoor Figure 8 Self-supporting FTTH Drop Cable outdoor.



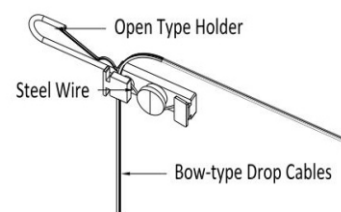
FF-IAC Series

FTTH Cable Installation Accessories

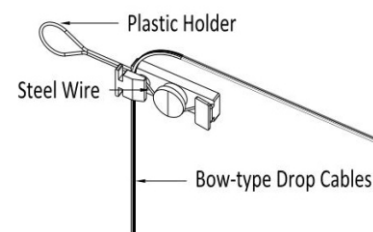
Name	Stainless Steel Holder
Model	IAC-SH-01
Size	205*16*17 mm
Materials	Stainless Steel
Color	Original
Application	Fixed bow-type drop cables by wedge-shaped structure



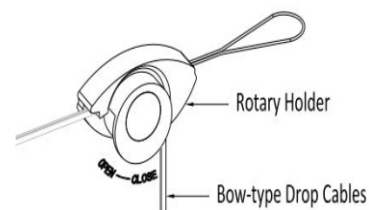
Name	Open Type Holder
Model	IAC-SH-02
Size	150*45*16 mm
Materials	ABS & Stainless Steel Wire
Color	White / Black
Application	Fixed bow-type drop cables by binding way, steel wire is open structure.



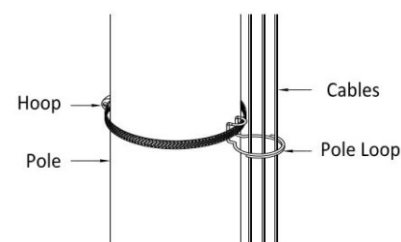
Name	Plastic Holder
Model	IAC-SH-03
Size	135*28*16 mm
Materials	ABS & Stainless Steel Wire
Color	White / Black
Application	Fixed bow-type drop cables by binding way



Name	Rotary Holder
Model	IAC-SH-04
Size	126*37*20 mm
Materials	ABS & Stainless Steel Wire
Color	Black
Application	Fixed bow-type drop cables by rotate locking structure



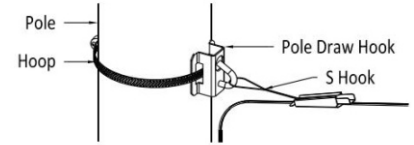
Name	Pole Loop
Model	IAC-DW-05
Size	70*60*320 mm
Materials	Steel Rod
Color	Original
Application	Install on the pole by steel strip, vertical line for cables.



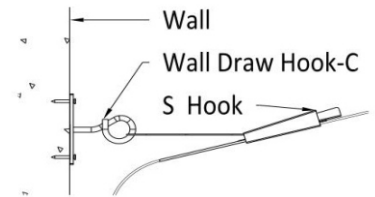
FF-IAC Series

FTTH Cable Installation Accessories

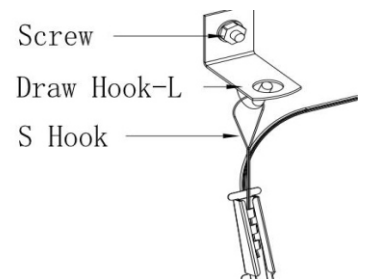
Name	Pole Draw Hook
Model	IAC-DW-01
Size	65*65*60 mm
Materials	Steel (Zinc Plating)
Color	Original
Application	Install on the pole by steel strip, connect with S hook.



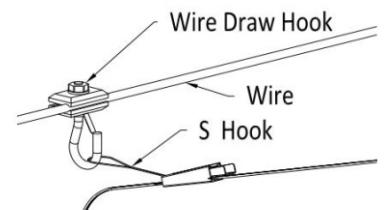
Name	Wall Draw Hook-C
Model	IAC-DW-02
Size	72*60*25 mm
Materials	Steel (Zinc Plating)
Color	Original
Application	Install on the wall by bolt, connect with S hook.



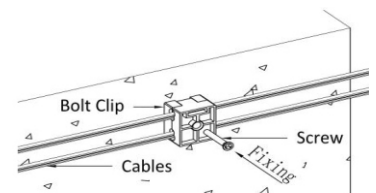
Name	Draw Hook-L
Model	IAC-DW-03
Size	80*75*40 mm
Materials	Steel (Zinc Plating)
Color	Original
Application	Install on the pole by by bolt , connect with S hook.



Name	Wire Draw Hook
Model	IAC-DW-04
Size	80*50*30 mm
Materials	Steel (Zinc Plating)
Color	Original
Application	Install on the steel strand, connect with S hook



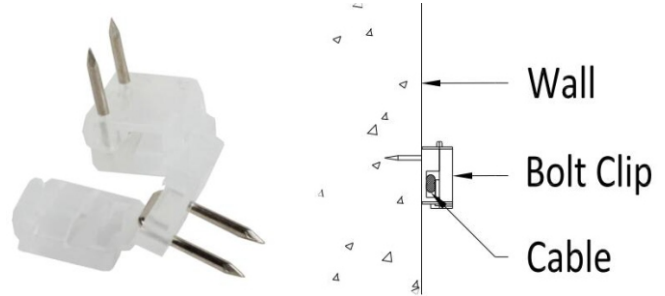
Name	Bolt Clip
Model	IAC-CC-01
Size	26*20*18 mm
Materials	PPO & Bolt
Color	White / Black
Application	Fixing by screw , laying bow-type drop cables



FF-IAC Series

FTTH Cable Installation Accessories

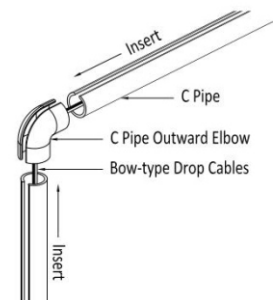
Name	Nail Clip
Model	IAC-CC-02
Size	16*16*13 mm
Materials	PPO & Nail
Color	Translucent
Application	Fixing by nail , laying bow-type drop cables.



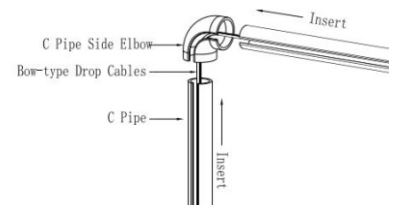
Name	C Pipe
Model	IAC-CP-01
Size	Φ20/Φ25 * 1000 mm
Materials	PVC
Color	White
Application	Outside bow-type drop cables , to protect it



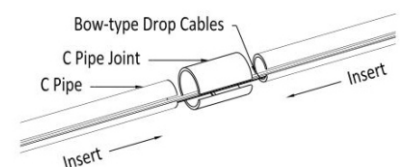
Name	C Pipe Outward Elbow
Model	IAC-CP-02
Size	Φ20/Φ25 * 38 * 38 mm
Materials	PVC
Color	White
Application	Bow-type drop cables enter from the outside of elbow.



Name	C Pipe Side Elbow
Model	IAC-CP-03
Size	Φ29 * 38 * 38 mm
Materials	PVC
Color	White
Application	Bow-type drop cables enter from the side of elbow



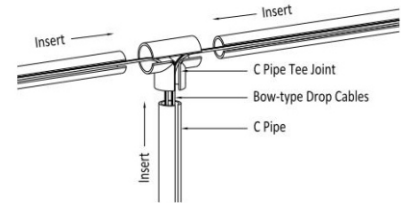
Name	C Pipe Joint
Model	IAC-CP-04
Size	Φ29 * 42 mm
Materials	PVC
Color	White
Application	A straight line connection for C pipe



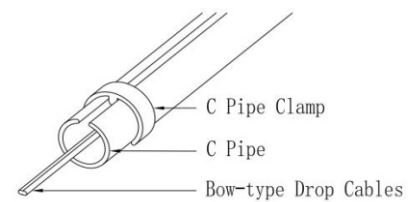
FF-IAC Series

FTTH Cable Installation Accessories

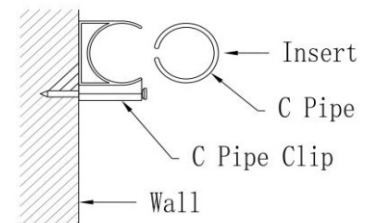
Name	C Pipe Tee Joint
Model	IAC-CP-05
Size	Φ29 * 60 * 44 mm
Materials	PVC
Color	White
Application	C pipe connections in three directions



Name	C Pipe Clamp
Model	IAC-CP-06
Size	Φ29 * 10 mm
Materials	PVC
Color	White
Application	Plugging C pipe gap



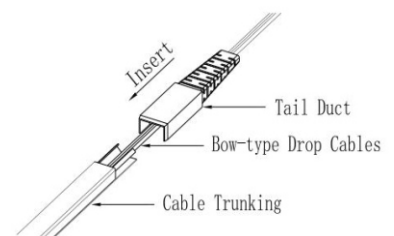
Name	C Pipe Clip
Model	IAC-CP-07
Size	35 * 27 * 10 mm
Materials	PVC& Nail
Color	White
Application	Fixing by nail, laying C pipe



Name	Cable Trunking
Model	IAC-CD-01
Size	10 * 8 * 1000 mm
Materials	PVC
Color	White
Application	Use cable trunking for cables, to protect it



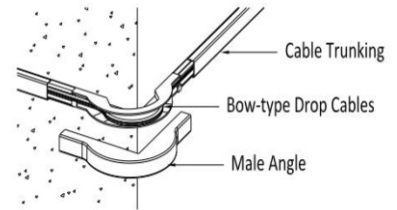
Name	Tail Duct
Model	IAC-CD-02
Size	75 * 14 * 8 mm
Materials	PBC
Color	White
Application	Connect to the end of cable trunking.



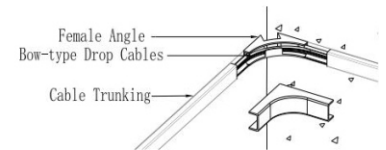
FF-IAC Series

FTTH Cable Installation Accessories

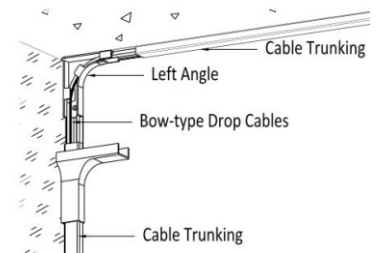
Name	Male Angle
Model	IAC-BA-01
Size	75 * 75 * 15 mm
Materials	ABS
Color	White
Application	For cable trunking to bend corners at outside angles



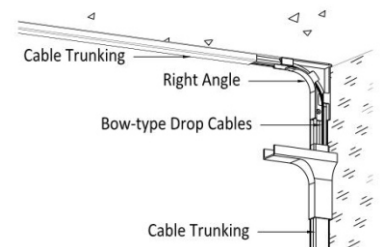
Name	Female Angle
Model	IAC-BA-02
Size	46 * 46 * 15 mm
Materials	ABS
Color	White
Application	For cable trunking to bend corners at inside angles



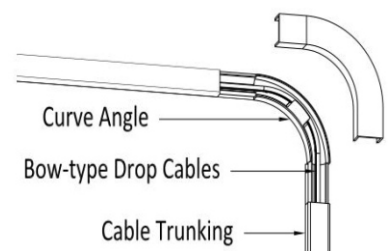
Name	Left Angle
Model	IAC-BA-03
Size	50 * 50 * 15 mm
Materials	ABS
Color	White
Application	For cable trunking to bend corners at the top left corner



Name	Right Angle
Model	IAC-BA-04
Size	50 * 50 * 15 mm
Materials	ABS
Color	White
Application	For cable trunking to bend corners at the top right corner



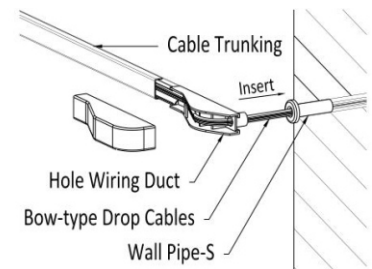
Name	Curve Angle
Model	IAC-BA-05
Size	55 * 55 * 09 mm
Materials	ABS
Color	White
Application	For cable trunking to bend corners at right angles.



FF-IAC Series

FTTH Cable Installation Accessories

Name	Hole Wiring Duct
Model	IAC-BA-06
Size	85 * 22 * 16 mm
Materials	ABS
Color	White
Application	Installed on the outside of cable through the wall hole



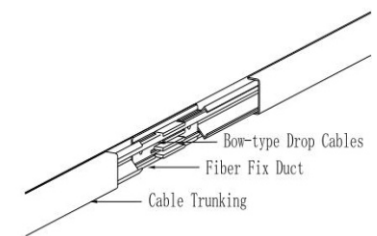
Name	Wall Pipe-S
Model	IAC-BA-07
Size	Φ16.5 * 32 mm
Materials	ABS
Color	White
Application	Installed in the optical cable through the hole in the wall



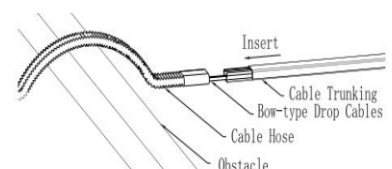
Name	Wall Pipe-L
Model	IAC-BA-08
Size	Φ38 * 29 mm
Materials	ABS
Color	White
Application	Installed in the optical cable through the hole in the wall



Name	Fiber Fix Duct
Model	IAC-CD-03
Size	50 * 12 * 5 mm
Materials	ABS
Color	White
Application	Fixing bow-type drop cables in the cable trunking



Name	Cable Hose
Model	IAC-CD-04
Size	16 * 9 * 1000 mm
Materials	ABS
Color	PBC
Application	Used at wall bending and bump



FF-FOS series

FTTH Fiber Optic Socket

Model#	FF-FOS1A
Material	ABS & PC
Size	146x88x90mm
Capacity	1 SC, 2 LC
Color	White



Model#	FF-FOS1B
Material	ABS & PC
Size	116x85x22mm
Capacity	1 SC, 2 LC
Color	White



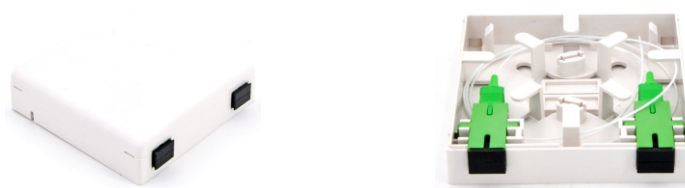
Model#	FF-FOS2A
Material	ABS & PC
Size	130x84x24mm
Capacity	2 SC, 4 LC
Color	White



Model#	FF-FOS2B
Material	ABS & PC
Size	86x86x27mm
Capacity	2 SC, 4 LC
Color	White



Model#	FF-FOS2C
Material	ABS & PC
Size	86x86x27mm
Capacity	2 SC, 4 LC
Color	White



Model#	FF-FOS2D
Material	ABS & PC
Size	116x85x22mm
Capacity	2 SC, 4 LC
Color	White



FF-FOS series

FTTH Fiber Optic Socket

Model#	FF-FOS2E
Material	ABS & PC
Size	80x100x25mm
Capacity	2 SC, 4 LC
Color	White



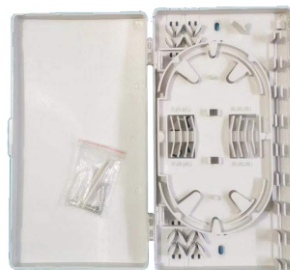
Model#	FF-FOS4A
Material	ABS & PC
Size	150x110x30mm
Capacity	2 SC, 8 LC
Color	White



Model#	FF-FOS4B
Material	ABS & PC
Size	100x80x29mm
Capacity	2 SC, 8 LC
Color	White



Model#	FF-FOS8A
Material	ABS & PC
Size	180x86x27mm
Capacity	8 SC, 16 LC
Color	White



★ The adapters and pigtails including in above pictures are sold separately.

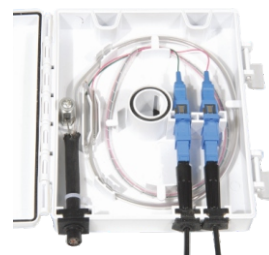
FF-FTB series

Fiber Termination Box

Model#	FF-FTB2A
Material	ABS & PC
Size	102x167x31mm
Capacity	2 SC, 4 LC
Color	White/Gray/Black



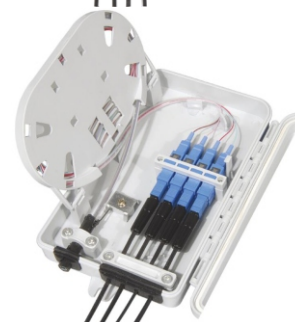
Model#	FF-FTB2B
Material	ABS & PC
Size	150x120x37mm
Capacity	2 SC, 4 LC
Color	White/Gray/Black



Model#	FF-FTB4A
Material	ABS & PC
Size	191x120x44mm
Capacity	4 SC, 8 LC
Color	White/Gray/Black



Model#	FF-FTB4B
Material	ABS & PC
Size	102x167x31mm
Capacity	4 SC, 8 LC
Color	White/Gray/Black



Model#	FF-FTB6A
Material	ABS & PC
Size	150x120x37mm
Capacity	6 SC, 12 LC
Color	White/Gray/Black



Model#	FF-FTB8A
Material	ABS & PC
Size	240x195x66mm
Capacity	8 SC, 16 LC
Color	White/Gray/Black



FF-FTB series

Fiber Termination Box

Model#	FF-FTB8B
Material	ABS & PC
Size	213x163x47mm
Capacity	8 SC, 16 LC
Color	White/Gray/Black



Model#	FF-FTB8C
Material	ABS & PC
Size	199x160x46mm
Capacity	8 SC, 16 LC
Color	White/Gray/Black



Model#	FF-FTB8D
Material	ABS & PC
Size	230x180x55mm
Capacity	8 SC, 16 LC
Color	White/Gray/Black



Model#	FF-FTB8E
Material	ABS & PC
Size	235x125x45mm
Capacity	12 SC
Color	White/Gray/Black



Model#	FF-FTB8F
Material	ABS & PC
Size	160x130x50mm
Capacity	12 SC
Color	White/Gray/Black



Model#	FF-FTB8G
Material	ABS & PC
Size	192x135x48mm
Capacity	12 SC
Color	White/Gray/Black



FF-FTB series

Fiber Termination Box

Model#	FF-FTB8H
Material	ABS & PC
Size	313x195x120mm
Capacity	8 SC, 16 LC
Color	White/Gray/Black



Model#	FF-FTB12A
Material	ABS & PC
Size	250x190x39mm
Capacity	12 SC, 24 LC
Color	White/Gray/Black



Model#	FF-FTB12B
Material	ABS & PC
Size	225x200x65mm
Capacity	12 SC, 24 LC
Color	White/Gray/Black



Model#	FF-FTB12C
Material	ABS & PC
Size	271x175x82mm
Capacity	12 SC, 24 LC
Color	White/Gray/Black



Model#	FF-FTB16A
Material	ABS & PC
Size	23x219x84mm
Capacity	16 SC, 32 LC
Color	White/Gray/Black



Model#	FF-FTB16B
Material	ABS & PC
Size	295x240x85mm
Capacity	16 SC, 32 LC
Color	White/Gray/Black



FF-FTB series

Fiber Termination Box

Model#	FF-FTB16C
Material	ABS & PC
Size	330x210x87mm
Capacity	16 SC, 32 LC
Color	White/Gray/Black



Model#	FF-FTB16I
Material	ABS & PC
Size	302x236x113mm
Capacity	16 SC, 32 LC
Color	White/Gray/Black



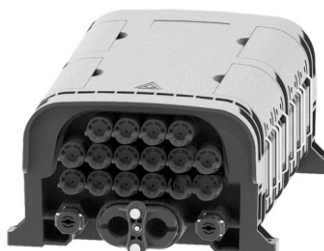
Model#	FF-FTB16J
Material	ABS & PC
Size	330x210x121mm
Capacity	16 SC, 32 LC
Color	White/Gray/Black



Model#	FF-FTB16K2
Material	ABS & PC
Size	241x208x117mm
Capacity	16 SC, 32 LC
Color	White/Gray/Black



Model#	FF-FTB16L
Material	ABS & PC
Size	353x230x132mm
Capacity	16 SC, 32 LC
Color	White/Gray/Black



Model#	FF-FTB16M
Material	ABS & PC
Size	295x240x85mm
Capacity	16 SC, 32 LC
Color	White/Gray/Black



FF-FTB series

Fiber Termination Box

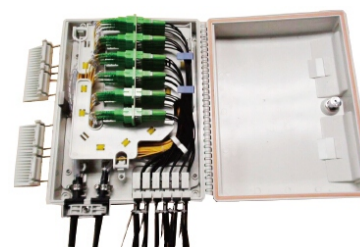
Model#	FF-FTB16N
Material	ABS & PC
Size	380x200x125mm
Capacity	16 SC, 32 LC
Color	White/Gray/Black



Model#	FF-FTB16Q
Material	ABS & PC
Size	300x210x105mm
Capacity	16 SC, 32 LC
Color	White/Gray/Black



Model#	FF-FTB24A
Material	ABS & PC
Size	305x225x100mm
Capacity	24 SC, 48 LC
Color	White/Gray/Black



Model#	FF-FTB24B
Material	ABS & PC
Size	320x240x100mm
Capacity	24 SC, 48 LC
Color	White/Gray/Black



Model#	FF-FTB24C
Material	ABS & PC
Size	330x260x130mm
Capacity	24 SC, 48 LC
Color	White/Gray/Black



Model#	FF-FTB24D
Material	ABS & PC
Size	415x330x120mm
Capacity	24 SC, 48 LC
Color	White/Gray/Black



FF-FTB series

Fiber Termination Box

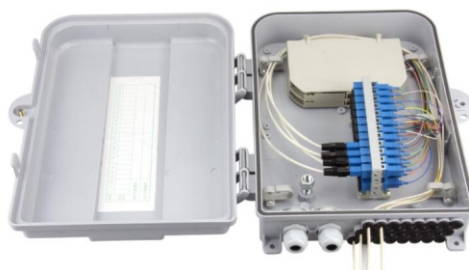
Model#	FF-FTB24E
Material	SMC
Size	390x288x105mm
Capacity	24 SC, 48 LC
Color	White/Gray/Black



Model#	FF-FTB24F
Material	ABS & PC
Size	340x250x110mm
Capacity	24 SC, 48LC
Color	White/Gray/Black



Model#	FF-FTB24H
Material	ABS & PC
Size	340x250x110mm
Capacity	24 SC, 48LC
Color	White/Gray/Black



Model#	FF-FTB24G
Material	ABS & PC
Size	340x250x110mm
Capacity	24 SC, 48LC
Color	White/Gray/Black



Model#	FF-FTB36A
Material	ABS & PC
Size	420x320x130mm
Capacity	36 SC, 72 LC
Color	White/Gray/Black



Model#	FF-FTB48A
Material	ABS & PC
Size	320x240x100mm
Capacity	48 SC, 96 LC
Color	White/Gray/Black



FF-FOSC series

Fiber Optical Splice Closure

Model#	Trays	Capacity	Ports	Sealing	Dimension
FOSCIA6S24-1	1	24	6	mechanical	390*210*120mm
FOSCIA6S24-2	2	48	6	mechanical	390*210*120mm
FOSCIA6S24-3	3	72	6	mechanical	390*210*120mm
FOSCIA6S24-4	4	96	6	mechanical	390*210*120mm

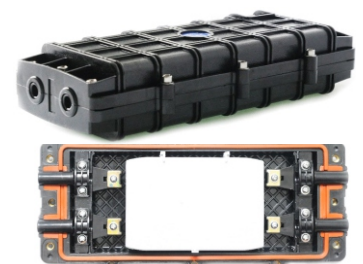
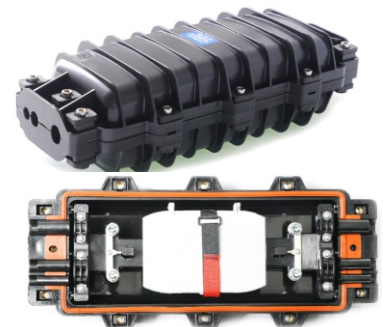
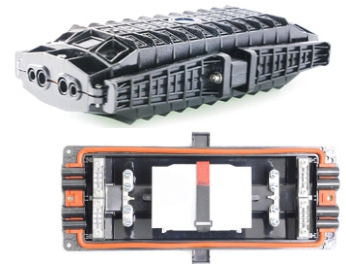
Model#	Trays	Capacity	Ports	Sealing	Dimension
FOSCIB6S24-1	1	24	6	mechanical	320*210*85mm
FOSCIB6S24-2	2	48	6	mechanical	320*210*85mm
FOSCIB6S24-3	3	72	6	mechanical	320*210*85mm
FOSCIB6S24-4	4	96	6	mechanical	320*210*85mm

Model#	Trays	Capacity	Ports	Sealing	Dimension
FOSCIC8S24-1	1	24	8	mechanical	450*220*110mm
FOSCIC8S24-2	2	48	8	mechanical	450*220*110mm
FOSCIC8S24-3	3	72	8	mechanical	450*220*110mm
FOSCIC8S24-4	4	96	8	mechanical	450*220*110mm

Model#	Trays	Capacity	Ports	Sealing	Dimension
FOSCID6S24-1	1	24	6	mechanical	395*195*130mm
FOSCID6S24-2	2	48	6	mechanical	395*195*130mm
FOSCID6S24-3	3	72	6	mechanical	395*195*130mm
FOSCID6S24-4	4	96	6	mechanical	395*195*130mm

Model#	Trays	Capacity	Ports	Sealing	Dimension
FOSCIE6S24-1	1	24	6	mechanical	430*180*125mm
FOSCIE6S24-2	2	48	6	mechanical	430*180*125mm
FOSCIE6S24-3	3	72	6	mechanical	430*180*125mm
FOSCIE6S24-4	4	96	6	mechanical	430*180*125mm

Model#	Trays	Capacity	Ports	Sealing	Dimension
FOSCIF4S24-1	1	24	4	mechanical	340*150*70mm
FOSCIF4S24-2	2	48	4	mechanical	340*150*70mm



FF-FOSC series

Fiber Optical Splice Closure

Model#	Trays	Capacity	Ports	Sealing	Dimension (mm)
FOSCYA4S24-1	1	24	4	heat shrink	190(D)*440(H)
FOSCYA6S24-2	2	48	4	heat shrink	190(D)*440(H)
FOSCYA6S24-3	3	72	4	heat shrink	190(D)*440(H)
FOSCYA6S24-4	4	96	4	heat shrink	190(D)*440(H)

Model#	Trays	Capacity	Ports	Sealing	Dimension (mm)
FOSCYB5S24-1	1	24	5	heat shrink	190(D)*420(H)
FOSCYB5S24-2	2	48	5	heat shrink	190(D)*420(H)
FOSCYB5S24-3	3	72	5	heat shrink	190(D)*420(H)
FOSCYB5S24-4	4	96	5	heat shrink	190(D)*420(H)

Model#	Trays	Capacity	Ports	Sealing	Dimension
FOSCYC5S48-1	1	48	5	heat shrink	220(D)*490(H)
FOSCYC5S48-2	2	96	5	heat shrink	220(D)*490(H)
FOSCYC5S48-3	3	144	5	heat shrink	220(D)*490(H)
FOSCYC5S48-4	4	192	5	heat shrink	220(D)*490(H)
FOSCYC5S48-5	5	240	5	heat shrink	220(D)*490(H)
FOSCYC5S48-6	6	288	5	heat shrink	220(D)*490(H)

Model#	Trays	Capacity	Ports	Sealing	Dimension
FOSCYD7S24-1	1	24	7	heat shrink	220(D)*450(H)
FOSCYD7S24-2	2	48	7	heat shrink	220(D)*450(H)
FOSCYD7S24-3	3	72	7	heat shrink	220(D)*450(H)
FOSCYD7S24-4	4	96	7	heat shrink	220(D)*450(H)
FOSCYD7S24-5	5	120	7	heat shrink	220(D)*450(H)
FOSCYD7S24-6	6	144	7	heat shrink	220(D)*450(H)
FOSCYD7S24-7	7	168	7	heat shrink	220(D)*450(H)
FOSCYD7S24-8	8	192	7	heat shrink	220(D)*450(H)
FOSCYD7S24-9	9	216	7	heat shrink	220(D)*450(H)
FOSCYD7S24-X	10	240	7	heat shrink	220(D)*450(H)

Model#	Trays	Capacity	Ports	Sealing	Dimension (mm)
FOSCYB4S12-1	1	12	4	mechanical	90(D)*310(H)
FOSCYB4S12-2	2	24	4	mechanical	90(D)*310(H)
FOSCYB4S12-3	3	36	4	mechanical	90(D)*310(H)
FOSCYB4S12-4	4	48	4	mechanical	90(D)*310(H)



FF-JCD series

FTTH Drop Cable Closure

FTTH Drop Cable Type Fiber Optic Splice & Splitter Closure features with ruggedness, which stands the test under harsh conditions with severe moisture, vibration and extreme temperature. Humanized design helps user gain better experience and safer operating environment.

Features

- Dis-mountable adaptor panel
- Support midspan termination
- Easy operation and installation
- Rotatable and dis-mountable splice tray for easy splicing

Applications

- Wall mounting & pole mounting installation
- Suitable for 2*3mm Indoor FTTH Drop Cable and Outdoor Figure 8 FTTH Drop Cable



Specification

Model#	FF-JCD-16-I4		FF-JCD-24-I4	
Adapter	16pcs of SC		24pcs of SC	
Cable Ports	oval port	round ports	oval port	round port
Applicable Cable Dia.	10~17.5mm	8~17.5mm	10~17.5mm	8~17.5mm
Drop Cable Ports	16 ports		24 ports	
Applicable Cable Dia.	2~7mm drop cables			
Dimension	385*245*130mm		385*245*155mm	
Material	modified polymer plastic			
Sealing Structure	mechanical sealing			
Color	black			
Maximum Splicing	48 fibers (4 trays, 12 fibers/tray)			
Applicable Splitter	2pcs of 1*8 PLC Splitters			
Sealing	Ip68			
Impact Test	1k10			
Pull Force	100N			
Midspan Entry	Yes			
Storage (Micro Cable)	Yes			
Net Weight	4kg			
Gross Weight	5kg			
Packing	540*410*375mm (4pcs per carton)			

FF-FOSCIE6

Fiber Optic Splice Closure (Joint Closure)

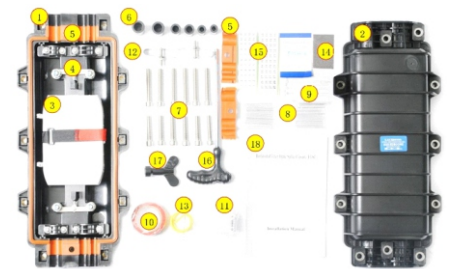
FF-FOSCIE6 Inline Type Fiber Optic Splice Closure (Joint Closure) is mechanical sealing for reusable application.

Specification

Model	FF-FOSCIE6
Type	Inline type
No. of Inlet/Outlet ports	6 ports
Cable Diameter	2 ports×13mm, 2 ports×16mm, 2 ports×20mm
Maximum Capacity	Bunchy: 96 fibers; Ribbon: 144 fiber
Capacity per Splice Tray	Single Layer: 12 fibers; Dual Layers: 24 fibers
Quantity of Splice Tray	4 trays
Body Material	PC
Sealing Material	Thermoplastic rubber
Assembling method	Aerial, direct buried, wall mounting, manhole
Dimension	430(L)×180(W)×125(H)mm
Net Weight	2.5~2.8KG
Temperature	-40°C~65°C

Packing List

Item	Name	Usage	Qty
1	Housing (Bottom)	To protect splices of fiber optic cables	1
2	Housing (Cover)	To protect splices of fiber optic cables	1
3	Splice Tray	To fix Fiber Splice Protective Sleeves	Max. 4
4	Foundation	To fix fiber cable, strength member and splice trays	1
5	Plug	To seal empty ports	6
6	Sealing Grommet	To seal bottom and cover	1
7	Bolt	To fix bottom and cover	1
8	Fusion Sleeves	To protect fiber splices	enough
9	Nylon Tie	To fix buffer tubes with fibers inside	8
10	Insulation Tape	To enlarge cable diameter for fixation	1
11	Sealing Tape	To enlarge cable diameter for sealing	1
12	Hanging Hook	For aerial installation	2
13	Grounding Wire	To connect with grounding device	1
14	Abrasive Cloth	To polish fiber optic cable	1
15	Labelling Paper	To label fibers	1
16	M8 Wrench	To screw bolts of housing and insertion plates	1
17	M10 Wrench	To screw nuts for strength member	1
18	User Manual	To instruct installation	1



FF-FOSC-AL

Aluminium Alloy Fiber Optic Splicing Closure

The fibre optic splice closure is suitable to be used with OPGW and ADSS Cable on Power Transmission lines and Rectangular Concrete Poles. It is of high mechanical strength, anti-corrosion, easy for installation and good sealing, and made of aluminium alloy. The closure includes all assembly and fixing devices for cable and splice trays are also provided inside the box. Cable glands and heat shrinkable tube also included for sealing entries of cables. Anchoring of joint box to tower shall be achieved with galvanized steel clamps allowing fixation in all types of towers.



Specification

Model	FF-FOSC-AL01	FF-FOSC-AL02
Cable Ports	3	6
Material	aluminium alloy housing	
Max. Capacity	96 cores	
Max. Trays	4 (24 cores/tray)	
Cable Diameter	8 to 22mm	
Water-proof Level	Ip68	
Dielectric Strength	15KV DC, no breakdown for 2 minutes	
Service Life	50 years	
Operating temperature	-40 to +65 °C	
Installation Manual	English	



FF-FPX-P1

Distribution Frame ODF

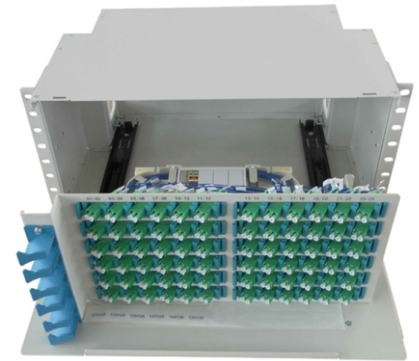
FF-FPX-P1 Series ODF is used as terminal equipment of fiber optic cable for optical fiber wiring, fixation, fusion and patching.

Features

- Cable clamping and strength member fixation system
- Universal adapter panel, suitable for SC, FC and LC adapters
- Clear fiber number marking on adapter panel and pigtails

Specification

Applicable Adapter	SC, FC, duplex LC
Capacity	12, 24, 36, 48, 72, 96, 144, etc
Material	cold rolled steel or aluminum
Color	Black or grey
Fiber Capacity	482(W)*276(D)*44(H)mm SC/FC: 12 fibers; LC: 24 fibers
	482(W)*276(D)*87(H)mm SC/FC: 24 fibers; LC: 48 fibers
	482(W)*276(D)*131.5(H)mm SC/FC: 36 fibers; LC: 72 fibers
	482(W)*276(D)*150(H)mm SC/FC: 48 fibers; LC: 96 fibers
	482(W)*276(D)*200(H)mm SC/FC: 72 fibers; LC: 144 fibers
Installation Method	19" rack mount (21" rack mount is available)
Splice Tray Capacity	24 fibers/tray



Ordering Information

Model	Type	XX:Adapter	XX: Capacity	XX:Pigtail
FF-FPX	P1	SC:SC/UPC	12 fibers	SC:SC/UPC
		AS:SC/APC	24 fibers	AS:SC/APC
		LC:LC/UPC	48 fibers	LC:LC/UPC
		AL:LC/APC	72 fibers	AL:LC/APC

FF-FPX-P2

Distribution Frame ODF

FF-FPX-P2 Series ODF is used as terminal equipment of fiber optic cable for optical fiber wiring, fixation, fusion and patching.

Features

- Cable clamping and strength member fixation system
- Changeable adapter panel suitable for various adapters
- Clear fiber number marking on adapter panel and pigtails



Specification

Applicable Adapter	SC, FC, ST, duplex SC, duplex LC, quadplex LC
Capacity	12, 24, 36, 48, 72, 96 fibers, etc.
Material	cold rolled steel or aluminum
Color	black, white or grey
Dimension	482(W)*250(D)*44(H)mm (1U) 482(W)*250(D)*88(H)mm (2U)
Installation Method	19" rack mount
Splice Tray Capacity	24 fibers/tray
Packing for 1U	Quantity 5pcs/carton Gross Weight 19.2kgs/carton Carton Size 53*30*40cm

Ordering Information

Model	Type	XX:Adapter	XX: Capacity	XX:Pigtail
FF-FPX	P2	SC:SC/UPC	12 fibers 24 fibers 48 fibers 72 fibers	SC:SC/UPC
		AS:SC/APC		AS:SC/APC
		LC:LC/UPC		LC:LC/UPC
		AL:LC/APC		AL:LC/APC
		FC: FC/UPC		FC: FC/UPC
		AF: FC/APC		AF: FC/APC

FF-FPX-P3

Distribution Frame ODF

FF-FPX-P3 Series Drawer Type Fiber Optic Panel is used as terminal equipment of fiber optic cable for optical fiber wiring, fixation, fusion and patching.

Features

- The fiber optic panel consists of three main parts: cover, bottom and tray. Both the bottom and the tray can be pulled out by two guide rails.
- Separate spaces for fiber optic cable storage and fiber fusion: fiber optic cable comes in from the rear of the fiber optic panel, and then stores at the reverse side of the tray. The fiber optic cable goes up into the splice tray for splicing with pigtails at the front side of the tray.
- Special cable fixation device for easy cable storage at the reverse side of the tray.
- Patchcord could be led out from the left side or the right side of the fiber optic panel. The curved piece can protect the patchcord fiber from bending sharply



Specification

Applicable Adapter	SC, FC, ST, duplex SC, duplex LC, quadplex LC
Capacity	12 fibers, 24 fibers, 48 fibers, 96 fibers, etc
Material	cold rolled steel or aluminum
Color	Black or grey
Size	482.6(W)*273.8(D)*43.25(H)mm (19" 1U); 482.6(W)*273.8(D)*88(H)mm (19" 2U)
Fiber Capacity	1U SC/FC/ST: 24 fibers; LC: 48 fibers
	2U SC/FC/ST: 48 fibers; LC: 96 fibers
	3U SC/FC/ST: 72 fibers; LC: 144 fibers
Installation Method	19" rack mount
Net Weight	3.7kgs (1U)
Splice Tray Capacity	12 fibers/tray; 24 fibers/tray
Cable Port Quantity	4 ports
Packing for 1U	Quantity 5pcs/carton
	Gross Weight 21kgs/carton
	Carton Size 52.5*32*37cm

Ordering Information

Model	Type	XX:Adapter	XX: Capacity	XX:Pigtail
FF-FPX	P3	SC:SC/UPC	12 fibers	SC:SC/UPC
		AS:SC/APC	24 fibers	AS:SC/APC
		LC:LC/UPC	48 fibers	LC:LC/UPC
		AL:LC/APC	72 fibers	AL:LC/APC
		FC: FC/UPC	96 fibers	FC: FC/UPC
		AF: FC/APC		AF: FC/APC

FF-FPX-P4

Distribution Frame ODF

FF-FPX-P4 Series Fiber Optic Panel is used as terminal equipment of fiber optic cable for optical fiber wiring, fixation, fusion and patching.

Features

- Humanization: Products are of humanized management and operation, and detail-orientation.
- Specialization: Technical professionals and production/testing equipment ensure excellent product performance.
- Standardization: We strictly follow industry standard and actively participate in the modification of industry specifications.
- Innovation: For 12 fibers Splice and Distribution Integrated Trays and outdoor cross-connect cabinet, we improve our products according to customers' needs.
- Modular design: 12 fibers Splice and Distribution Integrated Trays are adopted for easy installation and maintenance. All components are in the form of modules to achieve flexible configuration. Components of different models are interchangeable, which shortens delivery time, reduces costs, and simplifies installation and maintenance.



Specification

Model#	Dimension (mm)	Capacity (C)
FF-FPX-P4-12	486(W)*275(D)*44(H)	12
FF-FPX-P4-24	486(W)*275(D)*74(H)	24
FF-FPX-P4-48	486(W)*275(D)*128(H)	48
FF-FPX-P4-72	486(W)*275(D)*182(H)	72
FF-FPX-P4-96	486(W)*275(D)*238(H)	96
FF-FPX-P4-648	860(W)*365(D)*2000(H)	648
FF-FPX-P4-720	860(W)*365(D)*2,200(H)	720
FF-FPX-P4-864	860(W)*365(D)*2,600(H)	864

Ordering Information

Model	Type	XX:Adapter	XX: Capacity	XX:Pigtail
FF-FPX	P4	SC:SC/UPC	12 fibers	SC:SC/UPC
		AS:SC/APC	24 fibers	AS:SC/APC
		LC:LC/UPC	48 fibers	LC:LC/UPC
		AL:LC/APC	72 fibers	AL:LC/APC
		FC: FC/UPC	96 fibers	FC: FC/UPC
		AF: FC/APC	648 fibers	AF: FC/APC
			720 fibers	
			864 fibers	

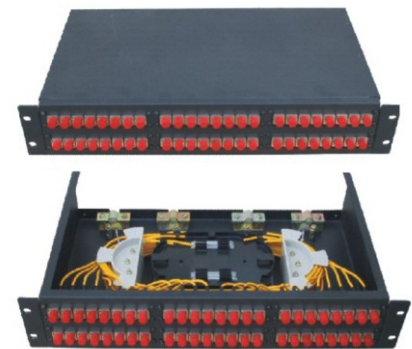
FF-FPX-P5

Distribution Frame ODF

FF-FPX-P5 Series ODF is used as terminal equipment of fiber optic cable for optical fiber wiring, fixation, fusion and patching.

Specification

Applicable Adapter	SC, FC, ST, duplex SC, duplex LC, quadplex LC
Capacity	12, 24, 36, 48, 72, 96 fibers, etc.
Material	cold rolled steel or aluminum
Color	black, white or grey
Dimension	482(W)*250(D)*44(H)mm (1U)
	482(W)*250(D)*88(H)mm (2U)
Installation Method	19" rack mount
Splice Tray Capacity	24 fibers/tray



Ordering Information

Model	Type	XX:Adapter	XX: Capacity	XX:Pigtail
FF-FPX	P5	SC:SC/UPC	12 fibers	SC:SC/UPC
		AS:SC/APC	24 fibers	AS:SC/APC
		LC:LC/UPC	48 fibers	LC:LC/UPC
		AL:LC/APC	72 fibers	AL:LC/APC
		FC: FC/UPC	96 fibers	FC: FC/UPC
		AF: FC/APC		AF: FC/APC

FF-FPX-P8

Distribution Frame ODF

FF-FPX-P8 Series ODF is used as terminal equipment of fiber optic cable for optical fiber wiring, fixation, fusion and patching.

Features

- Adapters are installed in angle to avoid direct laser beam.
- Changeable adapter panel for SC, FC, LC, etc.
- Small dimension in width



Specification

Applicable Adapter	SC, FC, LC
Capacity	12 fibers, 24 fibers
Material	cold rolled steel
Color	grey
Size	488(W)*190(D)*44(H)mm (19" 1U)
Installation Method	19" rack mount
Splice Tray Capacity	12 or 24 fibers/tray
Cable Port Quantity	4 ports



Ordering Information

Model	Type	XX:Adapter	XX: Capacity	XX:Pigtail
FF-FPX	P8	SC:SC/UPC	12 fibers	SC:SC/UPC
		AS:SC/APC	24 fibers	AS:SC/APC
		LC:LC/UPC		LC:LC/UPC
		AL:LC/APC		AL:LC/APC
		FC: FC/UPC		FC: FC/UPC
		AF: FC/APC		AF: FC/APC

FF-FPX-P10

Distribution Frame ODF

FF-FPX-P10 Series ODF is used as terminal equipment of fiber optic cable for optical fiber wiring, fixation, fusion and patching.

Features

- Adapters are installed in angle to avoid direct laser beam.
- Changeable adapter panel for SC, FC, LC, etc.
- Cable fixation and strength member fixation system on the left and right back of ODF.
- Excellent fiber bending radius mechanism to ensure minimum bending radius
- Very reasonable cable management
- Removable door and cover
- Drawer type ODF



Specification

Applicable Adapter	SC, FC, LC
Capacity	24 fibers
Material	cold rolled steel
Color	grey
Size	482.6(W)*365.5(D)*44(H)mm (19" 1U)
Net Weight	4.2kgs
Installation Method	19" rack mount
Splice Tray Capacity	24 fibers/tray

Ordering Information

Model	Type	XX:Adapter	XX: Capacity	XX:Pigtail
FF-FPX	P10	SC:SC/UPC	24 fibers	SC:SC/UPC
		AS:SC/APC	48 fibers	AS:SC/APC
		LC:LC/UPC		LC:LC/UPC
		AL:LC/APC		AL:LC/APC
		FC: FC/UPC		FC: FC/UPC
		AF: FC/APC		AF: FC/APC

FF-FPX-P11

Distribution Frame ODF

FF-FPX-P11 Series ODF is used as terminal equipment of fiber optic cable for optical fiber wiring, fixation, fusion and patching.

Features

- Changeable adapter panel for SC, FC, LC, etc.
- Cable fixation by cable ties on the left and right sides and right back of ODF.
- Excellent fiber bending radius mechanism to ensure minimum bending radius
- Removable cover
- Sliding ODF and sliding tray fixed by magnet
- Adjustable mounting depth



Specification

Applicable Adapter	SC, FC, LC
Capacity	30 fibers
Material	cold rolled steel
Color	grey
Size	482.6(W)*280(D)*43.5(H)mm (19" 1U)
Net Weight	4.2kgs
Installation Method	19" rack mount
Splice Tray Capacity	24 fibers/tray

Ordering Information

Model	Type	XX:Adapter	XX: Capacity	XX:Pigtail
FF-FPX	P11	SC:SC/UPC	30 fibers	SC:SC/UPC
		AS:SC/APC		AS:SC/APC
		LC:LC/UPC		LC:LC/UPC
		AL:LC/APC		AL:LC/APC
		FC: FC/UPC		FC: FC/UPC
		AF: FC/APC		AF: FC/APC

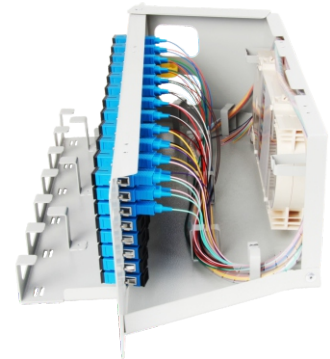
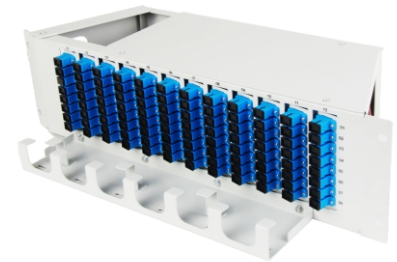
FF-FPX-P12

Distribution Frame ODF

FF-FPX-P12 Series ODF is used as terminal equipment of fiber optic cable for optical fiber wiring, fixation, fusion and patching.

Features

- Adapters are installed in angle to avoid direct laser beam.
- Removable cover
- Clear fiber marking on the tray cover and adapter panel
- Sliding splice trays
- High density ODF



Specification

Applicable Adapter	SC, FC, LC
Capacity	96 fibers
Material	cold rolled steel
Color	grey
Size	482.6(W)*230(D)*127.2(H)mm (19")
Net Weight	3.5kgs
Installation Method	19" rack mount
Splice Tray Capacity	24 fibers/tray

Ordering Information

Model	Type	XX:Adapter	XX: Capacity	XX:Pigtail
FF-FPX	P12	SC:SC/UPC	96 fibers	SC:SC/UPC
		AS:SC/APC		AS:SC/APC
		LC:LC/UPC		LC:LC/UPC
		AL:LC/APC		AL:LC/APC
		FC: FC/UPC		FC: FC/UPC
		AF: FC/APC		AF: FC/APC

FF-FPX-P15

Distribution Frame ODF

FF-FPX-P15 Series ODF is used as terminal equipment of fiber optic cable for optical fiber wiring, fixation, fusion and patching.

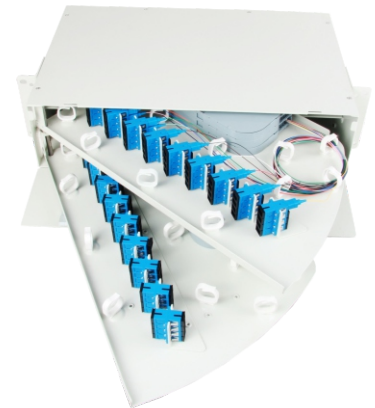
Features

- Adapters are installed in angle to avoid direct laser beam.
- Cable comes in the ODF from left side and back of ODF
- Sliding type ODF



Specification

Applicable Adapter	SC, FC, LC
Capacity	12~72 fibers
Material	cold rolled steel
Color	grey
Size	12 fibers: 482.6(W)*270(D)*44(H)mm (19" 1U)
	72 fibers: 482.6(W)*270(D)*108(H)mm (19")
Net Weight	12 fibers: 4.3kgs
	72 fibers: 7.4kgs
Installation Method	19"and 21" rack mount
Splice Tray Capacity	16 fibers/tray



Ordering Information

Model	Type	XX:Adapter	XX: Capacity	XX:Pigtail
FF-FPX	P15	SC:SC/UPC	12 fibers	SC:SC/UPC
		AS:SC/APC	36 fibers	AS:SC/APC
		LC:LC/UPC	72 fibers	LC:LC/UPC
		AL:LC/APC		AL:LC/APC
		FC: FC/UPC		FC: FC/UPC
		AF: FC/APC		AF: FC/APC

FF-FPX-P16

Distribution Frame ODF

Fiber optic distribution frame(ODF) integrates fiber splicing, storage and cable connections together in a unit.

It can manage both bundle type and ribbon type fiber cables, used in center office, optical cross connection point and network access point in fiber access network projects. It is with large working space to integrate the pigtail, cables and adapters for fiber management.

Rack mounted fiber optic patch panel is standard 19 inch design, cold roll steel box, with blue or green splice trays inside, front & rear cover can be opened.

Features

- Cold-roll steel, electrostatic painting
- Modular design blue splice tray, ABS plastic; 12 cores per tray
- FC, SC, LC... adapter can be loaded.
- Slide out splice tray for easy cable management
- Suitable for 19" standard optic distribution cabinets
- With front cover; rear cover can be opened, convenient for cable management
- Cable entry ports suitable for single fiber, bundle & ribbon fiber cables
- Reasonable design ensures the cables are in good order
- Rack mounted type, indoor using;
- White, black, grey ... color painting optional
- 12, 24, 48, 96 ... capacity customized

Specification

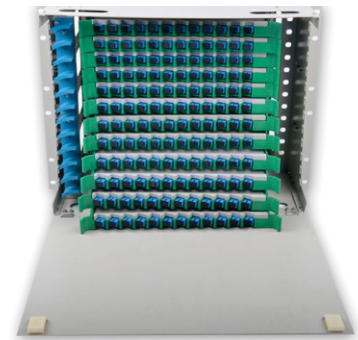
- Under the general air pressure, 500VDC, insulation resistance $\geq 1000\text{M}\Omega$;
- The high voltage protection can undertake 3000VDC, no spark-through and flashover within 1 minute.
- Technical and quality grade reaches the ISO/IEC11801 requirement.
- Working temperature $-20^{\circ}\text{C}\sim +55^{\circ}\text{C}$;
- Working humidity $\leq 95\%$ (30°C);
- Working atmospheric pressure 70~106KPa

ODF Size

Height	Capacity	Size	Note
1U	12 cores	482x300x50mm	1 pcs of splice tray inside
2U	24 cores	482x300x70mm	2 pcs of splice tray inside
2U	36 cores	482x300x70mm	3 pcs of splice tray inside
3U	48 cores	482x300x140mm	4 pcs of splice tray inside
4U	72 cores	482x300x200mm	6 pcs of splice tray inside
5U	96 cores	482x300x254mm	8 pcs of splice tray inside
7U	144 cores	482x300x340mm	12pcs of splice tray inside

Ordering Information

Model	Type	XX:Adapter	XX: Capacity	XX:Pigtail
FF-FPX	P16	SC:SC/UPC	12 fibers	SC:SC/UPC
		AS:SC/APC	24 fibers	AS:SC/APC
		LC:LC/UPC	36 fibers	LC:LC/UPC
		AL:LC/APC	48 fibers	AL:LC/APC
		FC: FC/UPC	72 fibers	FC: FC/UPC
		AF: FC/APC	96 fibers	AF: FC/APC
			144 fibers	



FF-ODC series

Optical Distribution Cabinet

Fiber Distribution Terminal, Outdoor Cabinet is made of SMC plastic sheet material. It is one of the fiber distribution equipment in telecom system, which is used for the main cable distribution outdoor. It can perform fiber splicing and distribution function.

The FDT consists of cabinet, OSF (optical splitter Frame) distribution area, Bypass area, fiber fusion area, fiber storage area and input & output fiber fixing area. There are 4 optical splitter trays in each OSF, and totally 8 splitter trays for 1*32 PLC splitter (or 2*32 splitter) .

Features

- The splitter tray can be pull out for easier operation.
- High density of splitter tray to save space
- Easier for patchcord jumping between different trays and for massive jumping
- The splitter section and the pigtail section are separated clearly in two sections
- Clear marking for each splice tray and pigtails



Specification

<i>Splitter Panel (OSF):</i>	
Dimension (W×D×H)	288×180×25mm
Material	plastic
Capacity	2*32 splitter
<i>Bypass patch panel</i>	
Function	Used for the splicing of the main cables
Capacity	2*24=48 fibers
Dimension (W×D×H)	288×180×25mm
<i>Distribution & feeder splice shelf</i>	
Dimension (W×D×H)	245×190×21mm
Material	plastic
Capacity	24 fibers

FF-ODC series

Optical Distribution Cabinet

FF-FDH-1 Fiber Distribution Hub (FDH) is made of outer cabinet wall with stainless steel and inner cabinet wall with aluminium alloy. Between the outer and inner cabinet, there's a heat insulation (thickness of 18mm), which is made of high temperature resistant, low heat transmit foam material to prevent heat, burn and shake.

In the places where top/bottom/door board and cabinet meet, the high temperature resistant foam sealing putty is used to prevent dust water and moist.

Cabinet Structure

The interior of FF-FDH-1 Fiber Distribution Hub (FDH) consists of the following primary components:

- Swing Frames : Provide a position for splicing trays. Each frame can provides mounting spaces for 19 splicing trays. Each splicing tray can provides 12 positions for connectors .The cabinet may be equipped with up to 38 splicing trays. SC/UPC or SC/APC style connectors are available.
- Grounding System – Provides a point for grounding the cabinet .
- The exterior of the cabinet is constructed of heavy stainless steel and is coated with an grey-colored finish. Each cabinet is equipped with two front doors that provide full front access to the optical components.
- Pedestal: The pedestal-mount cabinet may be mounted on a concrete pad Mounting kits (accessories) are available for each mounting option.



Specification

Dimension (H×W×D)	1310×1190×414mm
Material	Aluminum alloy and stainless steel
Capacity	2*32 splitter
Installation Space	38U
Protection Level	Ip56
<i>Splitter panel:</i>	
Dimension (W×D×H)	482×200×1Umm
Material	aluminum and power coated
Installation Method	19"rack
Capacity	1pc of 2*32 splitter
<i>24F Fiber Uni-rack:</i>	
Dimension (W×D×H)	482×200×1Umm
Material	aluminum and power coated
Installation Method	19" rack
Capacity	24 fibers

FF-06921AHM-101

Outdoor Integrated Cabinet

The product is an outdoor integrated equipment cabinet. The cabinet is suitable for outdoor environment, such as roadside, park, building roof, mountain areas, etc. Base station equipment, power equipment, temperature control equipment, and transmission equipment can be installed in the cabinet. And other ancillary equipment or reserve space and heat exchange capacity for the above equipment, which can provide reliable mechanical and environmental protection for the normal operation of internal equipment.

Features

- Short construction period, small land occupation, wider application scope and lower construction cost
- High integration and compact structure, which is very convenient for installation and migration
- High performance thermal solution
- Three-point anti-theft cabinet door lock, excellent keyhole protection device
- Perfect airflow duct design to effectively avoid mixed flow of hot and cold gases
- All-round protection such as access control, smoke, flooding, temperature and humidity, and knocking
- Professional outdoor powder coating, strong weather resistance

Environmental monitoring (optional)

Real-time monitoring of temperature and humidity, water immersion, tapping, smoke, access control, etc. in the cabinet, support RS485/TCP/IP communication mode

Specification

Model#	FF-06921AHM-101
Size (Outer)	W900xD900xH2100mm
Size (Inner)	W800xD800xH1800mm
Layout	Single Door, Single Space
Application	19 inch Equipments
Doors	Single Door, Anti-theft Lock
Materials	Cold-roll Steel
Temp. partition layer	45mm
IP Level	Ip55
Heat Exchanger	Air Conditioner
Electricity Source	Municipal electricity
Lighting	48V LED
Working Temperature	-40°C to +55°C
Stock Temperature	-50°C to +70°C
Relative Humidity	5%~100%
Atmospheric pressure	62kpa to 101kpa (Altitude 0m to 5000m)
Solar radiation intensity	1120×(1±5%)W/m2



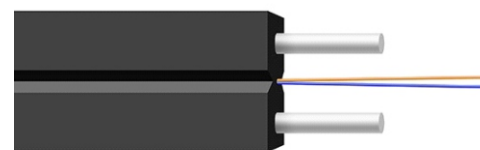
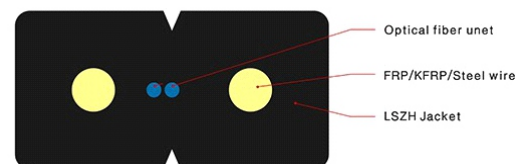
Fiber Cable

Optical Fiber Flat Drop Cable

GJXFH FTTH Indoor Drop Cable uses butterfly flat structure, whose optical fiber unit is positioned in the centre. Two parallel Fiber Reinforce Plastic (FRP) strength members are placed at the two sides. Then, the cable is completed with LSZH sheath. FTTH indoor cable has a much greater bandwidth to carry data and less susceptible to interference than common indoor fiber cables. With small diameter, water-resistant, soft and bendable characteristics, it's easy to deploy and maintenance. In addition, the non-metallic strength member can provide lightning protection and anti-electromagnetic interference. FTTH cables are ideal for indoor cabling, end users directly cabling, and access network.

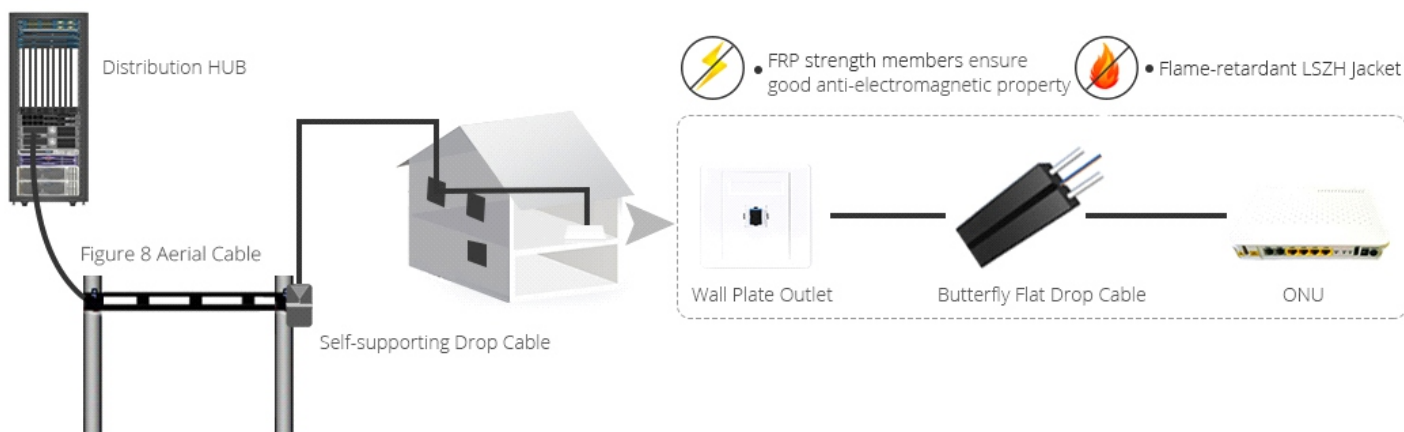
Features

- Good waterproof performance
- Low smoke, zero halogen and flame retardant sheath
- Smaller diameter, simple structure, light weight, and high practicability
- FRP strength member ensures anti-electromagnetic and crush resistance
- Special low-bend-sensitivity fiber provides high bandwidth data transmission
- Novel flute design, easily strip and splice, simplify installation and maintenance



Specification

Cable Type	FTTH Drop Cable
Construction	Butterfly Flat
Outer Jacket Material	LSZH (Black/White)
Cable Diameter	$(2.0 \pm 0.2) \times (3.0 \pm 0.2)$ mm
Tensile Strength (long/)	100N (Long Term)/200N (Short Term)
Bending Radius	10D (Long Term)/20D (Short Term) (mm)
Fiber Count	2 Fibers
Fiber Type	Single mode G.657A
Strength Member	FRP
Weight	10kg/km
Crush Load	300 (Long Term)/1000 (Short Term) (N/100mm)
Operating Temperature	-40 to +85 °C
Storage Temperature	-40 to +85 °C



Fiber Cable

Self-supporting Round Drop Cable

Fiber Parameters

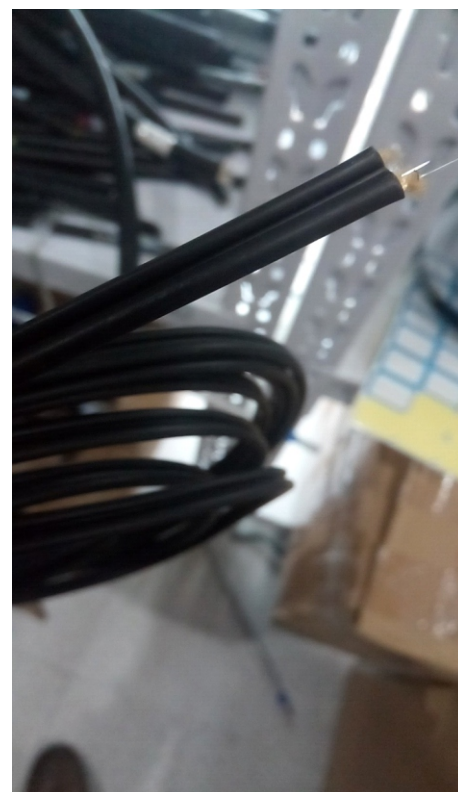
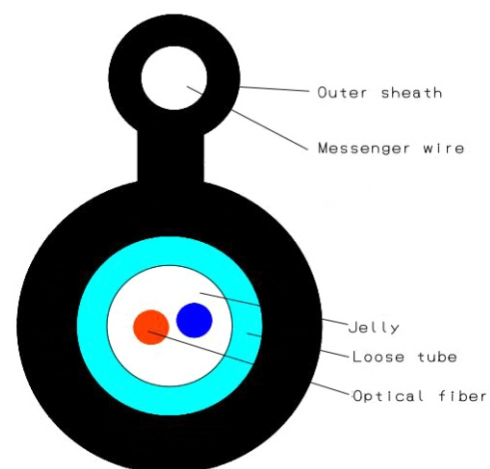
Mode Field Diameter (μm)	9.2±0.4@1310nm, 10.4±0.5@1550nm
Cladding Diameter	124.8±0.7μm
Cladding Non-Circularity	≤0.7%
Core-Cladding Concentricity Error	≤0.5μm
Coating Diameter	245±5μm
Coating Non-Circularity	≤6.0%
Cladding-Coating Concentricity Error	≤12.0μm
Cable Cutoff Wavelength	$\lambda_{cc} \leq 1260\text{nm}$
Attenuation(max.)	≤0.4dB/km@1310nm ≤0.3dB/km@1550nm

Cable Parameters

Fiber Count	2
Dimension (Colored Coating Fiber)	250mm±15μm
Color (Colored Coating Fiber)	Blue / Orange
Dimension (Loose Tube)	1.85mm±0.05mm
Material (Loose Tube)	PBT
Color (Loose Tube)	Natural
Dimension (Strength Member)	1.0mm
Material (Strength Member)	Steel
Dimension (Outer Jacket)	2mm±0.2mm / 3.6mm±0.3mm
Material (Outer Jacket)	LSZH
Color(Outer Jacket)	Black

Mechanical and Environmental Characteristics

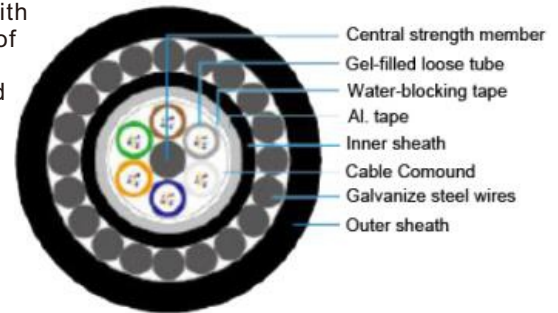
Tension(Long Term)	400N
Tension(Short Term)	1000N
Crush(Long Term)	300N/10cm
Crush(Short Term)	1000N/10cm
Min. Bend Radius(Dynamic)	20D mm
Min. Bend Radius(Static)	10D mm
Installation Temperature	-20 to +60 °C
Operating Temperature	-40 to +70 °C
Storage Temperature	-40 to +70 °C



Fiber Cable

Loose Tube Steel Wire Armored Cable

The fibers are positioned in a loose tube made of PBT. The tubes are filled with a water resistant filling compound. A steel wire or FRP locates in the center of core as a strength member. Tubes (and fillers) are stranded around the strength member into a compact and circular cable core. A swelling tape and aluminum polyethylene laminate (PAP) are applied around the cable core. Then the cable core is covered with a thin PE inner sheath. After the single-steel wire armored, the cable is finally completed with a PE outer sheath.



Installation Method

Direct Buried, Duct, Underwater

Characteristics

- Excellent mechanical and temperature performance
- The steel wires armoring make the cable to have the bigger tensile strength
- AL tape longitudinal cover cable core as moisture barrier
- Cable total cross-section water or salt water blocking
- Outer sheath protects cable from ultraviolet radiation
- Optional flame retardance outer sheath
- Max installed and under 250m water depth



Applications

River and lake crossing, coastal, rodent protection

Standards

YD/T901 / IEC 60794-3-30

Temperature Range		
Transportation	Installation	In Use
-40 to +70 °C	-5 to +50 °C	-40 to +70 °C

Air-blowing Cable with 250um fibers

Fiber Count	Outer Diameter	Mass	Min Bend Radius		Tensile Strength		Crush Resistance		Filler Number
			Dynamic	Static	Short Term	Long Term	Short Term	Long Term	
TubexFiber	mm	Kg/km	mm	mm	N	N	N/10cm	N/10cm	
12(2x6)	15.7	407	25D	13D	10000	4000	5000	3000	4
24 (4x6)	15.7	405	25D	13D	10000	4000	5000	3000	2
36 (6x6)	15.7	405	25D	13D	10000	4000	5000	3000	0
48 (4x12)	16.1	450	25D	13D	10000	4000	5000	3000	2
60(5x12)	16.1	450	25D	13D	10000	4000	5000	3000	1
72 (6x12)	16.1	450	25D	13D	10000	4000	5000	3000	0
84(7x12)	16.8	500	25D	13D	10000	4000	5000	3000	0
96(8x12)	17.5	565	25D	13D	10000	4000	5000	3000	0
108(9x12)	18.1	580	25D	13D	10000	4000	5000	3000	0
120(10x12)	19	645	25D	13D	10000	4000	5000	3000	0
132(11x12)	19.9	710	25D	13D	10000	4000	5000	3000	0
144(12x12)	20.6	745	25D	13D	10000	4000	5000	3000	0

Fiber Cable

Central Tube Air Blowing Optical Fiber Cable (2 ~ 24 cores)

The fibres are positioned in a loose tube made of PBT. The tube is filled with a water-resistant filling compound and covered with a layer of aramid yarn, as strength member. The cable is completed with an outer sheath.

Installation Method

Duct, air blowing

Features

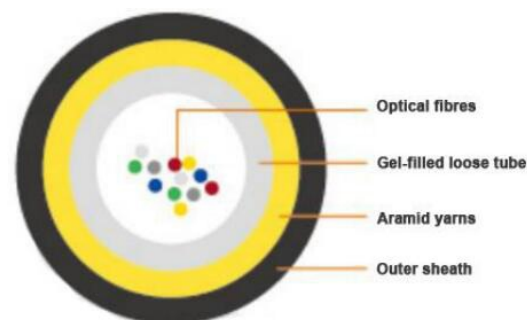
- Using centre tube design less than 24f to get more compact structure
- Small outer diameter, light weight, low friction sheath material - Accurate excess fibre length control to get stable cable performance
- Stable Temperature cycling performance by special process control
- High speed, long distance air blowing, efficient installation
- Optional LSZH outer sheathing, applicable for access to indoor
- Optional 200um mini optical fibre to get smaller outer diameter

Applications

FTTX, LAN communication

Standards

IEC60794-5; YD/T 1460.4; GB/T 7424.5



Temperature Range		
Transportation	Installation	In Use
-40 to +70 °C	-10 to +50 °C	-30 to +70 °C

Air-blowing Cable with 250um fibers

Fiber Count	Diameter	Mass	Min Bend Radius		Tensile Strength		Crush Resistance		Compatibility
			Dynamic	Static	Short Term	Long Term	Short Term	Long Term	Duct Dia.
	mm	Kg/km	mm	mm	N	N	N/10cm	N/10cm	mm
2~12	4.0	12	20D	10D	150	60	450	150	7.0/5.5
14~24	4.4	14	20D	10D	150	60	450	150	8.0/6.0

Air-blowing Cable with 200um fibers

Fiber Count	Diameter	Mass	Min Bend Radius		Tensile Strength		Crush Resistance		Compatibility
			Dynamic	Static	Short Term	Long Term	Short Term	Long Term	Duct Dia.
	mm	Kg/km	mm	mm	N	N	N/10cm	N/10cm	mm
2~12	3.5	10	20D	10D	150	60	450	150	7.0/5.5
14~24	4.4	12	20D	10D	150	60	450	150	7.0/5.0

Fiber Cable

Loose Tube Air Blowing Optical Fiber Cable (24 ~ 144 cores)

The fibres are positioned in a loose tube made of PBT. The tube is filled with a water-resistant filling compound. A fibre reinforce plastic locates in the center of core as a non-metallic strength member. The tubes (and the fillers) are stranded around the strength member into a compact and circular core. The cable is completed with a PE sheath.

Installation Method

Duct, air blowing

Features

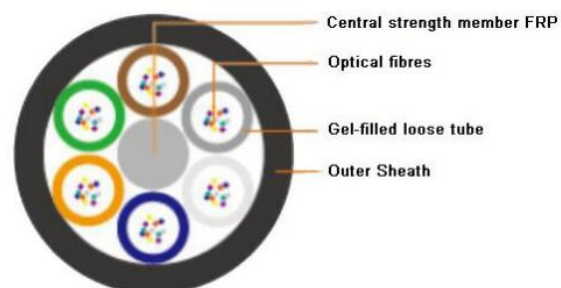
- Loose tube design, accurate excess fiber length control to get stable cable performance
- Semi-dry cable core design, environment friendly, easy for test and splice
- Small outer diameter, light weight, lower friction sheath material
- High speed, long distance air-blowing, efficient installation
- Bulk production, widely applied for European Telecom Network
- Optional 200um mini optical fibre to get smaller outer diameter

Applications

FTTX, LAN communication

Standards

IEC60794-5; YD/T 1460.4; GB/T 7424.5



Temperature Range		
Transportation	Installation	In Use
-40 to +70 °C	-10 to +50 °C	-40 to +70 °C

Air-blowing Cable with 250um fibers

Fiber Count	Outer Diameter	Mass	Min Bend Radius		Tensile Strength		Crush Resistance		Compatibility
			Dynamic	Static	Short Term	Long Term	Short Term	Long Term	
TubexFiber	mm	Kg/km	mm	mm	N	N	N/10cm	N/10cm	mm
24 (2x12)	5.7	23	20D	10D	500	150	450	150	10/8
36 (3x12)	5.7	23	20D	10D	500	150	450	150	10/8
48 (4x12)	5.7	23	20D	10D	500	150	450	150	10/8
60 (5x12)	5.7	24	20D	10D	500	150	450	150	10/8
72(6x12)	5.7	24	20D	10D	500	150	450	150	10/8
96 (8x12)	6.5	33	20D	10D	500	150	450	150	10/8
144(12x12)	8.5	55	20D	10D	1000	300	450	150	14/12
144(6x24)	7.9	42	20D	10D	1000	300	450	150	12/10

FTTH-OR19

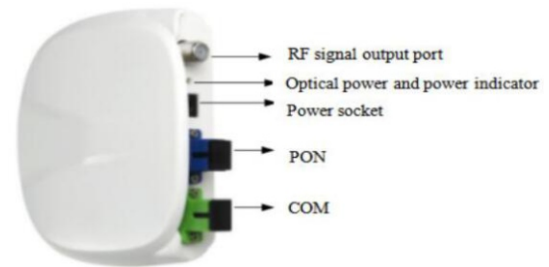
CATV Optical Receiver

The FTTH-OR19 optical receiver is a home optical receiver with optical fiber access as its ultimate goal. It is suitable for FTTH (Fiber to the Home) network optical fiber subscriber access terminals, enabling analog or digital signals to enter the home. The machine uses low-power photodetectors, GaAs and optical AGC technology to meet the fiber-to-the-home CATV reception needs. Among them OR19 is based on WDM as the main push product, and it is a home-based equipment tailored to realize triple play.

Features

- RF channel full GaAs low noise amplifier circuit. Digital signal can satisfy -18dBm reception, analog signal minimum meet -10dBm reception;
- With light input AGC (AGC range can be customized according to the user);
- Anti-high frequency surge device protection, GaAs amplification chip;
- Low-power design, using high-efficiency switching power supply to ensure high reliability and high stability of the power supply. The overall power consumption is less than 2W, with a light detection circuit;
- SC/APC, SC/UPC, metric or imperial RF interface (customizable according to customer requirements);
- Multi-stage lightning protection device (TVS transient suppression diode), lightning protection system is tight, to ensure the safe operation of the equipment;
- It can realize the power supply mode of output feed.

Note: Test conditions: 59 PAL-D analog TV channel signals in the 550 MHz frequency range and digital modulation signals in the 550 MHz to 862 MHz frequency range (8 MHz) under specified link loss conditions. Within the bandwidth, the carrier level of the analog signal is 10 dB lower, and the optical receiver input optical power is 0 dBm, measuring C/N, CTB, and CSO.



Model#	W/ WDM	Connector
FTTH-OR19-A	Yes	SC/APC
FTTH-OR19-B	Yes	SC/UPC
FTTH-OR19-C	No	SC/APC
FTTH-OR19-D	No	SC/UPC

Specifications

CATV Working wavelength	1200~1600nm&1550nm
Input optical power	0dBm~-10dBm(Analog signal) 0dBm~-18dBm(Digital signal)
Light reflection loss	>45 dB
Optical connector form	FC/APC or SC/APC or FC/PC or SC/PC
Frequency Range	40~862MHz
In-band flatness	±1dB@45~862MHz
RF output reflection	≥16dB@ 47~550MHz;≥14dB@550~862MHz
Output level	(78~80)dBuV(AGC:@-9~+0dBm Pin=0dBm)
RF output impedance	75Ω
AGC range	(0~-9)dBm(default)/(-3~-12)dBm/(-6~-15)dBm
Carrier to noise ratio	≥51dB
CTB	≥65dB
CSO	≥62dB
Host voltage	DC5V
Infeed voltage	DC5V
Adapter voltage	AC90V~145V or AC145V~265V
Power consumption	<2W
Operating temperature	-20°C~+45°C
Package Size	315*242*110mm(10pcs)
FCL product weight	1.78kg(10pcs)

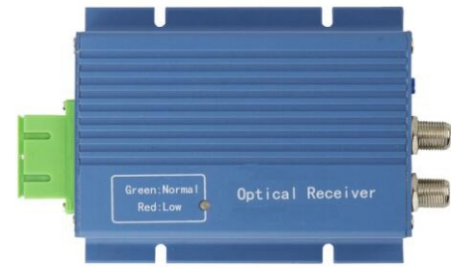
FTTH-OR20

CATV Optical Receiver

The FTTH-OR20 optical receiver is home optical receiver with optical fiber access as its ultimate goal. It is suitable for FTTH (fibre to the home) network fiber subscriber access terminals, enabling analog or digital signals to enter the home. The machine uses low-power photodetectors, GaAs and optical AGC technology to meet the fiber-to-the-home CATV reception needs. This device can increase WDM and achieve triple play.

Features

- High quality aluminum profile shell with good heat dissipation.
- RF channel full GaAs low noise amplifier circuit. The digital signal satisfies -18dBm reception at a minimum, and the -10dBm reception of an analog signal at a minimum.
- With light input AGC (AGC range can be customized according to user).
- Low-power design, using high-efficiency switching power supply to ensure high reliability and high stability of the power supply. The overall power consumption is less than 1W, with a light detection circuit.
- Multi-stage lightning protection devices (TVS transient suppression diodes), and lightning protection systems are tight to ensure safe operation of the equipment.
- Built-in WDM can realize single-fiber home (1490/1310/1550nm) tri-network convergence applications.
- Built-in optical isolator, input to achieve 1490/1310nm isolation.
- The output gain is manually adjustable (0~18dB) and the output level is >80dBuV.
- SC/APC or FC/APC or custom optical connectors, metric or imperial RF interfaces.
- It can realize the power supply mode of output feed.
- Can realize single or dual output



Model#	W/ WDM	Connector
FTTH-OR20-A	Yes	SC/APC
FTTH-OR20-B	Yes	SC/UPC
FTTH-OR20-C	No	SC/APC
FTTH-OR20-D	No	SC/UPC

Specifications

Gain adjustment range	0-18dB
Input optical power	0dBm~-10dBm(Analog signal) 0dBm~-18dBm(Digital signal)
Light reflection loss	>45 dB
Optical connector form	FC/APC or SC/APC or FC/PC or SC/PC
Frequency Range	45~1006MHz
In-band flatness	±1dB@45~1006MHz
RF output reflection	≥16dB@ 47~550MHz;≥14dB@550~1006MHz
Output level	(78~80)dBuV(AGC:@-9~+0dBm Pin=0dBm)
RF output impedance	75Ω
AGC range	(0~-9)dBm(default)
Carrier to noise ratio	≥51dB
CTB	≥65dB
CSO	≥62dB
Host voltage	DC5V
Infeed voltage	DC5V
Adapter voltage	AC90V ~145V&AC145V ~ 265V or custom
Power consumption	<1W
Operating temperature	-20°C~+55°C
Package Size	313×245×83mm(10pcs)
FCL package size (100pcs)	500×440×345mm

FF-DT1310NM/DT1550NM

CATV Optical Direct Transmitter

Features 1310/1550nm optical transmitter is designed according to the telecommunication standard, converting the CATV rf amplitude signal into 1310/1550nm optical signal then through single mode optical fiber to the optical node in HFC network, mainly used for TV signal, digital TV signal, telephone voice signal and data signal long distance transmission.

Features

- 1U rack, stainless steel housing with excellent heat dissipation and appearance. The bandwidth is 47-862MHz.
- Adopt world top brand laser with wide bandwidth and high output power.
- Built in microcomputer automatic monitoring circuit, realtime monitoring the optical output power and laser working state. To ensure the stable output power and expand the laser lifespan.
- Advanced multi-frequency RF pre-distortion technology, RF GaAs devices and complete SMT structure effectively improve the C/N, CTB and CSO parameters in the CATV system.
- RF driving circuit adopts the RF power digital automatic processing technology according to RF input signal level and the input channels number, automatically handles the driving level, in order to keep the C / CTB, C / CSO and C / N parameters always in the best status.
- Laser automatic temperature stabilization circuit (ATC) and optical power output stabilization circuit (APC), ensure the laser working with optimal performance.
- RF output power detector and the RF relay shutdown function effectively prevent the damage of the laser when the signal is too high. AGC / MGC working mode for optional.
- The front panel has working status indicators and the back panel has RF test port.
- The working parameters and fault information can be displayed through centralized monitoring unit on the LCD screen, also can monitor through RJ45 network interface



Model#	Power Level
FF-DT1310NM-02	2mW
FF-DT1310NM-04	4mW
FF-DT1310NM-06	6mW
FF-DT1310NM-08	8mW
FF-DT1310NM-10	10mW
FF-DT1310NM-12	12mW
FF-DT1310NM-14	14mW
FF-DT1310NM-16	16mW
FF-DT1310NM-18	18mW
FF-DT1310NM-20	20mW
FF-DT1310NM-22	22mW
FF-DT1310NM-24	24mW
FF-DT1310NM-26	26mW
FF-DT1310NM-28	28mW
FF-DT1310NM-30	30mW

Specifications

Model	FF-DT1310NM	FF-DT1550NM
Output Power (mW)	2mW-30mW	3mW-10mW
Wavelength(nm)	1310±10	1550±10
Optical Port Number	1	
Laser	DFB Laser	
Light Modulation	Direct light intensity modulation	
Optical Connector	FC/APC or SC/APC	
Bandwidth (MHZ)	47 ~ 862MHz	
RF Input Level (dBμV)	80dBμV ±5	
Flatness (dB)	±0.75	
Monitoring Port Level (dBμV)	-10 (Input)	
Inputs isolation (dB)	≥50 (Local port to broadcast port)	
AGC Accuracy (dB)	0.25	
MGC Adjustment Range (dB)	0 to 15	
RF Input Impedance (Ω)	75	
Input Return Loss (dB)	≥16	
C/CTB (dB)	≥65	
C/CSO (dB)	≥60	
CNR(C/N) (dB)	≥51	

Model#	Power	Max. Distance
DT1550NM-03A	3dBm	15km
DT1550NM-03B	3dBm	25km
DT1550NM-05A	5dBm	15km
DT1550NM-05B	5dBm	25km
DT1550NM-07A	7dBm	15km
DT1550NM-07B	7dBm	25km
DT1550NM-09B	9dBm	25km
DT1550NM-09C	9dBm	35km
DT1550NM-10B	10dBm	25km
DT1550NM-10C	10dBm	35km

FF-ET1550NM

CATV Optical External Transmitter

The FF-ET1550NM series External Transmitters are widely used in large and medium-sized CATV and distribution network, WDM systems and security monitoring systems. Depending on the modulator performance, the transmission distance is slightly different.

The FF-ET1550NM series External Transmitters adopt JDSU/OCLARO modulator, and SBS value can be controlled at 13-19dBm. So it is suitable for long-distance transmission from point to point. It is also be used for signal coverage of distribution network (with high SBS threshold, the device has a maximum of 19dBm laser When the power is pushed to the optical fiber transmission network to maintain good signal quality).

Features

- 1) 32-bit ARM processor, with monitoring circuit for real-time accurate monitoring of optical output power level and laser performance .
- 2) Microwave source controlled by CPU programming, the frequency and signal amplitude are dynamically adjustable, and microwave signals of arbitrary frequency and amplitude can be generated with less harmonics. The SBS threshold range is 13-16dBm.
- 3) The external modulation technology has no flaw effect, very low dispersion distortion, and has good characteristics in the band. The working bandwidth is 47~1000MHz.
- 4) RF signal digital pre-distortion system, which can accurately match the pre-distortion amount according to signal strength and modulation amplitude to ensure signal quality.
- 5) Narrow linewidth (1MHz), low noise, DFB continuous wave laser, LiNbO₃ external modulator for signal modulation, to ensure that the system COS performance indicators are excellent, increase the optical fiber power and increase the transmission distance.
- 6) RF gain can be selected in AGC/MGC mode, and the OMI±7dB range is adjustable.
- 7) 19-inch 1U height standard rack, blue and white 144*32 dot matrix LCD display embedded in the front panel, which can accurately display various working parameters and fault information of the equipment, and is equipped with a national standard class II transponder, which can be realized through the network.

Specifications

Wavelength	1550nm
Transmission distance	75km(Analogy) 100km(Digital)
Line Width	≤ 1MHz
Equivalent Noise Intensity	≤ 160dB/Hz
Side Mode Suppression	≥ 45
Optical Output Power	3 to 10 dBm
Optical Connector	FC/APC or SC/APC Optional
RF AGC Range	10dB
Bandwidth	47 - 1000MHz
Flatness	≤ 0.75
RF Input level	78~90dBuV
RF Input Impedance	75Ω
Input Return Loss	≥ 16dB
CNR	≥ 53dB
CTB	≥ 65dB
CSO	≥ 65dB
SBS Restrain	13~18dBm continuous
SNMP	Rj45
Input Voltage Working	AC110V/AC220V/DC48 Optional



Model#	Port No. * Power Level
FF-ET1550NM-S3	1*3dBm
FF-ET1550NM-S5	1*5dBm
FF-ET1550NM-S7	1*7dBm
FF-ET1550NM-S9	1*9dBm
FF-ET1550NM-D5	2*5dBm
FF-ET1550NM-D6	2*6dBm
FF-ET1550NM-D7	2*7dBm
FF-ET1550NM-D9	2*9dBm
FF-ET1550NM-D10	2*10dBm

1/2/3U EYDFA

1550nm EYDFA Amplifier

1550nm EYDFA Amplifier EYDFA high power multi-ports optical amplifier with gain spectrum band within 1540~1563nm, which is mainly designed for the application of CATV and also offers a flexible and low-cost solution for CATV large area coverage of large and medium-sized cities. standard class II transponder, which can be realized through the network.

Features

1. Light output control optional, suitable for a variety of applications
2. Multi chip 32 bit RAM processor, control output precision $\pm 0.5\text{dBm}$
3. The former adopts EDFA low noise, the output stage with high power EYDFA, -10~+10dBm input range, with extremely low noise figure, the use of bipolar amplification in the input optical power of $P_{in}=0\text{dBm}$, noise coefficient $\text{Typ} = 4.5\text{dB}$, $\text{Max} = 5.0\text{dB}$
4. The built-in light detection function, to avoid damage the jumper head
5. If the input light is lost, the high power pump laser will turn off automatically, laser safety protection
6. Remote control of the output power room, SNMP network management protocol, remote control of various parameters can be achieved
7. Telecommunication level, modular product design concept
8. Dual power supply, CPU control, power allocation output

Specifications

Work Wavelength	1540 ~ 1563nm
Input Optical Power Range	-10dBm ~ +10dBm (+3dBm in default)
Output Optical Power Range	27 ~ 43dBm(in sum)
Output Port	8/16/32/64/128/256
Output Optical Power Range	10 ~ 24dBm (each port)
Optical Connector	SC/APC or LC/APC
Output Power Detection	-20dB
Adjustable Power Range	-6 ~ 0dBm
Noise Index ($P_{in}=0\text{dBm}$)	4.5 ~ 6.0dB
Polarization Loss	0.3dB
Polarization Gain	0.4dB
Polarization Dispersion	0.3dB
Input/Output Isolation	30dB
Pump Leakage Power	-30dB
Return Loss	55dB
SNMP Interface	Rj45
Console Port	Rs232
Power Supply Voltage	AC110V/AC220V/CD48V

Options

- WDM
- Optical Switch
- SC/LC Connector

Packing Size

595*490*120mm
640*640*200mm
665*650*275mm

Model#	Power(sum)	Ports*Power
3U-EYDFA-38E	38dB	64*17dBm
3U-EYDFA-38F	38dB	128*13dBm
3U-EYDFA-40E	40dB	64*19dBm
3U-EYDFA-40F	40dB	128*15dBm
3U-EYDFA-41E	41dB	64*20dBm
3U-EYDFA-41F	41dB	128*16dBm
3U-EYDFA-43E	43dB	64*22dBm
3U-EYDFA-43F	43dB	128*18dBm



Model#	Power(sum)	Ports*Power
1U-EYDFA-24A	24dB	4*17dBm
1U-EYDFA-25A	25dB	4*18dBm
1U-EYDFA-26A	26dB	4*19dBm
1U-EYDFA-28A	28dB	4*21dBm
1U-EYDFA-28B	28dB	8*17dBm
1U-EYDFA-29A	29dB	4*22dBm
1U-EYDFA-29B	29dB	8*18dBm
1U-EYDFA-30A	30dB	4*23dBm
1U-EYDFA-30B	30dB	8*19dBm
1U-EYDFA-30C	30dB	16*16dBm
1U-EYDFA-31A	31dB	4*24dBm
1U-EYDFA-31B	31dB	8*20dBm
1U-EYDFA-31C	31dB	16*17dBm
1U-EYDFA-32B	32dB	8*21dBm
1U-EYDFA-32C	32dB	16*18dBm
1U-EYDFA-33B	33dB	8*22dBm
1U-EYDFA-33C	33dB	16*19dBm
1U-EYDFA-35B	35dB	8*24dBm
1U-EYDFA-35C	35dB	16*21dBm
1U-EYDFA-37C	37dB	16*23dBm

Model#	Power(sum)	Ports*Power
2U-EYDFA-31D	31dB	32*14dBm
2U-EYDFA-33D	33dB	32*16dBm
2U-EYDFA-34D	34dB	32*17dBm
2U-EYDFA-34E	34dB	64*13dBm
2U-EYDFA-36D	36dB	32*19dBm
2U-EYDFA-36E	36dB	64*15dBm
2U-EYDFA-37D	37dB	32*20dBm
2U-EYDFA-37E	37dB	64*16dBm
2U-EYDFA-38E	38dB	64*17dBm

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