Fusion Splicer------FSM-02B

FSM-02B splicer is an economic and competitive fusion splicer machine for optical network engineering. It has compact, simple and slim body, multiple foreign languages menu, handheld power in the machine. It is convenient and easy to operate indoor and field.

FSM-02B With smart appearance, reliable quality, Fusion Splicer is a special design for the installation, operation and maintenance of optical fiber specially design a precision, durable, convenient optical fiber construction instrument.

Features

Compact & Light weight

Fully Automatic Operation

5000m altitude ensures Splice Quality

SYSTEM TEST ensures the best working condition

Color LCD monitor

Pause function, convenient for scientific research

Store 8000 groups of splice results

USB&DC interface

High battery capacity, up to 260 times of continuous splice and heat

Specifications

Model	FSM-02B Fusion Splicer
Applicable fibers	SM, MM, DS, NZDS, G655, G657 and others
Fiber Diameter	Cladding Diameter: 80-C150 um; oating Diameter: 100~1000 um
Splicing Loss	0.01dB(MM) 0.02dB(SM) 0.05dB(DS/NZDS/G655/G657)
Return Loss	60dB
Tension test	2.0N
Protection sleeve length	25*40*50mm
Tube-heat Time	30S
Splicing program	Automatic Setting
Language	Chinese, English
Alignment	Core Alignment(PAS Technology)
Splicing method	Arc splicing
Fiber Holder	Replaceable and Suitable for the Splice of bare fiber, pigtail, patch cord, optical fiber drop cable and SC, FC, LC connector
Display	Color 4.3 Inch TFT
Interface	USB, suitable for data download and software update
Splice Memory	10000
Electrode Span	At least 5000 times
Operating Temp	-18℃~+50℃
Storage Temp	-40℃~+80℃
Window Protection	Max. wind velocity of 15m/s
Power Supply	Internal Li-Battery, DC adaptor
DC output	12V/2A Power for external heater, light or hot jacket stripper
Battery Capacity	More than 260 times of continuous splices and heats
Dimension	122*122*130mm

No	Name	Qty
1	Fusion Splicer	1 set
2	Stripper for Drop cable	1 pc
3	Electrode	1 pc
4	Manual	1 pc
5	Carry Case	1 pc
6	Cooling Tray	1 pc
7	Fiber Cleaver	1 pc
8	Head	1 pc
9	SOC holder （Optional）	1 pc

Packing :

Package size	1PC/CTN/0.039CBM
Package material	Standard carton for sea shipping or air express
Weight	6.5kgs

Fusion Splicer------FSM-03B

FSM-03B splicer is an economic and competitive fusion splicer machine for optical network engineering. It has compact, simple and slim body, multiple foreign languages menu, handheld power in the machine. It is convenient and easy to operate indoor and field.

FSM-03B With smart appearance, reliable quality, Fusion Splicer is a special design for the installation, operation and maintenance of optical fiber specially design a precision, durable, convenient optical fiber construction instrument.

Features

fiber-touch recognition,auto heat

pish-pull type fiber holder,more applicable

pluggable battery,dual mode power supply,therr mode charging

colorful breathing lights,different lights show different splice states

Specifications

Applicable Fibers	SMF(G.652)、MMF(G.651) 、DSF(G.653) 、NZDSF(G.655)、BIF(G.657）
Core Quantity	Single
Typical Splice Loss	0.02dB(SMF)、0.01dB(MMF)、0.04dB(DSF)、0.04dB(NZDSF)、0.02dB(BIF)
Return Loss	≥60dB
Tension Test	2.0N（200gf）Standard
Material of Fiber Core	Quartz Fiber
Fiber Diameter	Cladding Diameter: 80-150 μm; Coating Diameter: 100 μm~3mm
Cleaved Length	8~16mm
Lighting	Available
Estimated Splice Loss	Available
Splicing Time	8 sec
Tube-heat Time	20 sec
Fiber View & Magnification	X, Y, X/Y; 300X Magnification
Alignment	Core-Alignment, Cladding-Alignment, Auto
Electrode Life	5000 arcs, can be extended by using an electrode grinder
Protection Sleeve Length	20-60 mm, and other special sleeves
Splicing Program	6 modes factory preset, 74 user-defined
Heating Program	6 modes factory preset, 14 user-defined
Auto Heat	Yes
Data Storage	8000 results, 200 splice images
Language	Chinese, English,French,Korean,Russia,Spanish......
Operating Environment	Temperature：-25～＋50℃； Humidity: 0～95%RH: Altitude: 0～5000m；Wind Protection：Max. wind velocity of 15m/s
Storage Temp	Temperature：-40～+80℃；Humidity: 0～95%RH
Power Supply	AC Adapter: Input Voltage:85～260V, 50/60Hz Battery: Voltage:12V, Capacity:6.5Ah
Battery Power	260 times splicing and heating
Data Management	Can upload the result and screenshot to PC
Display	4.3 color LCD
Dimension/Weight	152（D）×142（W）×145（H）mm 1.57kg/1.98kg(with battery)

Applicable Fiber

Bare fiber to bare fiber

Pigtail to drop cable

Pigtail to bare fiber

Drop cable to drop cable

Standard Package

| Main body | Fiber Cleaver | Fiber Stripper | Drop Cable Stripper | Battery | Charger | Spare Electrodes | Cooling Tray | Carrying Case |

Fusion Splicer--------FSM-02D

Obtaining 16 patens of invention and 58 technical innovations, a brand-new product—FSM-02D Optical Fiber Fusion Splicer is launched, thanks to 5 years of painstaking research of 28 engineers.FSM-02D implements industrial-grade CPU+FPGA structure of high-performance, completely fresh HD optical fiber microscope, imported high-speed motor and aluminum-magnesium alloy materials extensively. Compared with 02D, our start product, FSM-02D lowers the size by 38%, the weight by 52%, the power consumption by 57%, but improves the speed by 60%, the environment adaptability by 80% and the reliability (MTBF) by 200%. You can get unprecedented fusion splicing experience.

Features

* Precise cladding alignment, ultra-low fiber fusion splicing consumption 7s fast fusion splicing
* 18s highly efficient heating
* 320 times image magnification
*5mm fusion splicing for fibers of ultra-short cutting length
*300 groups of fusion splicing modes
* 100 groups of heating modes
* 10000 groups of fusion records
* 64 images storage Ceramic presser foot
* Dual-direction splicing, automatic splicing, intelligent pyrocondensation
USB and SD card interfaces, U-disk automatic software upgrade
* Three Splicing modes: auto, half-auto, manual
* Built-in modular lithium battery, supports 220 times of splicing and heating cycles.

Technical Specifications

Optical Specifications	FSM-02D
Fiber heater	Effective heating length: ≤60mm Heating time: 10s～255s, settable as required. Typical heating time: ≤25s(standard 40mm sleeve)，≤28s(standard 60mm sleeve).
Power supply	External DC power input Input voltage is 13.5±0.5V; input current≥4.4A; socket center is positive. Built-in lithium-ion battery for power supply. The lithium-ion battery is 11.1V, ≥5.2Ah, full charging time is approx. 2.5h.
Dimensions and weight	Dimensions: W×H×D=120mm×130mm×154mm(without vibration-free rubber pad) Weight: approx.1.95kg(with the lithium-ion battery), approx.1.75kg(without the lithium-ion battery).
	Operating temperature: -10℃～+50℃

Environmental conditions	Temperature limit: -20℃～+55℃
	Operating humidity: 95%RH and below(non-condensing)
	Max. wind speed: 15m/s
	Storage temperature: -40℃～+80℃,
	Storage humidity: 95%RH and below (non-condensing).
Splice loss	Typical loss values of spliced points are:
	Single-mode fiber: 0.03dB
	Multi-mode fiber: 0.01dB
	Dispersion shifted fiber: 0.04dB
	Non-zero dispersion shifted fiber: 0.04dB
	Typical splice time: 7s(FAST mode, typical)
	Monitor: with touch screen function, 4.3 inch TFT color LCD
	USB port: system update and data transmission
	Real-time display of remaining battery capacity
	Built-in lighting with high brightness, for convenient loading of fibers

Standard Configuration:

Instrument (Main Body), Fiber Cleaver, Fiber Coat Stripper, Internal Battery, Charger, AC Power Cord, 2G USB Flash Disk, Spare Electrodes (one pair), Cooling Tray, Alcohol Pump Bottle, Carrying Case, Carrying Belt, User's Manual.

Fusion Splicer------FSM-03D

The machine adopts high-speed image processing technology and special precision positioning technology, which can make the whole process of fiber fusion automatically complete within 9 seconds. The large screen LCD display makes the various stages of fiber fusion clear. It is small in shape, light in weight, suitable for field work, and it is simple in operation, fast in melting, and small in melting loss. It is particularly suitable for optical fiber cable engineering and maintenance in the fields of telecommunications, radio and television, railways, petrochemicals, electricity, military forces, and public security, as well as the teaching and research of scientific research institutes.

Features

* Fiber alignment: core or cladding alignment
* Image processing: digital processing
* Multilingual interface
* Real-time monitoring of power supply
* 5 inch digital high-quality LCD screen
* Built-in lighting(easy to place fiber optics)

Specifications

Model	Fsm-03D
Splicing Type	SM, MM, DS, NZDS
Splicing Loss	0.02dB(SM)，0.01dB(MM)，0.04dB(DS)，
Return Loss	>60dB
Splicing Mode	Manual, Half Auto, Auto
Fiber Alignment	Core to Core Alignment by PAS technology
Applicable Fiber	Cable indoor and 0.25mm,0.9mm fiber, SC connector(option)
Splicing Time	≤9s
Heat Time	≤30s
Cleaved Length	8～16mm
Fiber Image/ Magnification	300/200 times
View Display	5 inch digital high-quality LCD screen
Tension Test	Standard 2N (option)
Heat Shrinkable Sleeve	60mm, 40mm and serials heat Shrinkable Sleeve
Battery Capacity	200 cycles splicing and heating, 3 hours charging time (splicing and charging at same time)
Battery Life	Cycling charge 300-500 times, easy to replace battery
Electrodes Life	3000, easy to replace electrodes
Power Source	≤20W
Interface	USB Convenient data download and software update
Construction Lighting	Built in high brightness, wide range of lights, easy to operate at night
Power supply	Built in lithium battery 5200mAh 11.1V; external adapter, input: AC100-240V, output: DC13.5V/4.5A
Operating Condition	0-5000m above sea level, Temperature: -10-60℃, Humidity:0～95%RH (No dew)
Weight (including battery)	2.1 KG (including battery)
Dimension (LxWxH)	135mm(L)×158mm(W)×155mm(H)

No	Name	Qty
1	Fusion Splice	1 set
2	Fiber Cleaver	1 set
3	Fiber Stripper	1 pc
4	AC Adaptor	1 pc
5	Power cord	1 pc
6	Li Battery	1 pc
7	Charger	1 pair
8	Cooling tray	1 pc
9	Spare Electrodes	2 pair
10	User Manual CD	1 pc

Fusion Splicer--------FSM-04D

◆ Core to core alignment by PAS technology
   (PAS: Profile Alignment System)
◆ Fiber core can be display clearly
◆ Single X or Y view and X & Y view simultaneously
◆ Auto check & display quality of cleaved end face
◆ 3.5inch color LCD monitor
   USB interface
◆ Software upgrade via US interface
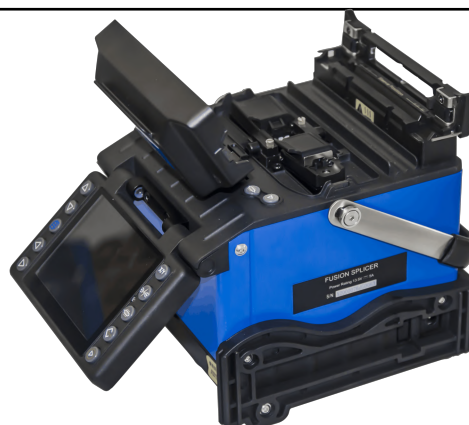
Specifications

Applicable fibers	SM　MM　DS　NZDS
Fiber diameter	Cladding diameter:80-150μm; Coating diameter:100-1000μm
Fiber count	Single
Fiber cleaved length	8-16mm (Coating diameter:250μm)
Actual average splice loss	0.02dB(SM), 0.01dB(MM), 0.04dB(DS), 0.04dB(NZDS)
Typical splicing time	Typical 9 sec (standard SM fiber)
Return loss	＞60dB
Splicing mode	Auto Calibrate Normal Special
Fiber aligning method	Meticulous、Core、Clad、Manual
Splicing program	53 (factory mode), 100(user mode)
Tube heating program	9 (factory mode), 40(user mode)
Tube typical heating time	Typical 16～25 sec
Protection sleeve length	60mm, 40mm
Storage of splice result	10000 results,　24parameter per result , 100 set of images
Fiber image magnification	120X (X or Y view)，60X　(X and Y view)
Battery capacity	Typical 300 cycles　(splice/tube heat with inner Li-battery)
Monitor	3.5 inch color LCD monitor
Tension test	2N
Electrode life	2500
Terminal	USB
Power supply	AC 100-240V with AC adapter DC13.5V　Inner Li-battery (5200mAH)
Operating condition	0-5000m above sea level, -10-50℃　Max wind velocity of 15m/s
Dimension	122mm(L)×148mm(W)×130mm(H)
Weight	1.4Kg excluding battery　　1.7Kg including battery

Standard Configuration

Fiber Cleaver　　Fiber Stripper　　Case　　Spare Electrodes　　Cleaning Tools　　P.S. Cord　　USB Line

OTDR-----3302F

3302F series Optical Time Domain Reflectometer (OTDR) is an intelligent meter of a new generation for the detection of fiber communications systems. With the popularization of optical network construction in cities and countrysides, the measurement of optical network becomes short and disperse; 3302F is specially designed for that kind of application. It's economic, having outstanding performance.

3302F is manufactured with patience and carefulness, following the national standards to combine the rich experience and modern technology, subject to stringent mechanical, electronic and optical testing and quality assurance; in the other way, the new design makes 3302F smarter. Whether you want to detect link layer in the construction and installation of optical network or proceed efficient maintenance and trouble-shooting, 3302F can be your best assistant.

FEATURES

* Integrated design, smart and rugged
* IP65 protection level, outdoor enhanced
* 7-inch anti-reflection LCD screen
* PON online test module (1625nm) is optional
* Support multi-language display and input

APPLICATIONS

* FTTX test with PON networks
* CATV network testing
* Access network testing
* LAN network testing
* Metro network testing

Specification

Dimension	253×168×73.6mm 1.5kg (battery included)
Display	7 inch TFT-LCD with LED backlight (touch screen function is optional)
Interface	1×RJ45 port, 3×USB port (USB 2.0, Type A USB×2, Type B USB×1)
Power Supply	10V(dc), 100V(ac) to 240V(ac), 50~60Hz
Battery	7.4V(dc)/4.4Ah lithium battery (with air traffic certification) Operating time: 12 hours, Telcordia GR-196-CORE Charging time: <4 hours (power off)
Power Saving	Backlight off: Disable/1 to 99 minutes Auto shutdown: Disable/1 to 99 minutes
Data Storage	Internal memory: 4GB (about 40,000 groups of curves)
Language	User selectable (English, Simplified Chinese, traditional Chinese, French, Korean, Russian, Spanish and Portuguese-contact us for availability of others)
Environmental Conditions	Operating temperature and humidity: -10℃~+50℃, ≤95% (non-condensation) Storage temperature and humidity: -20℃~+75℃, ≤95% (non-condensation) Proof: IP65 (IEC60529)
Accessories	Standard: Main unit, power adapter, Lithium battery, FC adapter, USB cord, User guide, CD disk, carrying case Optional: SC/ST/LC adapter, Bare fiber adapter

Type	Testing Wavelength (MM: ±20nm, SM: ±10nm)	Dynamic Range (dB)	Event Dead-zone (m)	Attenuation Dead-zone (m)
3302F-S1	1310/1550	32/30	1	8/8
3302F-S2	1310/1550	37/35	1	8/8
3302F-S3	1310/1550	42/40	0.8	8/8
3302F-S4	1310/1550	45/42	0.8	8/8
3302F-T1	1310/1490/1550	30/28/28	1.5	8/8/8
3302F-T2	1310/1550/1625	30/28/28	1.5	8/8/8
3302F-T3	1310/1490/1550	37/36/36	0.8	8/8/8
3302F-T4	1310/1550/1625	37/36/36	0.8	8/8/8

Test parameter

Pulse Width	Single mode: 5ns, 10ns, 20ns, 50ns, 100ns, 200ns, 500ns, 1μs, 2μs, 5μs, 10μs, 20μs
Testing Distance	Single mode: 100m, 500m, 2km, 5km, 10km, 20km, 40km, 80km, 120km, 160km, 240km
Sampling Resolution	Minimum 5cm
Sampling Point	Maximum 128,000 points
Linearity	≤0.05dB/dB
scale Indication	X axis: 4m~70m/div, Y axis: Minimum 0.09dB/div
Distance Resolution	0.01m
Distance Accuracy	±(1m+measuring distance×3×10-5+sampling resolution) (excluding IOR uncertainty)
Reflectance Accuracy	Single mode: ±2dB, multi-mode: ±4dB
IOR Setting	1.4000~1.7000, 0.0001 step
Units	Km, miles, feet
OTDR Trace Format	Telcordia universal, SOR, issue 2 (SR-4731) OTDR: User selectable automatic or manual set-up
Testing Modes	Visual fault locator: Visible red light for fiber identification and troubleshooting Light source: Stabilized Light Source (CW, 270Hz, 1kHz, 2kHz output) Field microscope probe
Fiber Event Analysis	-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)
Other Functions	Real time sweep: 1Hz Averaging modes: Timed (1 to 3600 sec.) Live Fiber detect: Verifies presence communication light in optical fiber Trace overlay and comparison

VFL Module (Visual Fault Locator, as standard function):

Wavelength (±20nm)	650nm
Power	10mw,CLASSIII B
Range	12km
Connector	FC/UPC
Launching Mode	CW/2Hz

PM Module (Power Meter, as optional function):

Wavelength Range (±20nm)	800~1700nm
Calibrated Wavelength	850/1300/1310/1490/1550/1625/1650nm
Test Range	Type A: -65~+5dBm (standard); Type B: -40~+23dBm (optional)
Resolution	0.01dB
Accuracy	±0.35dB±1nW
Modulation Identification	270/1k/2kHz,Pinput≥-40dBm
Connector	FC/UPC

LS Module (Laser Source, as optional function):

Working Wavelength (±20nm)	1310/1550/1625nm
Output Power	Adjustable -25~0dBm
Accuracy	±0.5dB
Connector	FC/UPC

FM Module (Fiber Microscope, as optional function):

Magnification	400X
Resolution	1.0μm
View of Field	0.40×0.31mm
Storage/working Condition	-18℃~35℃
Dimension	235×95×30mm
Sensor	1/3 inch 2 million of pixel
Weight	150g
USB	1.1/2.0
Adapter	SC-PC-F (For SC/PC adapter) FC-PC-F (For FC/PC adapter) LC-PC-F (For LC/PC adapter) 2.5PC-M (For 2.5mm connector, SC/PC, FC/PC, ST/PC)

OTDR-----3302XR

Product Overview

OTDR can used to test single-mode wavelengths of 1310nm, 1550nm, 1490nm, 1625nm and 1650nm, multi-mode wavelengths of 850nm and 1300nm as well as customized special wavelengths. It provides multiple optional modules, such as single wavelength, multi-wavelength and online test. With the maximum dynamic range of up to 50dB, the device can be used for remote multi-branch communication network test. It's designed with a minimum event dead zone of 0.5m which makes the near connection easy to be supervised, and the lowest sampling resolution of 2.5cm which enables it to locate the event point accurately. Additionally, the device is also designed with multiple convenient functional options, such as stable light source, optical power meter, visible red light source and fiber end face inspection tester.

* Main Characteristics
* Maximum dynamic range up to 50dB, and 256k data sampling points;
* Online test of PON network;
* Integrated mono-mode and multi-mode test;
* Automatic monitoring of optical communication signals;
* File formats of Bellcore GR196 and SR-4731 supported.

Maximum dynamic range	See the "**Technical specifications for each standard module of OTDR**" for more information.
Ranging accuracy	±(0.75 + sample interval + 0.0025% × range)(excluding the refractivity placement error) (m)
Ranging resolution	0.05, 0.1, 0.2, 0.5, 1, 2, 4, 8, 16 and 32m
Test range	0.4, 0.8, 1.6, 3.2, 6.4, 16, 32, 64, 128, 256 and 512km (mono-mode); 0.4, 0.8, 1.6, 3.2, 6.4, 16 and 32km (850nm multi-mode)
Testing PW	3, 5, 10, 30, 80, 160, 320, 640, 1280, 5120, 10240 and 20480ns 3, 5, 10, 30, 80, 160, 320, 640 and 1280ns(850nm multi-mode)
Maximum number of sampling points	256k
Linearity	0.03dB/dB
Loss resolution	0.001dB
Refractivity setting range	1.00000 ~ 1.99999(step: 0.00001)
Range unit	km, m, thousand feet, feet
Display	800×480, 7-inch TFT color LCD (a capacitive touch screen in the standard configuration, and a resistive touch screen optional)
Optical output interface	FC/UPC (standard configuration, with LC/UPC, SC/UPC and ST/UPC optional)
Interface language	Simplified Chinese, English, Russian and Korean available (contact the office for other language support)
External interfaces	USB, Micro-USB, 10M/100M Ethernet, earphone and Micro SD
Power supply	AC/DC adapter: AC100V~240V, 50/60Hz and 1.5A; DC: 17V±3V(2A) Internal Li battery: 11.1V, 6800mAh, battery operating time: 8h
Power consumption	10W
Dimensions	252mm(W)×180mm (H)×55mm (D)
Weight	About 1.8kg
Environmental	Operating temperature: -10℃~+50℃ (battery charging: 5℃~40℃)

adaptability	Storage temperature: -40℃~+70℃ (battery: -20℃~60℃)
	RH: 5% ~95%, no condensation

● **VFL (optional)**	● **Optical power meter (optional)**	● **Stable light source (optional)**
Operating wavelength: 650nm±20nm	Wavelength range: 1200nm~1650nm	Operating wavelength: the same as OTDR
Output power: 2mW (typical)	Power range: -60dBm~0dBm	Output power: ≥-5dBm
Operating mode: CW, 1Hz and 2Hz	Uncertainty: ±5%(-25dBm, CW)	Operating mode: CW, 270Hz, 1kHz and 2kHz

Module number	Operating wavelength	Laser wave length	Dynamic range[2] (dB)	Event dead zone[3] (m)	ATT dead zone[4] (m)
OTDR–1105	Mono-mode 1625nm (built-in filter)	Single	36	0.5	3
OTDR–1106	Mono-mode 1650nm (built-in filter)		36		
OTDR–1201	Multi-mode 850nm		24	0.7	5
OTDR–1202	Multi-mode 1300nm		36		
OTDR–2101	Mono-mode 1310/1550nm	Dual	37 / 35	0.5	3
OTDR–2102	Mono-mode 1310/1550nm		42 / 40		
OTDR–2103	Mono-mode 1310/1550nm		45 / 42		
OTDR–2105	Mono-mode 1550/1625nm (built-in filter)		36 / 36		
OTDR–2107	Mono-mode 1550 /1650nm (built-in filter)		36 / 36		
OTDR–2109	Mono-mode 1310/1550nm		50 / 50		
OTDR–2201	Multi-mode 850nm/1300nm		26/34	0.7	5
OTDR–3101	Mono-mode 1310/1490/1550nm	Three	37/35/35	0.5	3
OTDR–3102	Mono-mode 1310/1550/1625nm(built-in filter)		37/35/35		
OTDR–3103	Mono-mode 1310/1550/1625nm(built-in filter)		45/42/42		
OTDR–3104	Mono-mode 1310/1550 /1650 nm(built-in filter)		37/35/35		
OTDR–3105	Mono-mode 1310/1550/1650nm(built-in filter)		45/42/42		
OTDR–4101	Mono-mode 1310/1490/1550/1625nm(built-in filter)	Four	45/42/42/42	0.5	3
OTDR–4105	Mono-mode 1310/1490/1550/1650nm(built-in filter)		45/42/42/42		
OTDR-4001	Mono-mode 1310/1550nm, multi-mode 850/1300nm		40/38/26/34	0.7	5

OTDR-----FSM3302

FSM3302 handheld OTDR is a new generation of intelligent optical measuring instrument designed for the optical fiber communication system testing.This product is mainly used to measure the parameters of optical fibers and cables, such as length, loss, and connection quality, etc.; it can realize the accurate positioning of event points and fault points, and can be widely used in the construction, maintenance testing and emergency repair of the optical fiber communication systems as well as the research, production and production measurement of optical fibers and cables and so on.

This product can provide you with the highest performance of solutions for installation and construction of fiber optic network construction and the subsequent fast and efficient maintenance and troubleshooting testing.

Feature：

* Novel and beautiful appearance and structure design;
* Special protection design of shell, durable and able to work under bad environment;
* Simplest operating interface, shortcut key operation, easy to use;
* Dual operation of touch screen and keys;
* Short event blind zone, test 5 m fiber jumper easily; Have a multiple kinds of test modes such as automatic test, manual test
* and blind zone test, etc..
* Light detection and alarm are provided in the line, to avoid signal light from damage the instrument in the tested optical fiber;
* Built-in high-power visual red light fault positioning function;
* The USB interface functions can quickly realize the file transfer and report form preparation;
* The universal light output connector is easy to replace, which is able to realize e a variety of interface tests;
* Smart battery electric quantity indication and low –voltage alarm function;
* 10-hour long time of duration, particularly suitable for the field construction application for a long time;
* The multi-wavelength and dynamic range selection can satisfy customer's high higher cost performance demands to the greatest extent;
* The highly intelligent analysis software can accurately identify the fault splices, connectors and even macro-bending;
* Language: multiple choices of languages, such as Chinese, English, etc, which can be customized according to customer's requirements.

Specification:

Model	FSM3302A	FSM3302B
Type of optical fiber	Single –mode	
Center wavelength	1310nm/1550nm (±20nm)	
Maximum dynamic range (dB)	36/35	30/28
Event blind zone	1.5m	
Attenuation blind zone	10m	
Display type	3.5inch, color LCD, touch screen operation	
Optical interface	FC/UPC (Interchangeable SC, ST)	
Test range	500m,1km,2km,4km,8km,16km,32km,64km,128km	
Pulse width	10,30,50,100,275,500,1000,5000,10000ns	

Range accuracy	± (1m + sampling interval +0.005% × distance)
Attenuation measurement	±0.05 dB/dB
Reflection measurement	±4dB
Data storage	≥ 1000 test curves
Communication interface	USB
Power supply mode	AC / DC adapter: AC: 100V ~ 240V (1.5A), 50/60Hz DC: 18V to 20V (2A) Internal lithium-ion battery pack: 7.4V, 4400mAh
Battery operation time	≥ 10hours
Operating temperature	-5℃ ～ 50℃
Storage temperature	-20℃ ～ 70℃
Relative humidity	0 ～ 95％, no condensation
Weight	≤ 1kg
Volume	208mm × 110mm × 56mm

Standard Packages

MODEL	INCLUDES
3302	Instrument, FC/PC connector, NiMH battery, Trace Manager software CD, Data cable (USB/RS-232), AC adaptor, Soft carrying case, Warranty card, Quick reference guide.

MINI　OTDR-----FSM3302S

FSM3302S Mini-Pro OTDR is apply to FTTx and access network construction and maintenance, to test fiber breakpoint , length, loss and input light automatic detection, automatic test by one key. he tester is compact with 3.5inch colorful LCD screen, new plastic shell design, shock-proof and drop-proof. The tester also combine 8 functions with highly integrated OTDR, Event maps , Stable Light source , Optical power meter, Visual fault locator , cable sequence proofreading, cable length measurement and lighting functions. It could quick detection of breakpoint, universal connector, .600 internal storage,   TF card, USB data storage and built-in 4000mAh lithium battery, USB charging .It is a good choice for long term field work .

Specification:

Model	FSM3302S
Wavelength	1310nm/1550nm±20nm
Fiber Type	G.652 SM Fiber
Dynamic Range	24dB/22dB
Event Blind Zone	3m
ATT Blind Zone	8m
Test Range	500m~60km
Pulse Width	3ns~10us
Ranging Accuracy	±（1m+Sampling Interval +0.005％×Test Distance）
Loss Accuracy	±0.2dB/dB
Sampling Points	16k~128k
Sampling Resolution	0.05m~8m
Reflection Accuracy	±3dB
Data Storage	Internal：≥600；External：TF Card
Laser Safety Level	Class Ⅱ level
File Format	SOR Standard File Format
Connector	FC/UPC（Interchangeable SC、ST）
OPM	
Wave Range	800nm~1700nm
Interface Type	Universal Joint FC/SC/ST
Test Range	-50dBm～+26dBm
Uncertainty	±5%
Frequency Identification	CW/270/330/1k/2kHz
Calibration Wavelength	850/980/1300/1310/1490/1550/1625/1650nm
LS	

LD Type	FP-LD	
Output Wavelength	1550nm±20nm	1310nm/1550nm±20nm
Output Power	≥-5dBm	
Modulation Frequency	270/330/1k/2kHz	
Stability	CW，±0.5dB/15min（Test after15mins of preheating）	
Connector	FC/UPC（Interchangeable SC、ST）	
VFL		
Work Wavelength	650nm±20nm	
Output Power	≥10mW	
Mode	CW/1Hz/2Hz	
Connector	FC/SC/ST	
RJ45 Cable Length Measurement		
Test Range	300m	
Other Parameters		
Dispaly	3.5 inch Color LCD	
Data Interface	Micro USB	
External Storage	TF Card	
Power Supply	Polymer Li-battery：3.7V，4000mAh Power Adapter：5VDC，2A	
Battery Life	Standby＞20h；Measuring Time＞12h	
Operating Temperature	-10℃～+50℃	
Storage Temperature	-40℃～+70℃	
Relative Humidity	0～95％Non Condensing	
Weight	≤350g	
Dimension	173mm×82mm×37mm	
Functions：Orange，OTDR/OPM/LS/VFL/RJ45 Sequence/Flashlight		

MINI OTDR-----FSM3305A

FSM3305A handheld OTDR is a new generation of intelligent optical Measuring instrument designed for the optical fiber communication system testing. This product is mainly used to measure the parameters of optical fibers and cables, such as length, loss, and connection quality, etc.; it can realize the accurate positioning of event points and fault points, and can be widely used in the construction, maintenance testing and emergency   repair of the optical fiber communication systems as well as the research, production and production measurement of optical fibers and cables and so on.

Specification

Model	FSM3305A
Wavelength	1310nm or 1550nm
Type of fiber	9/125um SM Fiber
Connector	FC、SC/PC
Dynamic Range	22dB
Pulse Width	10ns~2.5us, Auto
Measurement	m
Event blind zone	3m
Attenuation blind	10m
Range accuracy	$\pm$（1m+2×10-4×distance）
VFL	$\geqslant$1mW
Power Supply	3pcs of Dry battery
Battery Work time	$\geqslant$2000 times measure
Save Data	＞500
Work Temperature	-5~40℃
Save Temperature	-10~60℃
humidity	0~85%（no condensation）
Net weight	300g

Handheld Optical Power Meter---------FSM-3216 Series

FSM-3216 Handheld Optical Power Meter is newly designed fiber optic tester, it aims at fiber network installation, fiber network engineering acceptance and fiber network maintenance. Combined usage with FSM3116 handheld optical light source, it offers a quick and accurate testing solution on both SM and MM fibers. Compared with usual power meters, the FSM-3216 has more great functions/features of automatic wavelength identification and switching and intelligent backlight control. Also the FSM-3216 features good appearance, good touch feeling and considerate humanity design.

Features

* Wave ID—Automatic wavelength identification and switching (when used with FSM3116 handheld light source)
* Frequency ID/Tone detection---Automatic frequency identification
*Intelligent backlight control (light intensity can be adjusted properly according to ambient light, which greatly reduced power consumption)
* Data storage function, up to 1000 test records
* USB communication port for saved testing records download
* Reference power level can be set up and stored
* User self calibration function
* Auto-off function can be activated or deactivated.
* AA alkaline and AC adapter for power supply
* Low battery indication

Specifications

Model	FSM-3216A	FSM-3216C
Calibrated（nm）wavelength	850, 1300,1310,1490,1550,1625	
Detector type	InGaAs	
Measurement Range（dBm）	-70～+6	-50～+26
Uncertainty (dB)	±0.15（3.5%）	
linearity (dB)	±0.02	
Display resolution(dB)	0.01	
Wave ID（nm）	1310，1490，1550，1625	
Date storage capacity	1000	
Communication Port	USB	
Optical Connector type	FC,SC,ST interchangeable	
Alkaline battery	3*AA，1.5V	
Power Supply Adaptor(V)	8.4	
Battery Operating time (h)	200	
Operation Temperature(℃)	-10～+60	
Storage Temperature(℃)	-25～+70	
Outline size（mm）/weight	180*90*45(250g)	

Standard Packages

MODEL	INCLUDES
All FSM-3216 Models	FSM-3216 Optical Power Meter, 3pcs 1.5V batteries, AC Adaptor, User Manual, Cotton swabs and Soft carrying case.

Optical Power Meter---------FSM3211 Series

FSM3211 optical power meter Is a handheld optical power meter, newly released in 2007, which can be used for absolute optical power measurements as well as for relative loss measurements in optic fiber networks. An Ø1.0mm photosensitive area photodiode is used to significantly improve the stability and the reliability. It features ingenious appearance, wide range of power measurement, high accuracy, user self-calibration function and reference power level storage.

Features

* Wide dynamic measurement range (up to 80dB)
* Reference power level storage(Ref Setting)
*User self-calibration function
*Comfortable LCD display and backlight LCD display
supports
night operation.
* Power measurements in dBm or mw and insertion loss in dB
*10 minutes Auto-off function can be activated or deactivated.
* AA alkaline batteries can last more than 140 hours, AC
adaptor also available
* Low battery indication

Applications

Telecom Maintenance
CATV Maintenance
Fiber Optic lab testing
Other Fiber Optic Measurements

Specifications

MODEL	FSM3211A	FSM3211C
Wavelength(nm)	800~1700nm	
Detector Type	InGaAs	
Detector Size	Ø 1.0mm	
Measurement Range (dBm)	-70~+10	-50~+30
Uncertainty	±5%	
Calibrated Wavelength(nm)	850,1300,1310,1490,1550,1625	
Resolution(dB)	0.01	
Optical Connector	FC(interchangeable SC,ST) / as well as 2.5mm universal	
Power Supply	Alkaline Battery(3 AA 1.5V batteries); AC Adaptor(9V)	
Battery Operating Time	140 h with 1.5V Battery(3pcs)	
Operating Temperature(℃)	-10 ~ +60	
Storage Temperature(℃)	-25 ~ +70	
Relative Humidity	0 to 95% (non-condensing)	
Dimension(mm)	190X100X50	
Weight(g)	370	

MODEL	INCLUDES
All 3211 Models	FSM3211 Optical Power Meter, 3pcs 1.5V batteries, AC Adaptor, User Manual, Cotton swabs and Soft carrying case.

Optical Power Meter---------FSM3208 Series

FSM3208 handheld optical power meter is a compact and an easy-to-use testing instrument for optical fiber networks, which can be used for absolute optical power measurements as well as for relative loss measurements in optical fibers. It features ingenious appearance, wide range of power measurement, high accuracy and user self-calibration function with high performance-to-price ratio.

Features

*User self calibration function
*Comfortable LCD display and optional backlight LCD display supports
night operation
*Power measurements in dBm or mw and insertion loss in dB
*Low battery consumption, more than 240 hours continual operation time
for three 1.5V alkaline batteries
*10 minutes Auto-off function can be activated or deactivated.

Applications

Maintenance in Telecom
Maintenance CATV
Fiber Optic Lab Testing
Other Fiber Optic Measurements

Specifications

Type	FSM3208A	FSM3208C
Wavelength(nm)	800~1700nm	
Detector	InGaAs	
Measurement Range (dBm)	-70~+6	-50~+26
Uncertainty	±5%	
Calibrated Wavelength(nm)	850,980,1300,1310,1490,1550	
Resolution(dB)	0.01	
Optical Connector	FC(interchangeable SC,ST) / as well as 2.5mm universal	
Power Supply	Alkaline Battery(3 AA 1.5V batteries)	
Battery Operating Time	240 h with 1.5V Battery(3)	
Operating Temperature(℃)	-10 ~ +60	
Storage Temperature(℃)	-25 ~ +70	
Relative Humidity	0 to 95% (non-condensing)	
Dimension(mm)	175x82x33	
Weight(g)	310	

Standard Packages

| MODEL	INCLUDES
All FSM3208 Models	FSM3208 Optical Power Meter, Protective Rubber Boot, 3pcs 1.5V batteries, User Manual, Cotton swabs and Soft carrying case.

Optical Power Meter---------FSM3402 Series

FSM3402 Optical Power Meter is a highly cost-effective portable power meter and it's newly launched by our Company. It can be used for the optical power measurement within the wavelength 800~1700nm. FSM3402 also has a wide measurement range which is more than 70dB. It's designed with the common wavelength calibration points, such as 850nm, 1300nm, 1310nm, 1490nm, 1550nm, 1625nm. The instrument is widely used in fiber-optic link construction, testing and maintenance.

Features

*Simple user interface

*mall size, easy to carry

*Wide testing range

*Automatic reminding of low battery

Applications

Maintenance in Telecom

Maintenance CATV

Fiber Optic Lab Testing

Other Fiber Optic Measurements
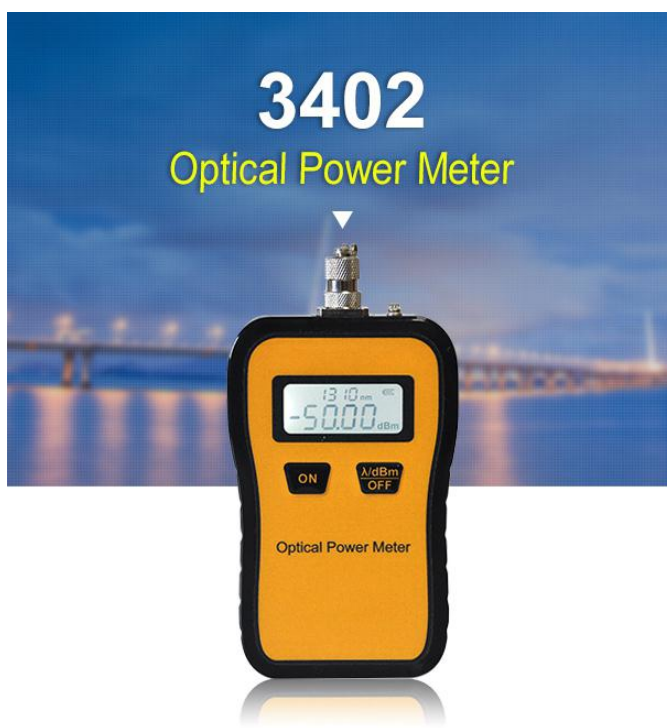
Specifications

Type	FSM3402A	FSM3402C
Wavelength(nm)	800~1700nm	
Detector	InGaAs	
Measurement Range (dBm)	-70~+6	-50~+26
Uncertainty	±0.25	
Calibrated Wavelength(nm)	850,980,1300,1310,1490,1550	
Resolution(dB)	0.05	
Optical Connector	FC(interchangeable SC,ST) / as well as 2.5mm universal	
Power Supply	Alkaline Battery(3 AAA 1.5V batteries)	
Battery Operating Time	300 h with 1.5V Battery(3)	
Operating Temperature(℃)	-10 ~ +60	
Storage Temperature(℃)	-25 ~ +70	
Relative Humidity	0 to 95% (non-condensing)	
Dimension(mm)	166x106x20	
Weight(g)	90	

Standard Packages

MODEL	INCLUDES
All FSM3402 Models	FSM3402 Optical Power Meter, User Manual, swabs and Soft carrying case.

FSM3229 PON Termination Tester is newly designed fiber optic tester, it aims at PON network installation, PON network maintenance. It can show 6 states of ONT and OLT.It can find problem of PON network easily.

Features

* Test 6 state of ONT and OLT.
* Providing 1310nm and 1490nm wavelengths optical power test.
* Used in Burst mode measurement of 1310nm upstream.
* 10 minutes Auto-off function can be activated or deactivated
* AA alkaline and AC adapter for power supply,Rechargeable Battery is optional
* Support English and Chinese
* Threshold can be set
* Providing VFL function

Specifications

Model	FSM3229 PON Termination Tester	
Test mode	6 state (1.On Line,2.Break,3.ONT Bad,4.No Power,5.Fall Off,6.ONT Fatal)	
Insertion Loss(dB)	≤1.5	
Optical Connector	SC/PC (FC, SC, ST available)	
PON test mode	1310 upstream	1490 downstream
Measurement Range(dBm)	+10 to -35	+12 to -40
OPM Uncertainty (dB)	≤0.5	
Calibration Wavelength（nm）	1310/1490/1550/1625	
Display resolution(dB)	0.01	
Display type	Color TFT	
Power supply	Rechargeable Battery/AC power adapter/Alkaline battery	
Communication Port	Mini USB	
Battery Operating time (h)	10h	
Operation Temperature(℃)	-5 to +40	
Storage Temperature(℃)	-10 to +70	
Dimension(mm)	192*102*50	
Weight(g)	423	

Standard Packages

MODEL	INCLUDES
All FSM3229 Models	3213 tester,User Manual,USB,Soft CD,1.5VAA Battery

FSM3213 Series PON Optical Power Meter target at the FTTx application and maintenance. This power meter is able to simultaneously test and estimate the signals of the voice, data and video. It is an essential and ideal tool for the construction and maintenance of the PON projects.

Features:

* It can experiment at Voice, data and video signal synchronous measurement and display on BPON/EPON/GPON.
* Providing simultaneous measurement for all three wavelengths on the fiber (1490nm, 1550nm,1310nm).
* Used in Burst mode measurement of 1310nm upstream.
* Use the software connect with PC, setting the threshold, data transfer, and calibration the wavelength.
* USB communication port enables data transfer to a PC.1000measurement items can be saved in 3213 PON power meter or computer for data review.
* With optical power meter modual, include 850、1300、1310、1490、1550、1625sixs(3213AP，3213A   without 850nm wavelength）；With visual fault locator modual （3213and3213AV）
* Optical power meter and VFL with one port.（only 3213A）
* Optional Chinese/English display.
* Offers up to 10 different threshold sets in total,Three status LEDs represent different optical signal conditions of Pass, Warn and Fail respectively.
* 10 minutes Auto-off function can be activated or deactivated
* Good key design,high sensitivity, greatly reducing the volume and weight of the tester.
* Different models corresponding to different function, according to own use to choose .

Specifications:

PON module:	FSM3213	FSM3213A	FSM3213AV	FSM3213AP
1310 upstream measurement				
Pass Zone(nm)	1260nm～1360nm			
Measurement Range(dBm)	-40dBm～+10dBm			
Output power(max)	15dBm			
Isolation@1490/1550(dB)	>40dB			
Burst mode measurement error	<±0.5dB			
1490 downstream measurement				
Pass Zone(nm)	1470nm～1505nm			
Measurement Range(dBm)	-40dBm～+10dBm			
Output power(max)	15dBm			
Isolation@1310/1550(dB)	>40dB			
1550 downstream measurement				
Pass Zone(nm)	1535nm～1570nm			

Measurement Range(dBm)	-40dBm〜+10dBm			
Output power(max)	25dBm			
Isolation@（1310/1490nm）	>40dB			
Measurement Accuracy				
Connatural uncertainty(dB)	±0.5dB			
Linearity(dB)	±0.1dB			
Passing through insertion Loss(dB)	<1.5dB			
General Information				
Detector Type	InGaAs			
Optical Connector	FC/SC/ST Interchangeable/2.5 universal adapter			
Fiber Type	SM 9/125um			
Measurement Unit	dB/dBm/xW			
Resolution (dB)	0.01dB			
Operation Voltage(V)	DC 3.3V〜5.5V			
Power Supply	3pc1.5V battery			
Continuously Operation time (h)	PON：90h	PON：90h OPM：100h VFL：50h	PON：90h VFL：50h	PON：90h OPM：100h
Operation Temperature(℃)	-10℃〜60℃			
Storage temperature(℃)	-25℃〜70℃			
Weight(kg)	423g	425g	424g	424g

Note: The operation time of the battery are all for the instrument that do not turn on back light, if the back light turn on the operation time will be shorted.

Normal Optical Power Meter Module：			
Normal Optical Power Meter	**3213[②]**	**3213A**	**3213AP**
Measurement Accuracy			
Connatural uncertainty(dB)	None	±0.5dB	
Linearity(dB)		±0.1dB	
Measurement Range(dBm)		-70dBm〜+6dBm	
General Information			
Measurement Unit	None	dB/dBm	
Resolution (dB)		0.01dB	
Calibration Wavelength(nm)		1310/ 1490/1550/1625	1310/ 1490/1550/1625
Detector Type		InGaAs	
Optical Connector		FC/SC/ST Interchangeable/2.5 universal adapter	

②：3213do not have the OPM module

VFL	3213③	3213A	3213AV
Output power	None	>0.5mW	
Wavelength		650nm	
Optical Connector		FC/SC/ST Interchangeable/2.5 universal adapter	
Fiber Type		SM/MM	

③：**3213 without VFL module.**

Standard Packages:

Model	3213 Series PON Optical Power Meter	
Items	Title	Quantity
1	3213 tester	1unit
2	User Manual	1pc
3	USB	1pc
4	Soft CD	1pc
5	1.5VAA Battery	3pc

PON Optical Power Meter—FSM3213N series

FSM3213N PON Optical Power Meter is designed base on 3213 PON power meter. This power meter is able to simultaneously test and estimate the signals of the voice, data and video. It is an essential and ideal tool for the construction and maintenance of the PON projects.

Features:

* It can experiment at Voice, data and video signal synchronous measurement and display on BPON/EPON/GPON.
* Providing simultaneous measurement for all three wavelengths on the fiber (1490nm, 1550nm,1310nm).
* Used in Burst mode measurement of 1310nm upstream.
* Use the software connect with PC, setting the threshold, data transfer, and calibration the wavelength.
* USB communication port enables data transfer to a PC.1000measurement items can be saved in FSM3213N PON power meter or computer for data review.
* Optical power meter and VFL with one port.（only FSM3213NA）
* Optional Chinese/English display.
* Offers up to 10 different threshold sets in total,Three status LEDs represent different optical signal conditions of Pass, Warn and Fail respectively.
* 10 minutes Auto-off function can be activated or deactivated
* Good key design,high sensitivity, greatly reducing the volume and weight of the tester.
* Different models corresponding to different function, according to own use to choose.

Specifications:

PON module:	FSM3213N	FSM3213NA	FSM3213NAV	FSM3213NAP
1310 upstream measurement				
Pass Zone(nm)	1260nm～1360nm			
Measurement Range(dBm)	-35dBm～+10dBm			
Output power(max)	15dBm			
Isolation@1490/1550(dB)	>40dB			
Burst mode measurement error	<±0.5dB			
1490 downstream measurement				
Pass Zone(nm)	1470nm～1505nm			
Measurement Range(dBm)	-40dBm～+12dBm			
Output power(max)	15dBm			
Isolation@1310/1550(dB)	>40dB			
1550 downstream measurement				
Pass Zone(nm)	1540nm～1560nm			
Measurement Range(dBm)	-40dBm～+25dBm			
Output power(max)	25dBm			
Isolation@（1310/1490nm）	>40dB			

Measurement Accuracy				
Connatural uncertainty(dB)	±0.5dB			
Linearity(dB)	±0.1dB			
Passing through insertion Loss(dB)	<1.5dB			
General Information				
Detector Type	InGaAs			
Optical Connector	FC/SC/ST Interchangeable/2.5 universal adapter			
Fiber Type	SM 9/125um			
Measurement Unit	dB/dBm/xW			
Resolution (dB)	0.01dB			
Operation Voltage(V)	DC 3.3V～5.5V			
Power Supply	3pc1.5V battery			
Continuously Operation time (h)	PON：90h	PON：90h OPM：100h VFL：50h	PON：90h VFL：50h	PON：90h OPM：100h
Operation Temperature(℃)	-10℃～60℃			
Storage temperature(℃)	-25℃～70℃			
Weight(kg)	423g	425g	424g	424g

Note: The operation time of the battery are all for the instrument that do not turn on back light, if the back light turn on the operation time will be shorted.

Normal Optical Power Meter Module：

Normal Optical Power Meter	FSM3213N[②]	FSM3213NA	FSM3213NAP
Measurement Accuracy			
Connatural uncertainty(dB)	None	±0.5dB	
Linearity(dB)		±0.1dB	
Measurement Range(dBm)		-70dBm～+6dBm	
General Information			
Measurement Unit	None	dB/dBm	
Resolution (dB)		0.01dB	
Calibration Wavelength(nm)		1310/ 1490/1550/1625	1310/ 1490/1550/1625
Detector Type		InGaAs	
Optical Connector		FC/SC/ST Interchangeable/2.5 universal adapter	

②：**FSM3213N do not have the OPM module**

VFL Module：

VFL	FSM3213N[③]	FSM3213NA	FSM3213NAV
Output power	None	>0.5mW	
Wavelength		650nm	

Optical Connector		FC/SC/ST Interchangeable/2.5 universal adapter
Fiber Type		SM/MM

③：**FSM3213N without VFL module.**

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Standard Packages:

Model	**FSM3213N Series PON Optical Power Meter**	
Items	Title	Quantity
1	3213 tester	1unit
2	User Manual	1pc
3	USB	1pc
4	Soft CD	1pc
5	1.5VAA Battery	3pc

Optical Variable Attenuator ---------FSM3303

FSM3303 handhold optical variable attenuator is used for continuously variable optical signal attenuation. As the attenuator is used in the laser system for the on-line testing, therefore, FSM3303 can be used in the digital system of communication devices (such as: PHD, SDH) and also in the system of adopting analog modulation (CATV)

Main Features

* stepwise attenuating by circumgyrated dial: attenuating step 0.05dB
* Provide with the function of displaying dB and dBm attenuating value
* 10 minutes Auto-off function can be activate and deactivate with keypad operation.
* After off the instruments, the system will have the memorizing of the attenuating 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.

Applications

Telecom Maintenance

CATV Maintenance

Comprehensive cable construction system

Optical instruments research and development

Optical communication education and lab testing

Other optical project

Specifications

Type	FSM3303
Attenuating wavelength Range	1260~1650nm
Fiber Model	9/125um SM
Optical Connector	FC/PC
Calibrated wavelengths	1310/1490/1550/1625nm
Measurement Range	2~60dB
Resolution	0.05dB
Minimize Insertion Loss	＜2.0dB
Linearity	±0.5dB
Repeating	±0.2dB
Attenuating Accuracy	±0.8dB
Return Loss at Input/ Output	＞35dB（typical value40dB）
Max input	＋20dBm
Displaying type	lattice 128*64 black and white, white back ground light
Rechargeable batteries	8.4V
Power supply adaptor	8.4V
Operation temperature	0~40℃
Operation Time	40 hours
Storage temperature	-10~60℃
humidity	0~85%（non- condensation）
Dimensions	180X90X36.5

Weight	427g

Standard Packages

MODEL	INCLUDES
FSM3303	FSM3303 Main Body, Protective Rubber Boot, Rechargeable battery, Power Supply Adaptor, Instruction Manual and Cotton Swabs and Rigid hard carrying case.

3226A Power Meter is specially designed for 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 in the LCD screen.

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

Features

* Simultaneously test and show 18 wavelengths
* Friendly interface and easy operation
* Save and upload test results via USB port
* 1000 records
* Columnar graphics or list mode to show test data
* Color TFT-LCD display,high resolution 320*240
* Built-in clock and can edit test fiber number
* Quick start operation, requiring no warm-up time
* Light weight

Specifications

Model	3226A Optical Power Meter
Wavelength Range	1270 ~ 1610 nm
Number of Channels	18
Wavelength resolution	20nm
Measuring Wavelength (nm)	1270/1290/1310/1330/1350/1370/1390/1410/1430 1450/1470/1490/1510/1530/1550/1570/1590/1610
Dynamic range	+10 to -40dBm
Resolution	0.01dB
Optical interface	FC/PC(FC, LC, ST available)
Operating Temperature	-10 to +60℃
Power supply	Rechargeable Battery/AC power adapter
Time of Operating	10h
Dimension	220cm*110cm*70cm
Weight	850g

Standard Packages

MODEL	INCLUDES
3226A	3226A, , USB cable, AC Adaptor, User Manual, CD, Cotton swabs and Soft carrying case.

Investment on optical network maintenance is getting higher. In the last one kilometer of the optical network, operators need to check the occupation of optical ports idle resources to reduce the waste of port resources. However, such manual troubleshooting is extremely complicated and inefficient, and will bring huge trouble to users and cause complaints increase.

Features

*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, the optical connector off the state
*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
    Other:
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;

Specifications

PON Module	
PON Terminal status detection Online,	Break, ONT Fatal, ONT Bad, Cut, No Power, Fall off
Insertion Loss(dB)	≤1.5
Optical Interface	(FC/SC/ST)PC
PON Optical Power meter module	1310 Upstream 1490 Downstream 1550Downstream
Detection Range(dBm)	+10～-35 +12～-40 +25~-40
Measurement Uncertainty(dB)	≤0.5
Calibrated Wavelength (nm）	1310/1490/1550/1625
Resolution(dB)	0.01
OPM module	
Calibrated Wavelength(nm)	1310/1490/1550/1625
Detector type	InGaAs
Detection range（dBm）	+6~-70
Uncertainty（dB）	±0.5

VFL module	
Wavelength（nm）	650±20
Output power（mW）	≥1
OSL Module	
Wavelength（nm）	1310±20 & 1550±20
Output power（dBm）	0~±0.5
Others	
Display	TFT Colorful Screen
Power Supply	Standard Configuration:3PCS AA1.5VAlkline
Customized: Rechargeable Batteries/DC	5V Adapter
Communication InterfaceMINI USB	
Battery Operation Time（h）	≥ 10
Operation Temperature(℃)	-5～40
Storage Temperature(℃)	-10～70
Relative Humidity	0～95%（no condensation）
Weight(g.no battery and sheath)	423
Size （mm）	192×102×50

Standard Packages

MODEL	INCLUDES
	PON Terminal Tester , Cleaning Swabs , Qualification Certificate, Common jumper SC/pc-sc/PC , User Manual, USB（mini5pin Convert to 4pin）, Engraved computer software, manual electronic file.

MPO Optical Power Meter and MPO Optical Light Source is special for testing MPO fiber. At recent years, as the rapid development of data center and cloud computing, also with rapid growth of multi fibers(MPO) requirement. However, on the site of measurement process, traditional single channel Optical power meter with complex measurement and low credibility. Based on this, MPO products arises at this moment. The product can test the insertion loss of MPO fibers and polarity with only one key, And the integration of a variety of data storage, threshold analysis, data export and other applications，Compared with the traditional instrument the test efficiency of it is more than 10 times，it is the best choice for field application of MPO room test、calibration of production line、Determination of polarity.

Features

*12、24、Specific Channels
*High Precision of color LCD display
*100 history data reports
*If there is no operation in 5 mins, the screen will adjust the backlight automatically and enter the power saving mode

*Switch 4 functions interface with one key (single channel optical power meter, 12 channels Optical power meter, MPO testing, Column interface）
*Copy the data to the computer directly with USB interface, which is convenient for user.
*The user can customize the threshold to test
*Built-in 3500 Ma high-capacity lithium battery, work time more than 10 hours
*Humanized operation shape, easy to use.

Specifications

Laser Type	FP LD
Wave Length	850/1300 or 1310/1550
Frequency	0 Hz 270Hz 1KHz 2KHz
Fibertype	9/125 50/125 62.5/125
Interface Type	SM/MM MPO/PC 12/24 core
Output Power	> -10dBm
Stability	±0.2(15min.) ±0.5(8hours)
Detector	InGaAs
Wavelength Range	850～1700nm
Calibration Wavelength	850&&1300 OR 1310&&1550nm
Optical Power Meter Range	+3～-50 dBm
Insertion Loss Accuracy	< 0.2s/CHANNEL
Resolution	0.01dB
Linearity	±0.2dB (+5～-50dBm)
System Control	USB
Interface Type	SM/MM MPO/PC 12/24 core

FSM3223 VFL&OPM

FSM3223 Power meter and VFL integrated in one unit, this tester allows to perform both optical power/loss measurements and Fiber faults tracing visually.

Features

* FSM3223 VFL Power Meter is an ideal tester used in quickly mechanical splicing
   and FTTx networks.
* Optical Port: FC, SC interchangeable supports various optical connectors.

Applications

Maintenance in Telecom
Maintenance CATV
Fiber Optic Lab Testing
Other Fiber Optic Measurements

Specifications

Model	FSM3223
Operating wavelength(Power Meter Module)	850/1300/1310/1490/1550/1625
Detector Type	InGaAs
Out put power(VFL module)	1mW or 10mW
Power Measurement Range	-70~+6dBm / -50~+26dBm
Uncertainty	±0.5dB
Resolution	0.01
Operation temperature	-10~+60 ℃
Storage Temperature	-25~+70℃
Auto-off function	Yes, Auto-off after 10minutes idle time
Battery Life @ OPM	180 hours
Battery Life @ VFL	60 hours
Power Supply	3pcs AA Batteries
Weight	700g (including batteries)
Size	192*102*50

Standard Packages

MODEL	INCLUDES
All FSM3223 Models	VFL Power Meter, 3pcs alkaline batteries, User Manual and Soft carrying case.

Handheld Adjustable Light Source---------FSM3116 Series

FSM3116 Handheld Adjustable Light Source is newly designed fiber optic tester, it aims at fiber network installation, fiber network engineering acceptance and fiber network maintenance. Combined usage with FSM-3216 handheld optical power meter, it offers a quick and accurate testing solution on both SM and MM fibers. The FSM3116 provides 1 to 4 wavelengths and output power can be adjustable on customer requests. Also the FSM3116 features good appearance, good touch feeling and considerate humanity design.

Features

* Wave ID information can be transmitted when used with FSM-3216 Optical Power Meter.
* Tone generation, 270HZ,330HZ,1KHZ,2KHZ
* Output power can be adjustable
* Output power value is shown on LCD display
* 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

Specifications

Model	FSM3116
Operating wavelength（nm）	1310/1550;1310/1490/1550/1625（others specify on requests）
Applicable fiber	SM，MM
Laser type	FP-LD(others specify on requests)
Output Power（dBm）	-5~-12dBm （can be adjustable）
Adjustable step size（dBm）	＜0.5
Stability(dB，30min，20℃)	0.15
Modulation（Hz）	CW， 270，330，1K，2K
Fiber Port	FC/PC
Alkaline Battery	3*AA，1.5V
Power Supply Adaptor(V)	8.4
Battery Operating time(h)	45
Operation Temperature(℃)	-10～+60
Storage Temperature(℃)	-25～+70
Outline size（mm）/weight	180*90*45(250g)

Standard Package

MODEL	INCLUDES
All FSM3116 Models	FSM3116 Optical Light Source, 3pcs 1.5V batteries, AC Adaptor, User Manual and Soft carrying case.

Optical Light Source---------FSM3111 Series

FSM3111 optical light source is a handheld optical light source, newly released . It can provide 1 to 5 wavelengths output to satisfy specific requirements including the 650nm visible light source and the 1310/1550nm wavelengths for single mode fiber or the 850/1300nm wavelengths for multimode fiber, as well as other wavelengths according to customer's needs. Together with the 3211 optical power meter, it is a perfect solution for fiber optic network applications.

Features

* Provides 1~5 wavelengths output which can be optional according to customers' needs
* CW, 2Hz modulation output at 650nm, and CW, 270Hz,1KHz,2KHz modulation output at other wavelengths.
* High stability of the output power
* Stable output wavelength
* Backlight LCD display supports night operation
* Low battery power indication

Applications

Maintenance in Telecom
Maintenance CATV
Fiber Optic Lab Testing
Other Fiber Optic Measurements

Specifications

Type	FSM3111
Wavelengths(nm)	Provides 1~5 Wavelengths according to needs.
Emitter Type	FP-LD,LED
Typical Output	0@650nm / -7 @1310nm,1550nm, -20dBm for LED
Spectral Width(nm)	≤10
Output Stability	±0.05dB/15mins; ±0.1dB/ 8hours
Modulation Frequencies	CW.2Hz@650nm / CW,270Hz,1KHz,2KHz@1310nm,1550nm
Optical Connector	FC/PC(Other type adapters can be required)
Power Supply	Alkaline Battery(3 AA 1.5V batteries); AC Adaptor(9V)
Battery Operating	45
Operating	-10~+60
Storage Temperature(℃)	-25~+70
Dimension(mm)	190X100X50
Weight(g)	370
Recommendation	
FSM3111 Handheld Light Source is designed for optimal use with 3211 Optical Power Meter for measuring optical loss on both single mode and multimode fiber cable.	

Standard Package

MODEL	INCLUDES
All FSM3111 Models	FSM3111 Optical Light Source, 3pcs 1.5V batteries, AC Adaptor, User Manual and Soft carrying case.

Optical Light Source---------FSM3109 Series

FSM3109 optical light source can provide 1 to 4 output wavelengths to meet specific requirements, including the 650nm red source and the 1310/1550nm wavelengths for single mode fiber or the 850/1300nm wavelengths for multi mode fiber, as well as other wavelengths according to customer needs. Together with the FSM3208 optical power meter, it is a perfect solution for the fiber optic network characterization.

Features

* Provides 1~4 output wavelengths which can be optional according to customer's needs
* CW, 2Hz modulation output at 650nm, and CW, 270Hz,1KHz,2KHz modulation output at other wavelengths.
* High stability of the output power
* Stable output wavelength
* Backlight LCD display supports night operation
* Compact size and decent appearance
* Large LCD, easy operation
* Alternative 10 minutes Auto-off function conserving battery life

Specifications

Type	FSM3109			
Wavelengths(nm)	650	1310/1550	850/1300	850/1300/1310/1550
Emitter Type	FP-LD,LED or others please specify			
Typical Output Power (dBm)	0	-7dBm for LD, -20dBm for LED		
Spectral Width(nm)	≤10			
Output Stability	±0.05dB/15mins; ±0.1dB/ 8hours			
Modulation Frequencies	CW,2Hz	CW,270Hz,1KHz,2KHz		
Optical Connector	FC/ universal adaptor	FC/PC		
Power Supply	Alkaline Battery(3 AA 1.5V batteries)			
Battery Operating Time(hour)	45			
Operating Temperature(℃)	-10~+60			
Storage Temperature(℃)	-25~+70			
Dimension(mm)	175x82x33			
Weight (g)	295			
Recommendation				
FSM3109 Handheld Light Source is designed for optimal use with FSM3208 Optical Power Meter for measuring optical loss on both single mode and multi mode fiber cable.				

Standard Packages

MODEL	INCLUDES
All FSM3109 Models	FSM3109 Optical Light Source, Protective Rubber Boot, 3pcs 1.5V batteries,User Manual, and Soft carrying case.

Pen-type Visual Fault Locator (VFL)---------FSM3105P

The 3105 Pen type VFL is specially designed for field personnel who need an efficient and economical tool for fiber tracing, fiber routing and continuity checking in optical network. It includes:

Finding the breakpoint, poor connections, bending or cracking in fiber optic cables.

Finding the faults of OTDR dead zone

End-to-end visual fiber identification

Features

* 2.5mm universal connector, for 1.25mm connectors

FC (Male)-LC (Female) convertor can be provided on requests.

* Operates either in CW or Pulsed
* Constant output power
* Lower Battery warning
* Long battery life (up to 60 hours)
* Crash-proof and dust-proof design for laser head
* Laser case ground design prevents ESD damage
* Burning testing to ensure the reliability.
* Portable and rugged, easy to use
* Guarantee to CE standards include EMC, EMI, ROHS

Specifications

Type	3105 Pen-type Visual Fault Finder
Central Wavelength	650nm±10nm (635nm can be required on request)
Emitter Type	FP-LD
Output Power	Optional choice for 1mw, 10mw on actual needs
Optical Connector	2.5mm universal connector For 1.25mm connectors, FC (Male)-LC (Female) convertor can be optional on customer requests
Operating Model	Both CW and Pulse available
Pulse Frequency	2~3Hz
Power Supply	2　AA alkaline batteries
Battery Operating Time	650nm@1mw ≥65hour 650nm@10mw≥15hour Test with Panasonic LR6 AA ALKALINE battery
Operating Temperature	-10~+45 (℃)
Storage Temperature	-40~+70 (℃)
Dimension (mm)	∅ 15X180
Weight	120g(Without battery)

Remark: Colors can be customized on request when meets certain qty!

Standard Packages

MODEL	INCLUDES
FSM3105P	Main Unit (Original color), 2pcs Alkaline battery, User Manual, and Soft Carrying case.

Pen-type Visual Fault Locator (VFL)---------FSM3105A

FSM3105A VFL is specially designed for field personnel who need an efficient and economical tool for fiber tracing, fiber routing and continuity checking in optical network. It includes:

Finding the breakpoint, poor connections, bending or cracking in fiber optic cables.

Finding the faults of OTDR dead zone

End-to-end visual fiber identification

Features

* 2.5mm universal connector, for 1.25mm connectors, FC (Male)-LC (Female) convertor can be provided on requests.
* Operates either in CW or Pulsed
* Constant output power
* Lower Battery warning
* Long battery life (up to 60 hours)
* Crash-proof and dust-proof design for laser head
* Laser case ground design prevents ESD damage
* Burning testing to ensure the reliability.
* Portable and rugged, easy to use

Specifications

Type	FSM3105A
Central Wavelength	650nm±10nm (635nm can be required on request)
Emitter Type	FP-LD
Output Power	Optional choice for 1mw, 10mw on actual needs
Optical Connector	2.5mm universal connector For 1.25mm connectors, FC (Male)-LC (Female) convertor can be optional on customer requests
Operating Model	Both CW and Pulse available
Pulse Frequency	2~3Hz
Power Supply	2　AA alkaline batteries
Battery Operating Time	650nm@1mw ≥65hour 650nm@10mw≥15hour Test with Panasonic LR6 AA ALKALINE battery
Operating	-10~+45 (℃)
Storage	-40~+70 (℃)
Dimension (mm)	¢ 15X180
Weight	900g(Without battery)

Standard Packages

| MODEL	INCLUDES
FSM3105A	Main Unit (Original color), 2pcs Alkaline battery, User Manual, and Soft Carrying case.

Economical Visual Fault Locator (VFL) ---------FSM3105N

The FSM3105N Economical VFL is an efficient and low cost basic fiber test tool, it provides a visible way to find fiber faults and identify fibers in an optical network during and after installation. It includes:

Finding the breakpoint, poor connections, bending or cracking in fiber optic cables.

Finding the faults of OTDR dead zone

End-to-end visual fiber identification
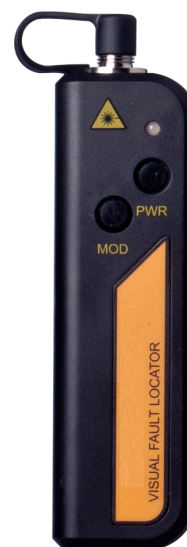
Features

* Constant & stable output power
* Special laser driver circuit design, to make sure the laser output power remains a constant power level as long as in an available battery voltage.
* Low battery warning, reminds users to change the battery timely.
* Long battery life(up to 40 hours with AAA batteries)
* Operates either in CW or Pulsed
* Pocket size and light weight, easy to use

Specifications

Type	FSM3105N Economical VFL
Central Wavelength	650nm±10nm
Emitter Type	FP-LD
Output Power	1mw or 10mw
Optical Connector	FC/2.5mm universal connector For 1.25mm connectors, FC (Male)-LC (Female) convertor can be optional on customer requests
Operating Model	Both CW and Pulse(2Hz) available
Power Supply	Two AAA alkaline batteries
Battery Operating Time	40hours Test with Panasonic LR6 AAA ALKALINE battery
Operating Temperature	-10~+60 (℃)
Storage Temperature	-25~+70 (℃)
Dimension (mm)	100*30*18
Weight	37g

Standard Packages

MODEL	INCLUDES
FSM3105N	FSM3105N VFL, Two AAA batteries, User Manual and Soft Carrying case.

Optical Multi-meter---------FSM3209 Series

FSM3209 Handheld Optical Multi-meter Integrates the functions of an intelligent optical power meter module and of 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.

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
* Alkaline Battery and Mini USB Adapter for power supply

Applications

Telecom Maintenance

CATV Maintenance

DDN Maintenance

Fiber Optic lab testing

Other Fiber Optic Measurements

Specifications

Type	FSM3209A	FSM3209C
Optical Power Meter Module		
Detector Type	InGaAs	
Measurement Range(dBm)	-70~+6	-50~+26
Rosolution(dB)	0.01	
Uncertainty	≤±0.25	
linearity (dB)	≤±0.1	
Frequency ID Range（Hz）	＜10K	
Optical Light Source Module		
Wavelengths(nm)	1310/1550(other wavelengths can be optional)	
Typical Ouput Power(dBm)	-5	
Output Stability	≤0.1	
Modulation Frequencies(Hz)	CW,270,1K,2K	
General Specifications of Multi Meter		
Power Supply	3 pcs 1.5V Alkaline Batteries/Mini USB 5V Adapter	
Battery Operating Time(h)	≥50 (Both Power Meter and Light Source are working) ≥200(Only Power Meter is working)	
Auto-off time (min)	10	
Communication Port	Mini USB	
Operating Temperature(℃)	-10~+60	
Storage Temperature(℃)	-25~+70	
Dimension(mm)	175X90X44.5	
Weight (g,without batteries)	265	

Standard Packages

MODEL	INCLUDES
FSM3209	Multimeter, Mini USB cable,5V USB Adapter,3pcs 1.5V Alkaline Batteries,CD,User Manual, Cotton swabs and Soft carrying case.

Optical Fiber Ranger ---------FSM3304N

FSM3304N Optical Fiber Ranger is the most portable test instrument in the industry. It adopts the OTDR technical principles and integrates the powerful analysis software, which enables the FSM3304N fiber ranger detect fiber faults location more accurate and easy.

Main 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.

Applications

Testing the distance of the fiber and identify the faults location in the fiber link.

Locates reflective and non-reflective breaks in the fiber network.

Inspection of fiber repair and maintenance.

FSM3304N Fiber Ranger is ideal to be used in FTTx network installation and maintenance.

Specifications

Model		FSM3304N
Operating Wavelength		1550nm（1310nm Optional）
Fiber Type		9/125um SM Fiber
Optical Connector Type		FC/PC
Detector Type		InGaAs
Peak Power of laser		≥60mW
Max. Displaying Distance	Reflection Event	60km (≥1dB)
	Non-reflection Event	20km (≥2.5dB)
Measurement Unit		m
Reflection Event Dead Zone		15m
Distance Accuracy（Reflection Event）		±（2m+2*10（-4）*Distance）
Wavelength of VFL Option		650nm
Output Power of VFL Option		>=1mW
Power Supply		Alkaline Battery (3pcs 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

Standard Packages

MODEL	INCLUDES
FSM3304N	FSM3304N Fiber Ranger, 3pcs 1.5V batteries, User Manual, Cotton swabs and Soft carrying case.

Optical Fiber Identifier---------FSM3306B Series

FSM3306B Optical Fiber Identifier can quickly identify the direction of transmitted fiber and display the relative core power without any damages to the bend fiber. When the traffic is present,the intermittently audible tone is activated.
The FSM3306B optical fiber identifier also recognize the modulation like,270Hz,1kHz and 2kHz .When they are used to detect the frequency, the continuously audible tone is activated.There are four adapter heads available: Ø0.25, Ø0.9, Ø2.0 and Ø3.0. The FSM3306B optical fiber identifier is powered by a 9V alkaline battery .

Features

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

Specifications

Type	FSM3306B	
Identified Wavelength Range	800-1700 nm	
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 Test Range (dBm, CW/0.9mm bare fiber)	-46~10(1310nm)	
	-50~10(1550nm)	
Signal Power Test Range (dBm, CW/0.9mm bare fiber)	-50~+10	
Signal Frequency Display (Hz)	270, 1k, 2k	
Frequency Test Range (dBm, Average Value)	Ø0.9, Ø2.0, Ø3.0	-30~0 (270Hz,1KHz)
		-25~0 (2KHz)
	Ø0.25	-25~0 (270Hz,1KHz)
		-20~0 (2KHz)
Insertion Loss(dB, Typical Value)	0.8 (1310nm)	
	2.5 (1550nm)	
Alkaline Battery(V)	9	
Operating Temperature(℃)	-10－+60	
Storage Temperature(℃)	-25－+70	
Dimension (mm)	196X30.5X27	
Weight (g)	200	

Standard Packages

MODEL	INCLUDES
FSM3306B	FSM3306B Optical Fiber Identifier, 4pcs adapter heads, Sunshade, Alkaline battery, User Manual, Cotton Stick and Soft Carrying case.

FSM3306D Optical Fiber Identifier is an important tool for optical maintenance, which is used for nondestructive fiber identification project. Meanwhile it also has Visual Fault Locator module with fault location function.

Using the macro bending technology on line for nondestructive testing, FSM3306D can measure the signal direction and power and avoid misoperation resulting in interrupted lines.

Features

* * 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
* Don't need to replace adaptor
* Lower power indication
* Build in VFL function

Specifications

Type	FSM3306D
Identified Wavelength Range	750-1700 nm
Insertion Loss	1.0dB
Fiber Type	＜ 3mm Fiber
Identified Signal Type	270Hz/1KHz/2KHz
Display Type	LED
Detector Type	1mm InGaAs
Minimum detection power	-35dBm(1550nm)
	-30dBm(1310nm)
Center Wavelength	650nm
Output Power	10mW
Alkaline Battery	2*AA
Battery Life	＞ 60H
Operating Temperature	0~+50℃
Storage Temperature	-20~+60℃
Weight	200g
Dimension	230*43*48mm

Standard Packages

MODEL	INCLUDES
FSM3306D	FSM3306D Optical Fiber Identifier, Alkaline battery, User Manual, Cotton

Optical Fiber Identifier---------FSM3306C

FSM3306C Optical Fiber Identifier is equipped with the function of low frequency signal detection. It can quickly identify the direction of transmitted fiber and display the relative core power without any damages to the bended fiber. It can be used to detect in anywhere of SM and MM fiber. When the traffic is present,the intermittently audible tone is activated.

The FSM3306C optical fiber identifier also recognize the modulation like,270Hz,1kHz and 2kHz .When they are used to detect the frequency, the continuously audible tone is activated.There are four adapter heads available: Ø0.25, Ø0.9, Ø2.0 and Ø3.0. The FSM3306C optical fiber identifier is powered by a 9V alkaline battery .

Features

*Identify the direction and frequency of the light without stopping operation.

* Easy-to-use with "ONE KEY" operation.

* Efficiently identifies the traffic direction and frequency tone (270Hz, 1KHz, 2KHz) with audible warning.

* Displays the relative core power

* Detect low frequency signals of FSM3306CT.

* Easy-to-replace adaptors

* Battery indication:change the battery if there is a low battery indication.

* Digital tube and LED indicator light.

Specifications

Type	FSM3306C	
Identified Wavelength Range	800-1700 nm	
Identified Signal Type	CW, 270Hz，1kHz，2kHz	
Detector Type	Ø1 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 Test Range (dBm, CW/0.9mm bare fiber)	-20~10(1310nm)	
	-30~10(1550nm)	
Signal Power Test Range (dBm, CW/0.9mm bare fiber)	-30~+10dBm	
Signal Frequency Display (Hz)	270, 1k, 2k	
Frequency Test Range (dBm, Average Value)	Ø0.9, Ø2.0, Ø3.0	-30~0 (270Hz,1KHz)
		-25~0 (2KHz)
		-25~0 (270Hz,1KHz)
	Ø0.25	-20~0 (2KHz)
Insertion Loss(dB, Typical Value)	0.8 (1310nm)	
	2.5 (1550nm)	
Alkaline Battery(V)	9V	
Operating Temperature(℃)	-0－+50	
Storage Temperature(℃)	-10－+70	
Dimension (mm)	209X33X31	

FSM3306CT		
Signal type	1HZ low frequency signal	
Signal Mode	Mechanical vibration	
Insertion loss	<1 dB(1310)	
Fiber external diameter	Ø0.9, Ø2.0, Ø3.0	

Standard Packages

MODEL	INCLUDES
FSM3306C	FSM3306C Optical Fiber Identifier, 4pcs adapter heads, Sunshade, Alkaline battery, User Manual, Cotton Stick and Soft Carrying case.