

Váš spolehlivý partner pro síť budoucnosti

MĚŘÍCÍ PŘÍSTROJE PRO OPTICKÁ VLÁKNA

Shineway Technologies, Inc.

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1. Měřicí přístroje pro optická vlákna



palmOTDR — nejmenší OTDR na světě

POPIS

PalmOTDR řady **ShinewayTech®** slouží k optické lokalizaci a analýze poruch v optických sítích jako kompaktní a lehké ruční přístroje, které jsou lehce obsluhovatelné a přitom inteligentní a vedou rychle k výsledkům. Velký podsvícený LCD-display umožňuje komfortní práci ve dne i v noci.

Ve srovnání s tradičními OTDR jsou přístroje řady **palmOTDR** jednodušší v ovládní, lehčí a přinášejí uživateli vyšší užitek. S jedinečným Hot-Key-Designem mohou být výsledky rychle vyvolány a analyzovány. Také měření v reálném čase jsou dětskou hrou. Přístroje jsou použitelné jak pro Single-Mode (1310/1550 nm) tak pro Multi-Mode (850/1300 nm). Data měřených křivek mohou být pomocí společně dodávaného „**Trace Manager**“ **Software** exportovány pro další analýzu a zpracování na PC.

Ergonomické uspořádání řady **palmOTDR** vedlo k velkoplošnému grafickému displeji. Měření může uživatel aktivovat jediným stlačením tlačítka. Pomocí odpovídajících adapterů lze použít různé typy konektorů. Řada **palmOTDR** tak bude ideálním a nezbytným nástrojem pro všechny, kteří mají co do činění s výstavbou a údržbou optických sítí.

VLASTNOSTI

- *Lehký, přenosný a ekonomicky výhodný*
- *Jednoduše obsluhovatelný, lehce k naučení*
- *Rychlé měření, velký display se všemi informacemi*
- *Vícejazyčná pracovní plocha*
- *Podsvícený display umožňuje práci ve tmě*
- *Měří délku a identifikuje zavaděná vlákna navinutém na bubnu*
- *Velká kapacita paměti (300 měřených křivek)*
- *Výstup dat přes RS232 / USB*
- *Výměnné konektorové adaptéry (FC/PC, SC nebo ST)*
- *PC software pro analýzy a zprávy k předem uloženým datům*
- *Chráněný proti prachu, vlhkosti a nárazu při použití v terénu*
- *Stav nabití baterie a funkce diodového laseru na displeji*
- *Vestavěná NiMH baterie umožňuje 5 hodin nepřetržité práce*
- *Automatické vypnutí při delším běhu na prázdko šetří baterii*
- *Varování vybití baterie*



OBLASTI POUŽITÍ

Měřicí přístroje řady **palmOTDR** nalézají použití při lokalizaci závad a přerušení vláken v místech spojení, slouží k zobrazení průběhu útlumu v optických kabelech a ke zjištění délek úseků. Poskytují údaje o útlumu mezi libovolnými body a poskytují informace o vložném útlumu spojek, konektorů a pasivních prvků, jakož i o útlumu odrazu vláken. Tak může být dohromady se stabilizovanými laserovými zdroji a měřicími přístroji pro optický výkon optická síť efektivně měřena a udržována.

Měřicí přístroje řady **palmOTDR** mohou být použity během instalace, zkoušení a údržby optických kabelů v systémech LAN, MAN, WAN a CATV a jsou zejména vhodné hledání závad jak v areálech tak v dálkových sítích s optickými kabely.

TECHNICKÉ ÚDAJE

parametr ⁽¹⁾	palmOTDR-S20		palmOTDR-M20
	A	C	A
dynamický rozsah (dB) ⁽²⁾	24 / 24	32 / 32	18 / 22
vlnová délka (±20nm)	1310 / 1550		850 / 1300
typ displeje	barevný LCD podsvícený		
typ vlákna	Single-Mode		Multi-Mode
optické připojení	Single Port		
typ emitoru	LD		
typ konektoru	FC/PC (výměnný za SC,ST)		
rozsahy délek (km) ⁽³⁾	1,3 / 2,5 / 5 / 10 / 20 / 40 / 80 / 120 / 160 / 240		0,1/ 0,3/ 0,5/ 1,3/ 2,5/ 5/ 10 @ 850 nm 0,1/0,3/0,5/1,3/2,5/5/10/20/80 @ 1300 nm
šířky pulsu (ns) ⁽⁴⁾	12 / 30 / 100 / 275 / 1000 / 2500 /10000 ⁽⁴⁾ / 20000 ⁽⁴⁾		12 / 30 / 100 / 275 / 1000 @850 nm 30 / 100 / 275 / 1000 / 2500 @ 1300 nm
průměrování	15s / 30s / 1min / 2min / 3min		
mrtvá zóna události	10 m ⁽⁵⁾		7 m ⁽⁶⁾
mrtvá zóna útlumu ⁽⁶⁾	25 m ⁽⁵⁾		20 m ⁽⁶⁾
přesnost délek	± (1 m + 5×10 ⁻⁵ ×Distance + sampling space)		
přesnost měření odrazu	± 4 dB		
přesnost měření útlumu	±0.05 dB/dB		
paměť měřených dat	300 měřených křivek		
přenos dat	RS-232 / USB Port		
všeobecné údaje			
napájení	NiMH aku / síťový zdroj		
provozní doba baterie	na nabití 4 hodiny měření nebo 20 hodin standby		
přenos dat	RS 232 / USB Port		
provozní teplota	0 °C až 50 °C		
skladovací teplota	-20 °C až 70 °C		
relativní vlhkost	0 – 95 % (nekondensující)		
hmotnost	0,87 kg		
rozměry (v x š x h)	196 x 100 x 64 mm		

poznámky:

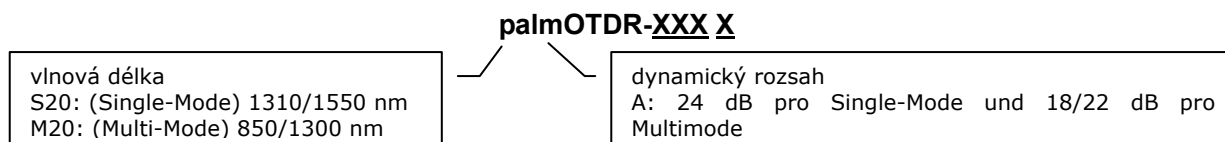
- | | |
|--|--|
| <p>(1) Údaje popisují zaručený výkon přístroje s běžným PC-konektorem. Nepřesnosti podmíněné refrakčním indexem vlákna nejsou zohledněny;</p> <p>(2) Dynamický rozsah platí při větší šířce pulsu a průměrování 3 minuty;</p> <p>(3) Délkové rozsahy 160 km a 240 km jen u typu C;</p> | <p>(4) Šířky pulsu 10µs a 20 µs njen u typu C;</p> <p>(5) Podmínky pro Blindmessung: Reflektionsereignisse v rozsahu 4 km, Reflektions-Intensität kleiner als -35 dB und die Totzone ist bei kleinster Pulsweite ermittelt</p> <p>(6) Bedingungen für Blindmessung: Reflektionsereignisse im Bereich von 1 km, Reflektions-Intensität kleiner als -32 dB und die Totzone ist bei kleinster Pulsweite ermittelt</p> |
|--|--|

OZNAČENÍ MODELU

Modely **palmOTDR** řady ShinewayTech® jsou označeny následovně: tři znaky udávají mode a vlnovou délku:

„S20“ pro Single-Mode 1310/1550nm, „M20“ pro Multi-Mode 850/1300nm

Následující písmeno „A“ nebo „C“ přísluší dynamickému rozsahu (viz tabulka dat).



ROZSAH DODÁVKY

Měřicí přístroj, NiMH-Aku, síťový adapter, instalační disk s „Trace Manager“ softwarem, přenosový kabel (RS232 / USB), gumové ochranné pouzdro, sada příslušenství k transportní tašce (dóza se stlačeným vzduchem, čistící sada pro spojování vláken), záruční list, CE/FCC certifikát, Kalibrační certifikát, návod k obsluze

Opční příslušenství

označení	číslo dílu	označení	číslo dílu
50 m opt. patchcord	AC-FJC-50-FC/FC	keramické jádro pro LS	AC-FRL-C
SC konektor pro LS	AC-CONN-SC-L	příslušenství luxusní kufr	AC-PB-40
ST-konektor pro LS	AC-CONN-ST-L	Transportní taška	AC-PB-20

FiberTracer Inteligentní hledač závad

— Optická lokalizace závad pouze jedním přístrojem

Měřicí přístroje **ShinewayTech®** řady FiberTracer jsou jedinečně vytvořené nástroje pro každodenní práci v oboru údržby sítí s optickou lokalizací a analýzou.

K řadě FiberTracer náležející přístroje jsou lehké, kompaktní a jednoduše obsluhované ruční přístroje. Poskytují cennou podporu měřením jak útlumu tak i mrtvé zóny událostí v obou monomodových vlnových rozsazích 1310 a 1550 nm. Kromě toho může FiberTracer zjištěná data křivek uložit (až 200 křivek), tyto mohou být přeneseny do PC a zde pomocí „Trace-Manager“ softwaru analyzovány, shrnuty do zprávy a vytisknuty. Jednoduchou výměnou různých adapterů mohou být prováděna měření s rozličnými konektory.

VLASTNOSTI

- *Lehké, přenosné a ekonomicky výhodné*
- *Velmi precizní měření*
- *Velká paměť (až 200 měřených křivek)*
- *Vhodný pro použití v terénu (žádný pevný disk, chráněný proti prachu, vlhkosti a nárazu)*
- *Podporující měření útlumu a mrtvé zóny událostí*
- *Velký display se všemi informacemi o měření*
- *Výměnné konektorové adaptéry (FC/PC, SC nebo ST)*
- *Výstup dat přes RS232 / USB*
- *PC software pro analýzy a zprávy k předem uloženým datům*
- *Vestavěná NiMH baterie umožňuje 5 hodin nepřetržitě práce*
- *Certifikován podle CE, FCC, FDA*



TECHNICKÉ ÚDAJE

parametr	FiberTracer-13 A	FiberTracer-15A
vlnová délka (±20nm)	1310	1550
typ vlákna	Single-Mode	
max. měřicí rozsah (km)	60	100
mrtvá zóna(m)	20	
typ displeje	černobílý	
Emitter Type	LD	
typ konektoru	FC/PC (výměnný za SC,ST)	
přesnost měření vzdálenosti	±(1 m + 5×10-5×vzdálenost + sampling space)	
přesnost údaje útlumu	± 4 dB	
uložení měření	až 200 profilů	
přenos dat	RS-232/USB	
všeobecné údaje		
napájení	NiMH aku / síťový adapter	
provozní doba baterie	na nabití 4 hod měření nebo 20 hod standby	
provozní teplota	0°C ~ 50°C	
skladovací teplota	-20°C ~ 70°C	
relativní vlhkost	0 to 95% (nekondensující)	
hmotnost	0,87 kg	
rozměry (v x š x h)	196 × 100 × 60 mm	

poznámka: údaje specifikací mohou být bez oznámení změněny

ROZSAH DODÁVKY

Standardní vybavení:

měřicí přístroj, aku, síťový adapter, TraceManager Software CD, přenosový kabel (RS232/USB), kompaktní měkká transportní taška, záruční list, CE/FCC certifikáty, kalibrační certifikát, manuál.

opční příslušenství

označení	číslo dílu	označení	číslo dílu
50 m, opt. patchcord	P/N:AC-FJC-50-FC/FC	keramické jádro pro LS	P/N:AC-FRL-C
SC konektor für LS	P/N:AC-CONN-SC-L	gumový ochranný kryt	AC-RB-30A
ST konektor für LS	P/N:AC-CONN-ST-L		

OFL-20 Měřič optických poruch a délek

— ideální k lokalizaci optických událostí v optických sítích

POPIS



Měřicí přístroje ShinewayTech® řady **OFL-20** jsou měřiče optických poruch a délek v optických sítích. Vyznačují se nízkou hmotností a jednoduchým ovládáním. Inteligentní měření a rychlé výsledky po jednoduchém stlačení tlačítka pomáhají při instalaci, rutinních zkouškách a údržbě monomodových a multimodových optických sítí MAN, WAN a CATV.

Velký podsvícený LCD-display umožňuje komfortní práci ve dne i v noci. Měřicí přístroje řady **OFL-20** jsou známé

svojí dlouhodobou stabilitou, přesností, bezpečností a vynikající kvalitou.

V OFL-20 jsou uloženy mezní hodnoty; poruchy optických kabelů mohou být přesně lokalizovány na délkách až do 80 km. Hodnoty mohou být uloženy ve velké paměti a v případě potřeby transferovány do PC; tam pomůže dodaný software při analýze a umožní zprávy a tisk dat.

Při konstrukci přístroje bylo zejména dbáno na příjemnou obsluhu. Multifunkční transportní taška přístroje umožňuje použití v terénu i v laboratoři. Bez zdoluhavého školení mohou technici použít OFL-20 ihned k podpoře mnoha měření, za zlomek výdajů za OTDR.

VLASTNOSTI

- Lehký, přenosný a ekonomicky výhodný
- Jednoduše obsluhovatelný, lehce k naučení
- Rychlé měření, velký displej
- Vícejazyčná pracovní plocha
- Podsvícený display umožňuje práci ve tmě
- Obdivuhodná přesnost měření délky (± 2 m)
- Velká kapacita paměti (1150 měřených křivek)
- Výstup dat přes RS232 / USB
- PC software pro analýzu a zprávy
- Výměnné konektorové adaptéry (FC/PC, SC nebo ST)
- Chráněný proti prachu, vlhkosti a nárazu při použití v terénu
- Vestavěná NiMH baterie umožňuje 15.000 měření
- Automatické vypnutí při delším běhu na prázdko šetří baterii
- Varování vybití baterie
- CE-, FCC- a FDA-certifikát



TECHNICKÉ ÚDAJE

parametr	OFL-20A	OFL-20B
typ emitoru	LD	
vlnová délka (± 20 nm)	1310	1550
max. měření délky	50 km	80 km
min. měření vzdálenosti	20 m	
typ vlákna	Single/Multi-Mode	Single-Mode
optické připojení	Single Port	
typ konektoru	FC/PC	
přesnost měření	± 2 m	
refrakční faktor	1.4000 ~ 1.6999	
počet zjištěných událostí	až 7	
paměť dat	až pro 1150 měření	
automatické vypnutí	5 minut po posledním stlačení tlačítka	
přenos dat	RS-232 sériové rozhraní	
všeobecné údaje		
napájení	NiMH aku / síťový adapter	
provozní doba baterie-	na nabití ≥ 120 hod standby nebo $\geq 15,000$ měření	
provozní teplota	0°C ~ 50°C	
skladovací teplota	-20°C ~ 70°C	
relativní vlhkost	0 až 95% (nekondensující)	
hmotnost	0,6 kg	
rozměry (v x š x h)	196 × 100 × 44 mm	

poznámka: údaje specifikací mohou být bez oznámení změněny

ROZSAH DODÁVKY

standardní vybavení:

měřicí přístroj, aku, síťový adapter, OFL software CD, přenosový kabel, kompaktní měkká transportní taška, záruční list, CE/FCC certifikáty, kalibrační certifikát, manuál.

opční příslušenství

označení	číslo dílu	označení	číslo dílu
50 m, opt. patchcord	P/N:AC-FJC-50-FC/FC	keramické jádro pro LS	P/N:AC-FRL-C
SC konektor pro LS	P/N:AC-CONN-SC-L	ST konektor pro LS	P/N:AC-CONN-ST-L

OTM-20 Optical Test Meter

—An integrated tool for optical network test and maintenance.

Description



The ShinewayTech® OTM-20 series are integrated testers for optic fiber network, with the features of handheld, intelligent, multi-functional, fast test, dual-way powering system, large LCD display.

The OTM-20 series have a large memory capacity and can transfer the testing data to a PC by associated software for analyzing, reporting and printing. Its multi-functional kitbag is more convenient for field use and laboratory testing. The OTM-20 series are favored for its strong integrated function, outstanding quality, value, stability and safety.

The OTM-20 models combine the function of Laser Source (& Visible Laser) and Optical Power Meter, and ideal for both single-mode and multi-mode fiber checkouts. Besides conducting the measurement of absolute and relative power value, it also can activates self-testing system to measure optical loss of optic fiber cable and passive device, perfect for field installation, routine inspection and maintenance of Optic Telecom and CATV as well as for lab test and research work.

With the optional function of Visible Laser, the OTM can generate red laser and the visible red laser that escapes from optical fibers, finding breaks and tight bends in optical fibers. The visible red laser makes testing and finding breaks in LANs, verifying continuity, checking the validity of patch cables or looking for cracked fiber in splice cases, bad connectors, tight bends in fiber cable.

Features

- Support quick test, intelligentized operation
- Graphic interface, large easy to read LCD display
- Bilingual operation (English and simplified Chinese)
- Multi-wavelength auto self-testing
- Relative/absolute power measurement
- Measurement units in dB, dBm and W (or mW)
- Large memory capacity (4000 measurements)
- RS-232 data upload port, and PC associated software for previously stored data analyzing, graphic drawing and reporting
- Both continuous wave (CW) and modulated frequencies modes
- Single optical connector realizing dual-wavelength output
- Support auto test of optic fiber loss
- Draw changing curve of power value
- Support the optical power alarm function
- Automatically data storage
- Damp, dust and shock proof design, ideal for operation
- Dual-way powering system, auto recharging
- Interchangeable fiber-optic adapters (choice of FC, SC or ST)
- Build-in rechargeable battery pack
- Low battery indicator and auto recharging display
- Auto off function conserving battery life
- CE, FCC, FDA certificate



field

Technical Specifications

Optical Specifications	OTM-20A	OTM-20B	OTM-20C	OTM-20D
Optical Power Meter Module				
Detector Type	InGaAs			
Measurement Range (dBm)	-70 ~ +10		-50 ~ +27	
Calibrated Wavelength (nm)	850,1300,1310,1550		980,1310,1480,1550	
Accuracy (25°C& 10dBm)	±0.25 dB (5%)			
Resolution(dB)	0.001			
Laser Source Module				
Emitter Type	FP-LD			
Wavelength (±20nm)	1310/1550	850/1300	1310/1550	850/1300
Output Power (dBm)	≥ -7			
Spectral Width (nm)	≤ 5			
Stability	±0.05 dB/15min			
	±0.10 dB/8hr@1310/1550 nm; ±0.15 dB/8hr@850/1300 nm			
Modulation Frequencies(Hz)	270 , 1K , 2K Optional			
Connector Type	FC/PC(Interchangeable SC,ST)			
Visible Laser Source Module (for OTM-20AV/BV/CV/DV only)				
Emitter Type	FP-LD			
Wavelength (±20nm)	650			
Output Power (dBm)	≥ -3			
Modulation Frequencies(Hz)	1			
Connector Type	FC/PC (interchangeable SC,ST)			
General Specifications				
Data Storage	1000 measurements per wavelength Totalled 4000 measurements			
Power Supply	NiMH chargeable battery/AC adapter			
Battery Life	Support ≥80 hrs for only OPM operation / ≥35 hrs for OPM and OLS together on one charge			
Operating Temperature	0°C to 50°C			
Storage Temperature	-20°C to 60°C			
Relative Humidity	0 to 95% (non-condensing)			
Weight	1.3 lbs (0.6kg)			
Dimensions (H×W×T)	7.7×3.9×1.7 inch (196×100×44mm)			

Note: Specifications subject to change without notice.

Ordering Information

Standard

Configuration:

Instrument(including rechargeable battery), OTM software CD, Data transfer cable(RS232), AC adapter, Rubber boot, Protective soft bag, Warranty card, CE/FCC certificate, Certificate of Calibration, User's manual.

Optional Accessory:

Part Description	Part Number	Part Description	Part Number
3m, optical patch cord	P/N:AC-FJC-03-FC/FC	Fiber Connector Cleaner	P/N:AC-CLN-TAPE
50m, optical patch cord	P/N:AC-FJC-50-FC/FC	Connector Clean Stick	P/N:AC-CLN-STK
SC connector for LS	P/N:AC-CONN-SC-L	Ceramics core for LS	P/N:AC-FRL-C
ST connector for LS	P/N:AC-CONN-ST-L	Toolkit for softbag	P/N:AC-PB-30
SC connector for PM	P/N:AC-CONN-SC-P-1000	Toolkit for luxury package	P/N:AC-PB-40
ST connector for PM	P/N:AC-CONN-ST-P-1000		

OTS-20/30 Multi-purpose Optical Talk Sets

—An effective tool for field communication and test

Description



The ShinewayTech® OTS-20/30 series are highly efficient tools for optical network field work, that integrate the functions of digital optical phone, stabilized laser source and optical power meter (for OTS-30 only) in one set. They are full duplex, portable, intelligent and multi-functional.

Designed to fully embody the user's needs in mind, the OTS-20/30 series can be widely used in optical fiber networks of digital data, telecommunication and cable TV for engineering construction, checking & testing, maintenance as well as optical fiber attenuation measurement.

With the functions of stabilized laser source and optical power meter, they can help the engineers at any two given points to complete the field testing within the shortest time. They are highly praised for its excellent quality, value and all-in-one feature.

FEATURES

- *Single fiber, full duplex*
- *Digital voice coding and decoding process to guarantee high-quality speech*
- *Multi-function, providing both stabilized laser source and optical power meter*
- *Large memory capacity (3200 measurements)*
- *PC software available for testing data collection and report generation*
- *Multiparty communication to extend the communication distance*
- *Together with Optical Clip-On Coupler, realizing online communications*
- *Compact size, lightweight, and damp, dust, shock proof*
- *Dual-way power supply system, auto recharging*
- *Auto off function conserving battery life*
- *CE, FCC, FDA certificate*



Technical Specifications

1. Optical Specifications	2. OTS-20				3. OTS-30			
	4. A	5. B	6. C	7. D	8. A	9. B	10. C	11. D
12. Display	13. LED				14. LCD			
15. Optical Connector	16. Single Port				17. Dual Ports			
18. Talk Set Module								
19. Wavelength (±20nm)	20. 1310	21. 1550	22. 1310	23. 1550	24. 1310	25. 1550	26. 1310	27. 1550
28. Maxi. Transmission Range(Km)	29. 110	30. 160	31. 130	32. 180	33. 110	34. 160	35. 130	36. 180
37. Dynamic Range(dB)	38. ≥40		39. ≥45		40. ≥40		41. ≥45	
42. Emitter Type					43. FP-LD			
44. Spectral Width (nm)					45. ≤5			
46. Laser Source Module								
47. Wavelength (±20nm)	48. 1310	49. 1550	50. 1310	51. 1550	52. 1310	53. 1550	54. 1310	55. 1550
56. Output Power(dBm)	57. ≥-5		58. ≥-1		59. ≥-5		60. ≥-1	
61. Modulation Frequencies(Hz)	62. 2K				63. 270, 1k, 2K			
64. Stability					65. ±0.05 dB/15min; ±0.15dB/8hr			
66. Connector Type					67. FC/PC(Interchangeable SC,ST)			
68. Power Meter Module (for OTS-30 only)								
69. Detector Type					70. InGaAs			
71. Connector Type					72. FC/PC(Interchangeable SC,ST)			
73. Display Range (dBm)					74. -70 ~ +10 or -50 ~ +27			
75. Calibrated Wavelength (nm)					76. 850,1300,1310,1550			
77. Accuracy					78. ±0.25 dB (5%) @25°C&-10dBm			
79. General Specifications								
80. Power Supply					81. NiMH chargeable battery(1600mA/h) /AC adapter, auto recharging			
82. Battery Life					83. Support ≥10 hrs continuous operation on one charge			
84. Operating Temperature					85. 0°C to 50°C			
86. Storage Temperature					87. -20°C to 70°C			
88. Relative Humidity					89. 0 to 95%(non-condensing)			

90. Weight

91. 1.3 lbs(600kg)

92. Size(H×W×T)

93. 7.7×3.9×1.7 inch(196×100×44mm)

Note: Specifications subject to change without notice.

Ordering Information

Optical Talk Sets are purchased in pairs. Two units are required for communication.

Standard

Configuration:

Instrument(including rechargeable battery), headset, AC adapter, Rubber boot, Toolkit for softbag, OTS software CD(for OTS-30), Data transfer cable(RS232)(for OTS-30),Warranty card, CE /FCC certificate, Certificate of Calibration, User's manual.

Optional Accessory:

Part Description	Part Number	Part Description	Part Number
3m, optical patch cord	P/N:AC-FJC-03-FC/FC	Fiber Connector Cleaner	P/N:AC-CLN-TAPE
50m, optical patch cord	P/N:AC-FJC-50-FC/FC	Connector Clean Stick	P/N:AC-CLN-STK
SC connector for LS	P/N:AC-CONN-SC-L	Ceramics core for LS	P/N:AC-FRL-C
ST connector for LS	P/N:AC-CONN-ST-L	Protective soft bag	P/N:AC-PB-20
SC connector for PM	P/N:AC-CONN-SC-P-300	Toolkit for luxury package	P/N:AC-PB-40
ST connector for PM	P/N:AC-CONN-ST-P-300		

OPM-x/1x/2x Optical Power Meters

— A cute tool for optical network test

Description



The ShinewayTech® OPM-x/1x/2x optical power meters are compact, lightweight and easy-to-use testing instruments for optical fiber network, with unique characteristics of quick testing. Widely favored for their quality, value, reliability, accuracy and safety.

The pocketsize OPM series can support accurate testing of single mode and multimode optical fiber systems, with features of large LCD display, damp and shock proof design and dual-way powering system. The internal microprocessor and linear amplifier technology ensure the long-time accuracy. Besides, OPM-2x has a large memory capacity of 3000 records and can transfer the measurement data to a PC for editing and printing.

Ideal for both laboratory and field applications by using concise function keys to implement quick, high accuracy testing. Under the situation of laboratory, LANs, WANs and CATV as well as long-distance optical network, the Optical Power Meters, together with ShinewayTech's Stabilized Laser Sources, can be used to identify optical fiber, measure optical attenuation, verify continuity and evaluate fiber link transmission quality.

Features

- Pocketsize, large easy to read LCD display, easy to use
- Fast response, no warm up
- Measure six wavelengths through a single connector
- Direct loss measurement units in dB
- Absolute power measurement units in dBm and μW
- Interchangeable fiber-optic adapters (choice of FC, SC or ST)
- Dual-way powering system including a 9V battery and an optional power adapter
- Damp, dust and shock proof design
- PC software available for testing data collection and report generation (only available for OPM-2x)
- Auto off function conserving battery life
- CE, FCC certificate



OR

Technical Specifications

Optical Specifications		OPM-5	OPM-10			OPM-15			OPM-21			OPM-25		
			A	B	C	A	B	C	A	B	C	A	B	C
Calibrated Wavelength (nm) ⁽¹⁾		633,650, 670,850	850,1300, 1310,1550			850,1300, 1310,1490, 1550			850,1300, 1310,1490, 1550			850,1300, 1310,1490, 1550,1625		
Measurement Range (dBm) ⁽²⁾	-50~+10	✓												
	-70~+10		✓			✓			✓			✓		
	-50~+27			✓			✓			✓			✓	
	-60~+17				✓			✓			✓		✓	
Functions		W/μW/dBm				W/μW/dBm/dB(REF)								
Data Storage		N/A						3000 records						
Interface		N/A						RS-232						
Detector Type		Si	InGaAs											
Range of Use		plastic/multiple mode fiber	Single/multiple mode fiber											
Optical Connector ⁽³⁾		FC (interchangeable SC,ST)												
Accuracy		±0.25 dB (5%) @25°C& -10dBm												
Resolution(dB)		0.01												
Auto Shut Off		5 minutes after last key has been depressed												
General Specifications														
Power Supply		9V Alkaline battery(450mAh) / optical 9V AC adapter												
Battery Life		≥40hrs. Typical operation with 9V Alkaline												
Operating Temperature		0°C to 50°C												
Storage Temperature		-20°C to 60°C												
Relative Humidity		0 to 95% (non-condensing)												
Weight		0.66 lbs (300g)												
Size(H×W×T)		5.7×2.9×1 inch (145×75×25mm)												

Note:

(1) Other wavelength and measurement can customize.

(2) For 850nm, the lower limit of measurement range is -60 dBm.

(2) For plastic mode fiber, Optical Connector is special.

Specifications subject to change without notice;

Ordering Information

Standard

Configuration:

Instrument, 9V alkaline battery, OPM software CD(for OPM-21/25), Data transfer cable(for OPM-21/25), Rubber boot, Warranty card, CE certificate, Certificate of Calibration, User's manual.

Optional Accessory:

Part Description	Part Number	Part Description	Part Number
3 m, optical patch cord	P/N:AC-FJC-03-FC/FC	50 m, optical patch cord	P/N:AC-FJC-50-FC/FC
SC connector for PM	P/N:AC-CONN-SC-P-300	AC adapter for US	P/N:AC-ADPT-10-US
ST connector for PM	P/N:AC-CONN-ST-P-300	Protective soft bag	P/N:AC-PB-10

SLS-1x/2x Stabilized Laser Sources

— An excellent tool for optical network test

Description

The ShinewayTech®SLS-1x/2x series are pocket-size, lightweight, easy-to-use stabilized laser sources. Based on advanced technologies of precision laser control, the SLS models have been designed to provide high capability of laser source for engineering, R&D and equipment manufactures, and being favored for its quality, value, reliability and safety.

Ideal tools for optical network installation, trouble shooting and maintenance, with features of damp and shock proof design and dual-way powering system.

The SLS-2x series can provide a very stabilized optical signal at multi-wavelength, together with any of ShinewayTech's Optical Power Meters, can be used to identify optical fiber, measure optical attenuation, verify continuity and evaluate fiber link transmission quality.

Features

- *Pocket-size, easy to use*
- *Fast response, no warm up*
- *Damp, dust and shock proof design*
- *Modulation in CW and modulated frequencies*
- *Single/dual/triplex wavelength selectable*
- *Interchangeable fiber-optic adapters (choice of FC, SC or ST)*
- *High stabilized output of optical signal*
- *Dual-way powering system including a battery and an optional power adapter*
- *Auto off function conserving battery life*
- *CE, FCC, FDA certificate*



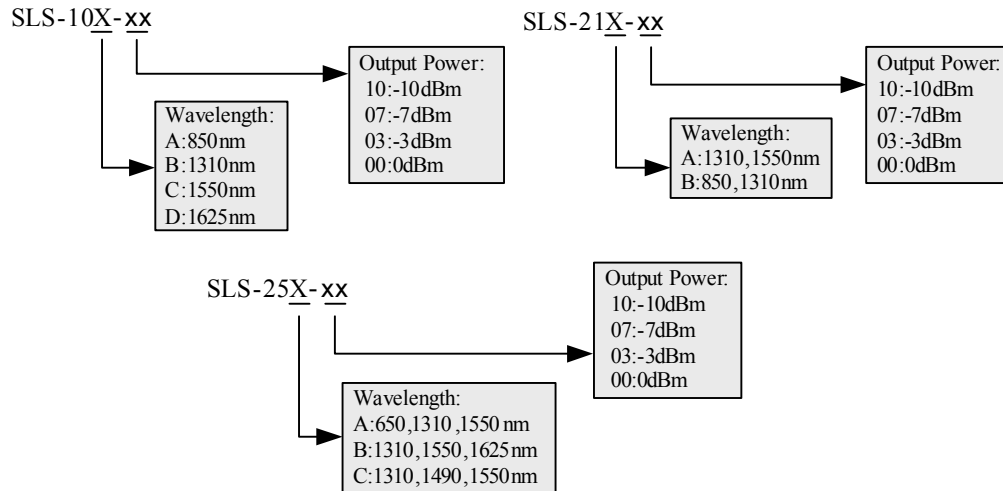
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Technical Specifications

Optical Specifications	SLS-10 Single-wavelength				SLS-21 Dual-wavelength		SLS-25 Triplex-wavelength		
	A	B	C	D	A	B	A	B	C
Wavelength (±20nm)	850	1310	1550	1625	1310/1550	850/1300	650/1310/1550	1310/1550/1625	1310/1490/1550
Display	LCD								
Optical Connector	Single Port					Dual Ports			
Output Mode	1Hz@650nm; CW,270Hz,1KHz,2KHz@others								
Emitter Type	FP-LD@650,850,1300,1310,1550nm; DFB-LD@1625nm								
Output Connector	FC/PC (interchangeable SC , ST)								
Spectrum Width	≤ 5nm								
Output Power	≥ -3dBm @ 650nm; ≥ -10/-7/-3/0dBm @ 1310/1550/1625nm; ≥ -10/-7dBm @ 850/1300nm								
Stability	±0.05dB/15min ±0.10dB/8hr@ 1310/1550/1625nm; ±0.15dB/8hr@ 850/1300 nm								
Range of Use	Multi/Single Mode Fiber								
Auto Shut Off	5 minutes after last key has been depressed								
General Specifications									
Power Supply	9V Alkaline battery(450mAh) / optical 9V AC adapter								
Battery Life	≥20hrs. typical operation with 9V Alkaline								
Work Temperature	0°C to 50°C								
Storage Temperature	-20°C to 60°C								
Relative Humidity	0 to 95%(non-condensing)								
Weight	0.66 lbs (300g)								
Size (H×W×T)	5.7×2.9×1 inch (145×75×25mm)								

Note: Specifications subject to change without notice.

Model Illumination



Ordering Information

Standard Configuration:

Instrument, 9V alkaline battery, Rubber boot, Warranty card, CE certificate, Certificate of Calibration, User's manual

Optional Accessory:

Part Description	Part Number	Part Description	Part Number
3 m, optical patch cord	P/N:AC-FJC-03-FC/FC	Ceramics core for LS	P/N:AC-FRL-C
SC connector for LS	P/N:AC-CONN-SC-L	AC adapter for US	P/N:AC-ADPT-10-US
ST connector for LS	P/N:AC-CONN-ST-L	Protective soft bag	P/N:AC-PB-10

VLS-20 Visible Laser Source

— An excellent tool for optical network test.

Description



The ShinewayTech® VLS-20 is compact, easy-to-use visible red laser source for finding breaks and tight bends in optical fibers. The VLS-20 generates red laser and the visible red laser that escaping from optical fibers makes testing and finding breaks in LANs, verifying continuity, checking the validity of patch cables or looking for cracked fiber in splice cases, bad connectors, tight bends in fiber cable.

Besides, it is also regarded as a perfect complementary tool for OTDR, due to its capability of finding breaks in the blink area of OTDR.

Features

- *Pocket-size, easy to use*
- *Fast response, no warm up*
- *Damp, dust and shock proof design*
- *Interchangeable fiber-optic adapters (choice of SC or ST)*
- *Dual-way powering system including a 9V battery and an optional AC adapter*
- *Auto off function conserving battery life*
- *CE, FCC, FDA certificate*



FC,

Technical Specifications

Optical Specifications	VLS-20A	VLS-20B
Emitter Type	FP-LD	
Wavelength (±20nm)	650	
Output Power (dBm)	≥ -3	≥ 3
Max.measurement Range (Km)	5	10
Modulation Frequencies(Hz)	1	
Display Type	LED	
Optical Connector	FC/PC(Interchangeable SC,ST)	
Range of Use	Single /multiple mode fiber	
General Specifications		
Power Supply	9V Alkaline battery(450mAh) / optical AC adapter	
Battery Life	≥20hrs	
Work Temperature	0°C to 50°C	
Storage Temperature	-20°C to 60°C	
Relative Humidity	0 to 95% (non-condensing)	
Weight	0.59 lbs(270g)	
Size (H × W × T)	5.7×2.9×1 inch (145×75×25mm)	

Note: Specifications subject to change without notice.

Ordering Information

Standard Configuration:

Instrument, 9V alkaline battery, Rubber boot, Warranty card, CE certificate, Certificate of Calibration, User's manual

Optional Accessory:

Part Description	Part Number	Part Description	Part Number
3 m, optical patch cord	P/N:AC-FJC-03-FC/FC	Ceramics core for LS	P/N:AC-FRL-C
SC connector for LS	P/N:AC-CONN-SC-L	AC adapter for US	P/N:AC-ADPT-10-US
ST connector for LS	P/N:AC-CONN-ST-L	Protective soft bag	P/N:AC-PB-10

OLT-20 Optical Loss Tester

—A versatile tool for fast testing of optical networks

Description



The ShinewayTech® OLT-20 series is a multi-functional testing instrument for optic fiber networks, which features by pocket-size, intelligentized and easy-to-use. The useful applications include installation, routine inspection and daily maintenance of MAN, WAN and CATV systems as well as for lab test and research work.

The OLT-20 series integrates laser source module and power meter module in one set, which can perform power testing and link loss testing of optic fiber network conveniently. It can test within the shortest time and efficiently avoid the file mistakes caused by not matching of laser source and power meter. They are highly praised for its excellent quality, safety, value and multi-functional features.

Features

Pocketsize, large LCD display

- Multi-wavelength measurement
- Direct loss measurement units in dB
- Link loss testing
- Absolute power measurement units in
- Modulation in CW and modulated
- Optional 270/1K/2K Hz Modulated
- Dual-wavelength output in single
- Dual-way powering system including and AC adapter
- Low power indicator
- Auto off conserving battery life
- CE, FCC, FDA certificate



dBm or μ W
frequencies
frequencies
optic output
a 9V battery

Specifications



Optical Specifications	OLT-20					
	A	B	C	D	E	F
Laser Source Module						
Wavelength(±20nm)	1310/1550	850/1300	1310/1550	850/1300	1310/1550	850/1300
Output Power (dBm)	≥ -7					
Spectral Width(nm)	≤ 5					
Emitter Type	FP-LD					
Stability	±0.05 dB/15min ±0.10dB/8hr@1310/1550nm;±0.15dB/8hr@850/1300nm					
Modulation Frequencies (Hz)	270,1K,2K optional					
Connector Type	FC/PC(interchangeable ST,SC)					
Optical Power Meter Module						
Detector Type	InGaAs					
Measurement Range (dBm)	-70 ~ +10	-50 ~ +27	-60 ~ +17			
Accuracy (25°C& -10dBm)	±0.25					
Resolution (dB)	0.01					
Calibrated Wavelength (nm)	850, 1300, 1310,1490, 1550, 1625					
General Specifications						
Power Supply	Dual way: 9V Alkaline battery and AC adapter					
Operating Temperature	0°C to 50°C					
Storage Temperature	-20°C to 60°C					
Relative Humidity	0 to 95%(Non-condensing)					
Weight	0.66lbs (300g)					
Dimensions(H×W×T)	5.7×2.9×1 inch (145×75×25mm)					

Note: Other calibrated wavelength can be also ordered.

Specifications subject to change without notice.

Ordering information

Standard Configuration:

Instrument, 9V alkaline battery, Rubber boot, Warranty card, CE certificate, Certificate of Calibration, User's manual

Optional Accessory:

Part Description	Part Number	Part Description	Part Number
3 m, optical patch cord	P/N:AC-FJC-03-FC/FC	Ceramics core for LS	P/N:AC-FRL-C
SC connector for LS	P/N:AC-CONN-SC-L	SC connector for PM	P/N:AC-CONN-SC-P-300
ST connector for LS	P/N:AC-CONN-ST-L	ST connector for PM	P/N:AC-CONN-ST-P-300
AC adapter for US	P/N:AC-ADPT-10-US	Protective soft bag	P/N:AC-PB-10

OFI-20 Optical Fiber Identifier

—An excellent tool for optical network test

Description



The **ShinewayTech®** OFI-20 series are handheld, easy-to-use optical test instruments that identify optical fibers without any damage by detecting the optical signals being transmitted through the fibers. By non-destructive macro-bend detection technology & mechanism damp technology, it avoids opening the fiber at the splice point

for identification and interrupting service.

The OFI-20 can accurately detect the optical signals, signal directions and the presence of 2kHz modulated tone. It can test all kinds of fibers, including fibers of 250um and 900um and Ribbon as well as jacketed fibers of 2mm and 3mm.

With its wide dynamic range, OFI-20 can efficiently identify the wide-spectrum signals, such as signals in CATV system and EDFA. Therefore it can be used in all the physical layer testing of SONET/SDH & DWDM systems. They are excellent tools for optical network test.

Features

- Handheld, easy to use
- Equipped with corresponding adapter for bare fiber and tail fiber
- Intensity display of optical signal
- Low battery indication
- Buzz indication function
- Display of transmission direction of light
- Identification of various signal frequency: 270Hz, 1kHz, 2kHz
- CE, FCC certificate

Technical Specifications

Model	OFI-20 B
Wavelength range for Identification	800~1700nm
Type of Detector	InGaAs
Signal Type	CW、270Hz±10%、1kHz±10%、2kHz±10%
LED Display	Signal, direction, frequency (270Hz,1kHz,2kHz), intensity (5 class), Low battery
Detect Sensitivity ⁽¹⁾	Over -55dBm
Fiber Type	250um、900um, Ribbon 2mm、3mm Jacketed Fiber
Typical Loss	H 0.25 ~ H 0.9 : 0.1dB H 2.0 ~ H 2.5 : 0.5dB
General Specifications	
Battery	9V Alkaline battery
Battery Life	≥16hrs
Work Temperature	0°C to 50°C
Storage Temperature	-20°C to 60°C
Relative Humidity	0 to 95% (non-condensing)
Weight	0.44 lbs (200g)
Size (H×W×T)	7.8×3.1×2.6 inch (200×80×40mm)

Note:

(1) Detect sensitivity is a typical value tested at the wavelength of 1310 and 1550nm.

Specifications subject to change without notice.

Ordering Information

Standard

Configuration:

Instrument, 9V alkaline battery, Optical clamp, Screwdriver, strap, Protective soft bag, Warranty card, CE certificate, Certificate of Calibration, User's manual

MLS-20 Multi-wavelength Laser Sources

—A powerful tool for optical network test

Description

The ShinewayTech® MLS series are powerful, pocket-size, lightweight, easy-to-use stabilized laser sources with higher customer value. Based on advanced technologies of precision laser control, the MLS models have been designed to provide high capability of laser source for engineering, R&D and equipment manufacturers in optical network.

Ideal tools for both laboratory and field applications, with features of damp and shock proof design and dual-way powering system, the MLS series can be widely applied under the situation of laboratory, LANs, WANs and CATV well as long-distance optical network. Besides, the internal microprocessor and linear amplifier technology ensure the time accuracy.



as
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The MLS series can provide a very stabilized optical signal at several kinds of wavelength, together with any of ShinewayTech's Optical Power Meters, can be used to identify optical fiber, measure optical attenuation, verify continuity and evaluate fiber link transmission quality.

Besides, the MLS series contain a 650nm visible red laser source for finding breaks. It generates red laser and the visible red laser that escaping from optical fibers makes testing and finding breaks in LANs, verifying continuity, checking the validity of patch cables or looking for cracked fiber in splice cases, bad connectors, tight bends in fiber cable.

Features

- Multi-wavelength selectable
- Nearly all kinds of wavelengths in optical network are supported
- Easy-to-use visible laser source for finding breaks
- Modulation in CW and modulated frequencies
- Modulation frequencies in 270, 1K, 2KHz (1Hz@650nm)
- 1625nm laser source with optical power meter to measure upper limit loss in DWDM
- Dual-way powering system including a 1600mAh battery and an optional power adapter
- Low battery annunciator
- Auto off function conserving battery life

➤ CE, FCC, FDA certificate

Specifications

Optical Specifications	MLS-20A (four wavelengths)	MLS-20B (five wavelengths)	MLS-20C (five wavelengths)	MLS-20D (five wavelengths)
Wavelength (±30nm)	850,1300,1310,1550	650,850,1300,1310,1550	850,1300,1310,1490,1550	850,1300,1310,1550,1625
Display Type	LED			
Emitter Type	FP-LD@650,850,1300,1310,1490,1550nm; DFB-LD@1625nm			
Spectrum Width (nm)	≤ 5			
Output Power	≥ -3 dBm@650nm; ≥ -7 dBm@850,1300,1310,1490,1550,1625nm			
Modulation Frequencies(Hz)	1@650nm; 270,1K, 2K, optional with @850,1300,1310,1490,1550,1625nm			
Stability	±0.05 dB/15min ±0.10dB/8hr @1310,1490,1550,1625nm; ±0.15dB/8hr @850/1300nm			
Output Connector	FC/PC(interchangeable SC,ST)			
Application Range	Multi / Single Mode Fiber			
Auto Shut Off	five minutes after last key has been depressed			
General Specifications				
Power Supply	Dual way: NiMH chargeable battery (1600mAh) and AC adapter			
Battery Life	≥40 hours			
Operating Temp.	0℃ ~ 50℃			
Storage Temp.	-20℃ ~ 70℃			
Relative Humidity	0 to 95% (non-condensing)			
Weight	1.3 lbs (600g)			
Size (H × W × T)	7.7×3.9×1.7 inch (196×100×44 mm)			

Note: Specifications subject to change without notice; Stabilized Laser source for other wavelength and output power can be specially ordered.

Ordering Information

Standard

Configuration:

Instrument(including rechargeable battery), AC adapter, Rubber boot, Protective soft bag, Warranty card, CE certificate, Certificate of Calibration, User's manual.

Optional Accessory:

Part Description	Part Number	Part Description	Part Number
3m, optical patch cord	P/N:AC-FJC-03-FC/FC	Ceramics core for LS	P/N:AC-FRL-C
SC connector for LS	P/N:AC-CONN-SC-L	ST connector for LS	P/N:AC-CONN-ST-L

FiberCute

— A powerful tool for optical network maintenance

Description

The ShinewayTech® FiberCute series are very powerful tools for optical network fieldwork, that integrate the functions of optical power meter, stabilized laser source, visible laser source, talk set, loss test, fiber length test in one set. They are portable, intelligent and multi-functional, that maximally reduce the burden of personnel for field communication and test.

The FiberCute series can be widely used in optical networks of digital data, telecommunication and cable engineering construction, checking & testing, maintenance as well as optical fiber attenuation measurement. The functions of optical talk sets and power meter can help the engineers at any two given to get the measurements of loss and attenuation data the shortest time. With the functions of visible laser and fiber length tester, they can inspect the short fiber optical cable and fiber connector. They are highly for its excellent quality, value and all-in-one feature.



fiber
TV for

optical
points
within
source
inside
praised

The FiberCute series without any tedious learning process are designed to fully embody the user's convenience in mind. They are really cute tools for field communication and test.

FEATURES

- Six test functions in one set
- Support multi-task, for example
 - ✓ Optical talk sets, optical power meter, visible laser source and fiber identifier
 - ✓ Optical talk sets, length tester, visible laser source and fiber identifier
 - ✓ Pulse modulation signal, optical power meter and visible laser source
- Graphic interface, large easy to read LCD display
- Digital voice coding and decoding to guarantee high-quality speech
- Together with Optical Clip-On Coupler, realizing online communications
- Compact size, lightweight, and damp, dust, shock proof

- NiMH chargeable battery or AC adapter, auto recharging
- Auto off function conserving battery life
- CE, FCC, FDA certificate

Technical Specifications

Optical Specifications	FiberCute-13	FiberCute-13	FiberCute-15	FiberCute-15
	A	B	A	B
Talk Set Module				
Wavelength (±20nm)	1310		1550	
Dynamic Range (dB)	40	45	40	45
Transmission Distance (Km)	110	130	160	180
Emitter Type	FP-LD			
Spectral Width (nm)	≤ 5			
Stabilized Laser Source Module				
Wavelength(±20nm)	1310		1550	
Output Power ⁽¹⁾	≥ 5 dBm	≥ 1 dBm	≥ 5 dBm	≥ -1 dBm
Stability	±0.05 dB/15min; ±0.15 dB/8hrs			
Modulation Frequencies	270Hz,1KH, KHz			
Emitter Type	FP-LD			
Spectral Width (nm)	≤ 5			
Connector Type	FC/PC(Interchangeable SC,ST)			
Optical Fiber Length Test Module				
Wavelength (±20nm)	1310		1550	
Maximum Distance Measured	50Km		80Km	
Minimum Distance Measured	20m			
Emitter Type	LD			
Connector Type	FC/PC(Interchangeable SC,ST)			
Max number of events detected	7			
Accuracy	±2m			
Index of Refraction	1.4000~1.6999			
Power Meter Module				
Detector Type	InGaAs			
Connector Type	FC/PC(Interchangeable SC,ST)			
Display Range (dBm)	-70 ~ +10			
Calibrated Wavelength (nm)	850,980,1300,1310,1550			

Accuracy	±0.25 dB (5%) @ 25□ & -10dBm
Memory Capacity	3000 measurements
Visible Laser Source Module	
Emitter Type	FP-LD
Optical Connector	FC/PC(Interchangeable SC,ST)
Wavelength(±20nm)	650
Output Power	≥5dBm
Modulation Frequencies	1Hz
General Specifications	
Power Supply	NiMH chargeable battery/AC adapter, auto recharging
Battery Capacity	16hrs standby or 9hrs operations
Data Transmission	RS232
Operating Temperature	0□ ~ 50□
Storage Temperature	-20□ ~ 70□
Relative Humidity	0 to 95% (non-condensing)
Weight	1.8 lbs (0.85kg)
Size (H x W x T)	7.7×3.9×2.4 inch (196×100×64mm)

Note: (1) Output power of Stabilized Laser Source Module can be adjusted manually with 0.1dBm each pace within ±1dBm range.

Ordering Information

Standard

Configuration:

Instrument(including rechargeable battery), AC adapter, Headset, FiberCute software CD, Data transfer cable(RS232), Rubber boot, Toolkit for softbag, Fiber Connector Cleaner, Connector Clean Stick, Warranty card, CE/FCC certificate, Certificate of Calibration, User's manual.

Optional Accessory:

Part Description	Part Number	Part Description	Part Number
3 m, optical patch cord	P/N:AC-FJC-03-FC/FC	50 m, optical patch cord	P/N:AC-FJC-50-FC/FC
SC connector for LS	P/N:AC-CONN-SC-L	Ceramics core for LS	P/N:AC-FRL-C
ST connector for LS	P/N:AC-CONN-ST-L	Toolkit for luxury package	P/N:AC-PB-40
SC connector for PM	P/N:AC-CONN-P-300	Protective soft bag	P/N:AC-PB-20
ST connector for PM	P/N:AC-CONN-P-300		

VLP Visible Laser Pen

— A cute tool for fiber fault checking

Description



VLP-15

The ShinewayTech® VLP is compact, easy-to-use visible red laser pen for finding breaks and tight bends in optical fibers. The VLP generates the visible red laser that escaping from optical fibers makes testing and finding breaks in LANs, verifying continuity, checking the validity of patch cables or looking for cracked fiber in splice cases, bad connectors, tight bends in fiber cable.

Besides, it is also regarded as a perfect complementary tool for OTDR, due to its capability of finding breaks in the blink area of OTDR.

Features

- *Pen-size, easy to use*
- *Fast response, no warm up*
- *Damp, dust and shock proof design*
- *All-purpose fiber-optic adapters*
- *1.5V battery power supply*
- *CE, FCC, FDA certificate*



VLP-10

Technical Specifications

Optical Specifications	VLP-10	VLP-15
Emitter Type	LD	
Wavelength ($\pm 20\text{nm}$)	650	
Output Power (dBm)	≥ -4	≥ 0
Max.measurement Range (Km)	≥ 4	≥ 5
Modulation Frequencies(Hz)	1	
Display Type	LED	
Optical Connector	Universal Push Pull	
Range of Use	Single /multiple mode fiber	
General Specifications		
Power Supply	two Alkaline battery	one Alkaline battery
Battery Life	$\geq 10\text{hrs}$	
Work Temperature	0°C to 50°C	
Storage Temperature	-20°C to 60°C	
Relative Humidity	0 to 95% (non-condensing)	
Weight	120g (0.26 lbs)	70g (0.15 lbs)
Size($\Phi \times L$)	$16 \times 160\text{mm}$ ($0.6 \times 6.3\text{inch}$)	$23 \times 140\text{mm}$ ($0.9 \times 5.5\text{inch}$)

Note: Specifications subject to change without notice.

Ordering Information

Standard

Configuration:

Instrument, battery, Warranty card, CE certificate, Certificate of Calibration, User's manual

ORL-20 Optical Return Loss Tester

— An integrated tool for optical return loss testing

Description



The ShinewayTech® ORL-20 series are integrated testers for optical fiber network, with the features of handheld, intelligent, multi-functional.

The ORL-20 series have a large memory capacity and can transfer the testing data to a PC by associated software for analyzing, reporting and printing. Its multi-functional kitbag is more convenient for field use and laboratory testing. The ORL-20 series are favored for its strong integrated functions, outstanding quality,

value, stability and safety.

The ORL-20 models combine the function of Optical Return Loss, Laser Source and Optical Power Meter. Besides measuring return loss and conducting the measurement of absolute and relative power value, it also can activates self-testing system to measure optical loss of optic fiber cable and passive device, perfect for verifying polish quality of connectors, measuring link return loss, field installation, routine inspection and maintenance of Optic Telecom and CATV as well as for lab test and research work.

Features

- Support quick test, intelligent operation
- Graphic interface, large easy to read LCD display
- Bilingual operation (English and simplified Chinese)
- Single/multi-model optical fiber return loss test
- Relative/absolute power measurement
- Measurement units in dB, dBm and W (or mW)
- Large memory capacity (2000 measurements)
- RS-232 data upload port, and PC associated software for previously stored data analyzing, graphic drawing and reporting



- Both continuous wave (CW) and modulated frequencies modes
- Auto test of optic fiber loss
- Draw curve of power value changing
- Optical power alarm function
- Damp, dust and shock proof design, ideal for field operation
- Dual-way powering system, auto recharging
- Interchangeable fiber-optic adapters (choice of FC, SC or ST)
- Build-in rechargeable battery pack
- Low battery indicator and auto recharging display
- Auto off function conserving battery life
- CE, FCC, FDA certificate

Technical Specifications

Optical Specifications	ORL-20A	ORL-20B	ORL-20C	ORL-20D
Return Loss Module				
Emitter Type	FP-LD		FP-LD; DFB-LD	
Wavelength(±20nm)	1310/1550		1550/1625	
Output Power(dBm)	≥ -5			
Stability	±0.05 dB/15min			
	±0.10 dB/8hr			
ORL Dynamic Range(dB)	65			
ORL Accuracy(dB)	±0.5 dB@0 ~ 50dB; ±1.0 dB@50 ~ 60dB			
ORL Resolution(dB)	0.1			
Modulation Frequencies(Hz) *	270, 1K, 2K			
Connector Type	FC/APC			
Optical Power Meter Module				
Detector Type	InGaAs			
Measurement Range (dBm)	-70 ~ +10		-50 ~ +27	
Calibrated Wavelength (nm)	850, 1300,1310,1490,1550,1625,			
Accuracy(25□& -10dBm)	±0.25 dB (5%)			
Resolution(dB)	0.01			
General Specifications				
Data Storage	2000 measurements			
Power Supply	NiMH chargeable battery/AC adapter			

Battery Life	SuppORL≥35 hrs for only ORL operation / ≥80 hrs for only OPM operation/ ≥35 hrs for OPM and OLS together on one charge
Operating Temperature	0□ to 50□
Storage Temperature	-20□ to 60□
Relative Humidity	0 to 95% (non-condensing)
Weight	1.4 lbs (0.65kg)
Dimensions (H×W×T)	7.7×3.9×1.7 inch (196×100×44mm)

Note: *For Laser Source Module only.

Ordering Information

Standard

Configuration:

Instrument(including rechargeable battery), APC optical reference cable, ORL data analysis software disc, Data transfer cable(RS232), AC adapter, Rubber boot, Protective soft bag, Warranty card, CE certificate, Certificate of Calibration, User's manual.

Optional Accessory:

Part Description	Part Number	Part Description	Part Number
SC connector for LS	P/N:AC-CONN-SC-L	Fiber Connector Cleaner	P/N:AC-CLN-TAPE
ST connector for LS	P/N:AC-CONN-ST-L	Connector Clean Stick	P/N:AC-CLN-STK
SC connector for PM	P/N:AC-CONN-SC-P-1000	Ceramics core for LS	P/N:AC-FRL-C
ST connector for PM	P/N:AC-CONN-ST-P-1000	Toolkit for softbag	P/N:AC-PB-30
Toolkit for luxury package	P/N:AC-PB-40		

OVA-10 Optical Variable Attenuator

— An excellent tool for optical network test

Description

The ShinewayTech(OVA-10 is compact, easy-to-use variable attenuator for reducing the power level of an optical signal.



Features

- *Pocket-size, easy to use*
- *Operating by the single rotary knob*
- *Reliable bi-directional attenuation*
- *Double scale indication*
- *Mechanized Machining, compact and stable*
- *Damp, dust and shock proof design*
- *Interchangeable fiber-optic adapters (choice of FC, SC or ST)*
- *CE certificate*

Technical Specifications

Optical Specifications	OVA-10
Operating wavelength	1310nm, 1550nm
Attenuating mode	Bi-directional and continuous
Adapter type	FC/PC、 SC/PC、 ST/PC
Fiber type	9/125μm
Signal type	CW
Attenuating range	1310nm: 0~60dB 1550nm: above 60dB

General Specifications

Work Temperature	-10°C to 50°C
Storage Temperature	-20°C to 60°C
Relative Humidity	0 to 95% (non-condensing)
Weight	0.59 lbs(270g)
Size (H × W × T)	5.9×3.1×1.1 inch (150×80×28mm)

Note: Specifications subject to change without notice.

Ordering Information

Standard items:

Instrument, FC/PC adaptor, Latex protective cover, Carrying case(optional), Warranty card, Certificate of Calibration, User's manual

Optional items:

AC/DC adaptor, SC adaptor, ST adaptor

2. About ShinewayTech

ShinewayTech is a young, vigorous and innovative high-tech enterprise, incorporated in October 2000. At present we offers advanced products and total solutions in areas of optical communications network testing and maintenance. These products are marketed mainly to telecommunications carriers and network service providers around the world. These customers use our handheld optical testing products for installation and maintenance, monitoring and troubleshooting applications.

Proceeding from the corporate culture of "Trustful pragmatism; Persisting innovation; Pursuing excellence", ShinewayTech will continuously offer cost effective products and solutions to the global customers.

Vision of the Company

ShinewayTech ---- Dependable Partner for Future Networks

Spirit of the Company:

"Trustful pragmatism; persisting innovation; pursuing excellence"

Our Commitment:

Continuously offering advanced products and sound service at highest efficiency, and to enable the success of customers

Our Cooperative Strategy:

Open and cooperative system, flexible cooperation ideas, and pragmatic cooperation attitude

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