

Intelligent Optical Loss Tester

OLT-50 Series Intelligent Optical Loss Tester

Bidirectional Loss Testing and ORL Testing

OLT-50 Intelligent Optical Loss Tester combines stabilized laser source and optical power meter which can perform automatic bidirectional loss test on single fiber with Pass/Fail assessment to offer user-friendly operation and avoid potential operational mistake.

The rugged and easy-to-use OLT-50 is the ideal optical loss tester for FTTx, LAN and CATV application.

Features

- ◆ FTTx/PON applicable
- ◆ Optical power monitoring
- ◆ Bidirectional loss test on single fiber
- ◆ ORL test
- ◆ Pass/Fail assessment
- ◆ Automatic wavelength identification
- ◆ Remote reference value setting
- ◆ Internal clock & fiber S/N editable
- ◆ Storage of 1000 test records
- ◆ Data transfer to PC via USB
- ◆ USB power charging
- ◆ Over 50 hours continuous operation
- ◆ No warm-up, quick start
- ◆ Backlight
- ◆ Pocketsize, lightweight and easy-to-use
- ◆ CE, FCC, FDA certificates



OLT-50



Bidirectional Loss Test on Single Fiber

Two OLT-50 at both ends of a single optical fiber can perform bidirectional loss test by just pressing one button and can automatically measure and display the entire fiber attenuation to help users acquire complete and accurate optical fiber loss information.

Automatic Wavelength Identification

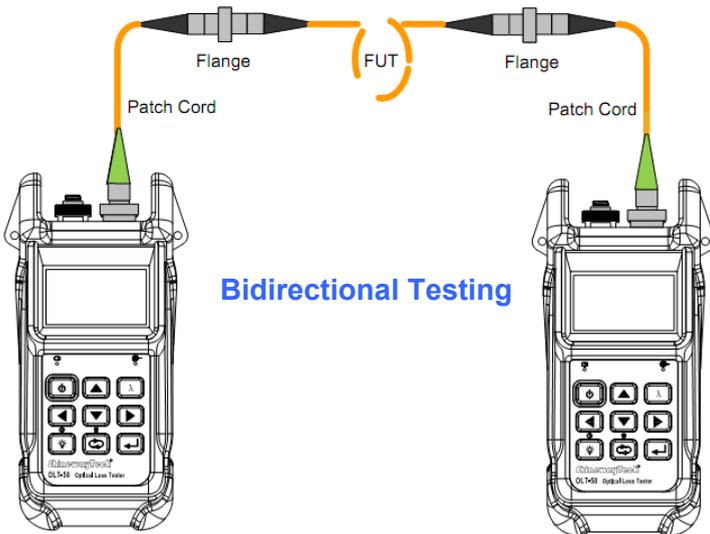
Compatible with the digital encryption protocols of its laser source module and Shineway SLS-50 Series Stabilized Laser Source, OLT-50 can automatically identify the wavelength of the input optical signal and switch to the corresponding test mode, which greatly reduces the workload at both ends and avoids potential error.

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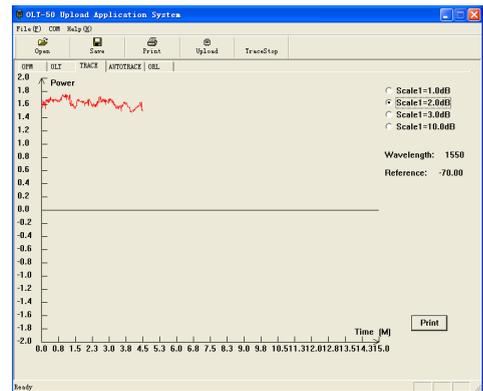
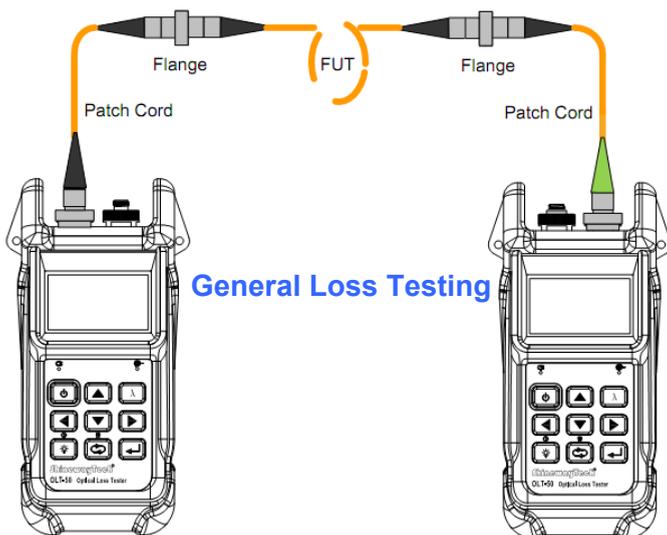
Application



OLT-50 Software

OLT	Filter	Wavelength	Loss	Loss-A	Loss-B	Loss-C	Loss-D	Loss-E	Loss-F	Threshold	Length
CA000	FI1000	1310	29.72	29.70	-4.40	-3.38	30.00	148.75			
	FI1000	1490	28.50	28.53	-6.19	-3.37	30.00	142.58			
	FI1000	1550	28.41	28.46	-3.85	-3.64	30.00	142.18			
CA000	FI1001	1310	25.95	27.07	-4.52	-3.41	30.00	136.06			
	FI1001	1490	25.83	25.66	-6.20	-3.41	30.00	138.72			
	FI1001	1550	25.51	25.48	-3.86	-3.66	30.00	127.62			
CA000	FI1002	1310	29.44	29.57	-4.52	-3.41	30.00	147.53			
	FI1002	1490	28.32	28.29	-6.20	-3.41	30.00	141.52			
	FI1002	1550	28.13	28.24	-3.86	-3.66	30.00	140.92			
CA000	FI1003	1310	14.82	14.91	-4.52	-3.41	30.00	74.33			
	FI1003	1490	13.94	14.03	-6.20	-3.41	30.00	69.82			
	FI1003	1550	13.71	13.71	-3.86	-3.66	30.00	69.56			
CA000	FI1004	1310	37.69	37.58	-4.19	-3.06	30.00	186.17			
	FI1004	1490	36.51	36.45	-5.99	-3.12	30.00	182.40			
	FI1004	1550	36.38	36.29	-3.67	-3.40	30.00	181.61			
CA000	FI1005	1310	25.22	25.36	-4.80	-3.68	30.00	138.76			
	FI1005	1490	24.25	24.37	-6.18	-3.12	30.00	133.31			
	FI1005	1550	23.96	24.49	-3.94	-3.40	30.00	121.75			

OLT-50 data uploaded to OLT Software for analysis and reporting.



OLT-50 can monitor power variation and upload result to OLT software.

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Specifications

Model	OLT-50	
Stabilized Laser Source		
Wavelength ($\pm 20\text{nm}$)	1310/1550nm	1310/1490/1550nm
Spectrum Width	$\leq 5\text{nm}$	
Emitter Type	FP-LD	
Output Power	$> -4\text{dBm}$	
Power Stability	$\pm 0.05\text{dB}/15\text{min}$; $\pm 0.10\text{dB}/8\text{hr}$ @1310/1490/1550nm	
Output Mode	CW, 270Hz, 1KHz, 2KHz	
Optical Power Meter		
Calibrated Wavelength ⁽¹⁾	850, 1300, 1310, 1490, 1550, 1625nm	
Power Range (dBm)	$-70 \sim +10$ ⁽²⁾	$-50 \sim +27$
Display Unit	W/mW/ μW /nW/pW/dBm/dB(REF)	
Detector Type	InGaAs	
Accuracy	$\pm 5\% \pm 0.01\text{nW}$ ($\pm 0.5\text{ dB}$ @850nm)	$\pm 5\% \pm 1\text{nW}$ ($\pm 0.5\text{ dB}$ @850nm)
Resolution (dB)	0.01dB	
Auto Wavelength Identification	Yes (With ShinewayTech specified Stabilized Laser Source)	
MOD Identification	270Hz, 1KHz, 2KHz	
Optical Loss Test		
Link Loss Range	50dB (1550nm, 200km)	
Link Loss Accuracy	$\pm 0.25\text{dB}$	
Link Loss Test Time	< 2 seconds per wavelength	
ORL Test (Optional)		
ORL Range	0~60dB	
ORL Accuracy	$\pm 0.75\text{dB}$ @(0~50dB), $\pm 1.5\text{dB}$ @(50~60dB)	
ORL Uncertainty	$\pm 0.5\text{dB}$ @20dB	
General Specifications		
Connector	FC (Interchangeable SC, ST)	
Data Storage	1000 records	
Data Interface	USB	
Backlight Display	Yes	
Auto Off	Yes (Auto-off after 5 minutes idle)	
Power Supply	AC Adapter/ Lithium Battery/ Continuous operation ≥ 50 hours	