### 6. Maintenance:

- 6.1 If the Light Source is not used for a long time, the light output port must be protected with the dustproof cover.
- 6.2 When the Fiber Optic Light Source is used for a long period of time, the output port may get dirty, which results in the output power decreasing. If there is a noticeable loss in output power, the connector must be cleaned with a cotton swab and alcohol. If it cannot be cleaned, please send it to the manufacturer for a replacement.
- 6.3 If you are not planning to use the (FW-5) Light Source for a long period of time, remove the batteries to prevent leakage.
- 6.4 Do not take the Fiber Optic Light Source apart. If there are any other issues, please contact the manufacturer.
- 6.5 DO NOT look into the Light Source adapters directly while the light source is on. The laser output will damage your eyes.

## 7. Trouble-shooting:

No.	Problem	Measures
1	The output light is unstable or decreases rapidly while operation.	Replace the batteries.
2	Output power is fluctuating.	Try warming-up the device for 15 minutes, then use it.
3	The output port is dirty.	Clean the connector with a cotton swab and alcohol.
4	The device turns off automatically after 10-15 minutes.	While the device is powered ON, press the ON/OFF button once. The osymbol in the top-left corner will disappear, indicating the auto-off feature has been turned off.





# **INSTRUCTION MANUAL**



FLS-50 FIBER OPTIC LIGHT SOURCE

### 1. Overview:

# FLS-50 - Fiber Optic Light Source:

Provides two different wavelength outputs, 1310 nm or 1550 nm, at varying frequencies for checking the optimal loss of single mode fiber optic cables using our FPM-50 Fiber Optic Power Meter (or other power meters).

## 2. Technical Specifications:

SPECIFICATIONS	
Туре	Fiber Optic Light Source
Operational Wavelengths	1310 nm/1550 nm
Emitter Type	LD
Typical Output Power	-7dBm
Spectral Width	10 nm
Output Stability	$\pm 0.05$ dB/15mins I $\pm 0.1$ dB/ 8hours
Modulation Frequencies	CW, 270Hz, 1KHz, or 2KHz
Optical Connector	FC/SC/LC
Power Supply	Alkaline Battery (3 AA 1.5V batteries)
Battery Operating Time	45 hr
Operating Temperature	-10- +60°C
Storage Temperature	-2- +70°C
Dimensions	7" x 3-3/16" x 1-1/4" (17.78 cm x 8.10 cm x 3.18 cm)
Weight	0.902 lb (0.409 kg)
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#### Recommendations

The FLS-50 Light Source is designed for optimal use with our FPM-50 Optical Power Meter for measuring optical loss on both single mode and multimode fiber cable. Note that the LC adapter may have up to 0.3 dB of signal loss.

## 3. What's Included:

Fiber Optic Light Source w/ installed SC Adapter	.1
FC Adapter	.1
LC Adapter	.1
Protective Holster	.1
AA 1.5V battery	.3
Storage Bag	.1

# Diagram of the FLS-50



# **Keys and Functions:**

- (1) Wavelength Output Port: FC/SC/LC.
- (2) Liquid Crystal Display: Displays wavelength and frequency of the light emitted.
- (3) "ON/OFF" Key: Hold to turn the Handheld Light Source Light On or Off.(a) While ON, press once to turn off the auto-off feature.
- (4) "Wave" key: For selecting the wavelength emitted.
- (5) "Mode" key: Modulation control: CW light output and modulated light output can be selected by pushing "Mode" key. When modulated light output is selected, a dot appears on the screen.

# 5. Operation:

- 5.1 Press and hold the "ON/OFF" key for about one second to turn on the FLS-50 Light Source. The default wavelength is 1310nm and can be changed using the "MODE" key.
- 5.2 To use the Fiber Optic Light Source:
  - 1. Connection: Choose one of the connectors: FC, SC, or LC, and install it on the light source. The FC adapter comes preinstalled.
  - $2. \ Wavelength \ selection: \ Press \ "Wave" \ key \ for \ wavelength \ selection.$
  - 3. Modulation: Press the "MODE" key, choose the "CW","270Hz","1KHz" or "2KHz" light output.
  - 4. When Done: Press "ON/OFF" key to turn off the FLS-50 Light Source.