

**Document Number: SGD-0908-001** 

# **Light-Source Mainframe**

Specification & User Manual





Date:
Part:
Part #:
Doc. Number:

April 27 2009 Light-Source Mainframe AFT-G-MF-LS SGD-0908-001

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For further information or general comments, please contact one of our sales offices.

# **Range Of Limitations**

The Product Information found herein pertain to the Light Source Mainframe, Part Number

#### **Dimensions and Materials**

All the materials comply with RoHS Restricted Hazardous Substances as detailed in "DIRECTIVE 2002/95/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 27 January 2003 on the Restriction of the use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS)"

#### **Features**

- Compact, portable, light and rugged design.
- No warm up time.
- Interchangeable SFP Module design.
- High wavelength flexibility with interchangeable SFP Modules.
- High Output Power stability.
- Stable output wavelength.
- Excellent re-connection repeatability.
- Low Voltage Battery warning.
- Compatible with LC Connectors.
- Easy to use.
- Operates in CW (Continuous Wave) or Pulse Mode 270 Hz / 2 KHz.
- Dust-proof design keeps fiber connectors clean.
- LED indicator for Power and Low Battery indicators.



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# **Specifications**

Laser Class	Class 1	
	850, 1300, 1310, 1550	
Wavelength (nm)	1270, 1290, 1310, 1330, 1350, 1370, 1390,	
	1410, 1430, 1450, 1470, 1490, 1510, 1530,	
	1550, 1570, 1590, 1610,1625	
Output Power	> 0.5 mW @ 25℃ into 9 µm fiber	
Mode	CW / Pulse Mode 270 Hz / 2 KHz	
Battery Type	AAA 1.5 V x 2	
LED Indicator	Power On ( GREEN ) / Battery Low ( RED)	
Output Power Accuracy	+/- 0.2 dB	
Output Power Stability ( 1 HR )	+/- 0.05 dB	
Operating Temp.	0℃ ~ 50℃	
Storage Temp.	0℃ ~ 70℃	

# **Applications**

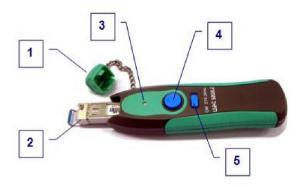
- Maintenance CATV / Telecom / FTTH in Singlemode or Multimode optical fiber network.
- Standard laboratories.
- High throughput quality assurance.
- Onsite installation/maintenance.



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#### Guide



- 1. Dust Cap
- 2. SFP Module: Interchangeable single LC connector SFP Module.
- 3. LED Display
- 4. On/Off Button
- 5. Mode Switch: to select Continuous Wave or Pulse Modes at 270Hz or 2KHz.

# **Operating Instructions**

- 1. Remove the Dust Cap and insert the desired SFP Module.
- 2. <u>INITIAL CBLIBRATION</u>: With the desired SFP Module loaded, close the Dust Cap then turn on the Light Source by pressing the On/Off Button. Once the unit is calibrated the LED will turn green.
- 3. Turn the Light Source off by pressing the On/Off button.
  - 3i. Remove the Dust Cap.
  - 3ii. Insert one end of the jumper to be tested directly into the output port of the Light Source.
  - 3iii. Insert the other end of the jumper into the Fiber Meter.
  - 3iv. If a test jumper has to be used, then insert the other end into the Fiber Meter to obtain the loss of the test jumper as reference. Remove the test jumper from the Fiber Meter, insert it into the appropriate adapter and then insert either end of the jumper to best tested to the adapter and Fiber Meter.
- 4. Slide the Mode Switch to select CW Mode or Pulse Mode 270 Hz / 2 KHz.
- 5. Turn the unit on by pressing the On/Off button.

#### **Important Notes:**

- DO NOT look into the output port of the Light Source when it is on. Doing so may damage your eyes.
- Do not touch the SFP Module's electrical connector.
- Do not touch the ferrule to avoid contaminating the connector.
- Keep the fiber connector dust cap on at all times when the device is not in use.
- Use suitable cleaning tools to clean the fiber before testing to obtain the desired test results and extend the service life of the device.
- When the LED shows "CB" (Check Battery), this means that the batteries are almost drained and in low voltage status. Immediate replacement of the batteries is recommended.



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#### Maintenance

This tool requires no maintenance in stead of periodic battery charges. Like any other electronic equipment, this tool should be kept away from water, high damp, dust, electricity, and environments of extreme temperature. Do not drop this tool on hard surface. Modifying internally any of this tool components can cause a malfunction and will invalid the manufacturer's warranty.

# **Inspection Datasheet**

Certificate of Compliance is included with each shipment.

# **Shipping Information**

All items are packed in a secure fashion so as to prevent any damage during transit.

#### **Product Guarantee**

The buyer of this product should inspect the goods upon arrival, and within five (5) business days should notify SENKO of any conditions which may prevent the acceptance of this product. In the event of a claim, appropriate measures will be taken to investigate the cause. Claims must be made in accordance to the conditions stated in the Standard Terms and Conditions of Sale.

# Warranty

The manufacturer warrants this product to be free of defects in workmanship and materials for a period of 1 year after purchase. This warranty (excluding batteries) is solely limited to the repair and replacement of original parts, which are defective in workmanship of materials. All other costs should be the sole responsibility of the owner. This warranty does not cover any defects, damage, and deterioration due to misuse, alteration, or negligence.

# **Ordering Information**

Part Number	Light Source SFP Plug-In Module	Wavelength (nm)
AFT-G-MF-LS	Light Source Mainframe	-
AFT-G-LS-M-850	VCSEL - Light Source SFP Plug-In Module	850 nm
AFT-G-LS-M-1300	LED - Light Source SFP Plug-In Module	1300 nm
AFT-G-LS-S-1310	FP LD - Light Source SFP Plug-In Module	1310 nm
AFT-G-LS-S-1550	FP LD - Light Source SFP Plug-In Module	1550 nm
AFT-G-LS-1270-1625	CWDM DFB LD - Light Source SFP Plug-In Module	1270 nm ~ 1625 nm

#### \* Acronyms:



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VCSEL - Vertical Cavity Surface Emitting Laser.

FP LD - Fabry-Perot Laser Diode.

CWDM DFB LD - Coarse Wavelength Division Multiplexing Distributed Feedback Laser Diode.

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