

# 830nm Narrow Linewidth Laser System of NLM Series



## DESCRIPTION

Narrow linewidth laser system is our special product. This series of products are compact in structure, portable and convenient. The core technologies such as short cavity method, VBG wavelength locking, directional optical feedback, built-in semiconductor refrigeration, etc. are used to realize narrow linewidth, stable power and stable spectral output of laser.

## FEATURES

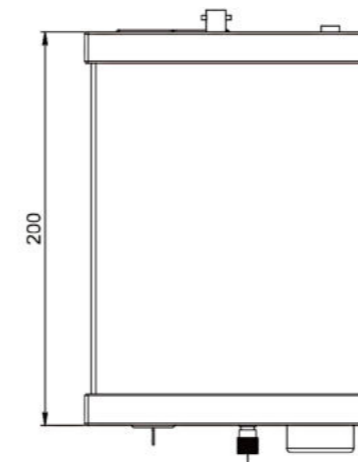
- Line width <0.1nm
- Frequency stability better than  $\pm 0.005\text{nm}@8\text{H}$
- Side mode rejection ratio is better than 40dB (60dB optional)
- Built-in TEC, power stability is better than  $\pm 1.5\%$
- Portable operation, temperature drift  $<0.007\text{nm} / ^\circ\text{C}$ , VBG wave lock

## APPLICATIONS

- Raman spectroscopy
- Fluorescence spectrum detection
- Holographic detection
- Up-conversion material

Model	CL830-MSIF(S)-500mW-NLM010	CL830-MSIF(FP)-500mW-NLM011
Central Wavelength (nm)	830	830
Output Power (mW)	500	500
Wavelength Tolerance (nm)	$\pm 0.5$	$\pm 0.5$
Line Width (nm)	<0.1	<0.1
Wavelength Stability	$\pm 0.005\text{nm}@8\text{H Typ.}$	$\pm 0.005\text{nm}@8\text{H Typ.}$
Power Stability	$\pm 1.5\% @8\text{H Typ.}$	$\pm 1.5\% @8\text{H Typ.}$
Edge Mode Rejection Ratio (dB)	40	40
Power Adjustment Range	0~100%	0~100%
Preheat Time (min)	15	15
Modulation Input	1kHz TTL or Analog signal 0-5V	1kHz TTL or Analog signal 0-5V
Control Interface	USB, BNC	USB, BNC
Fiber Interface	SMA905	FC/PC
Adaptive Optical Fiber	105 $\mu\text{m}$ , 0.22NA	105 $\mu\text{m}$ , 0.22NA
Power Input	100V-240V 50/60Hz	100V-240V 50/60Hz
System Power Consumption (W)	<7	<7
Storage Temperature ( $^\circ\text{C}$ )	-10~60 $^\circ\text{C}$	-10~60 $^\circ\text{C}$
Storage Humidity	0~80%RH	0~80%RH
Operating Temperature ( $^\circ\text{C}$ )	10~35 $^\circ\text{C}$	10~35 $^\circ\text{C}$
System Weight (Kg)	2.5	2.5
Laser Power Size (mm)	150 x 102 x 200	150 x 102 x 200

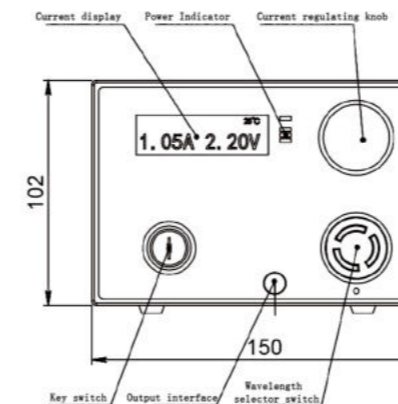
## OUTLINE SIZE(mm)



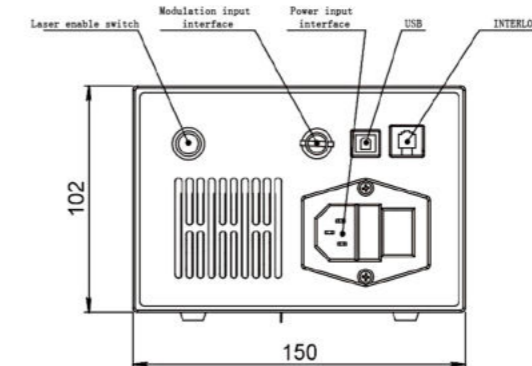
Top View



Unit: mm



Front View



Rear View

