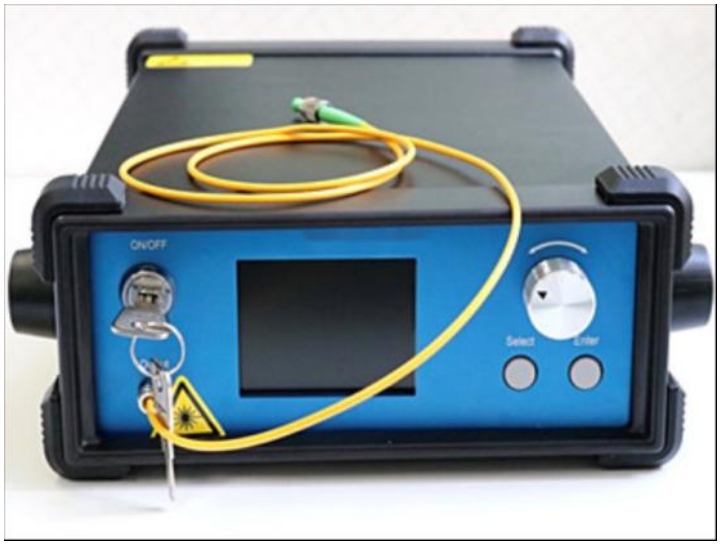
850nm 3mW Benchtop

Polarization-Maintaining SLD Light Source



Product Description

Idealphotonics' Ultra-Width Series 850nm High-Stability Single-Mode Pump Light Source utilizes a TEC wavelength-stabilized single-mode semiconductor laser, offering wavelength stability and high output power. Based on an advanced microprocessor control system, combined with high-precision ATC and ACC (APC) control circuits, this light source achieves highly stable laser output while ensuring quick and intuitive operation. We can also provide corresponding communication interfaces and control software based on user requirements for computer control. This light

source features a Turn-Key pump laser protection function to effectively prevent damage due to user error. Power can be coarsely adjusted (in 1mW steps) or finely tuned (in 0.1mW steps). 850nm single-mode pump light source is a highly integrated benchtop system light source, equipped with a high-definition LCD display, continuously adjustable output power, and synchronous display of current and voltage, making it ideal for experimental scientific research and production testing. Additionally, the company can provide modular packaging tailored to user needs for easy system integration.

• Product features

Single-mode high-power output: Up to 25mW、 Spectral width up to 80nm、 ASE light isolation protection design、 Stable and continuously adjustable output power、 LCD status display、 High-precision ACC and ATC control circuits、 Optional built-in isolator

• Part Number

MP-SLDS-850-3-40-PM-B

• Application area

Fiber Optic Gyroscopes 、 Optical Coherence Testing 、 Test and Measurement、 Nonlinear Effect Studies

Core parameters

Center Wavelength	Output Power	Spectral Width
850nm	3mW	40nm

General Parameters

Parameters

Parameters	Unit	Specs		
		Min.	Typ.	Max.
Output Power[1]	mW	3	-	35
Peak Operating Wavelength[2]	nm	830	850	870
Spectral Width (FWHM)	nm	25	40	80
Output Side Mode Suppression Ratio (SMSR)	dB	20	-	-
Output Isolation[3]	dB	-	30	-
Output Power Stability (15 minutes)[4]	%	-	±0.5	± 1.0
Output Power Stability (8 hours)[4]	%	-	±1.0	±2.0
Output Power Adjustable Range	%	0	-	100
Output Power Adjustment Mode		Coarse/Fine Adjustment		
TEC Stability	°C	-	±0.1	±0.2
TEC Operating Range	°C	25	30	35
Operating Voltage	VAC	100	220	240
Electrical Power Consumption[5]	W	-	-	30
Operating Temperature	°C	0	-	50

Parameters	Unit	Specs		
		Min.	Typ.	Max.
Storage Temperature	℃	-40	-	85
Output Fiber Type		SM/PM		
Output Fiber Length	m	>1		
Output Fiber Connector		FC/APC, other models optional		
Dimensions	mm	340(L) × 240(W) × 100(H) Benchtop		
		150(L) × 125(W) × 25(H) Module		

Technical Notes:

Remote software control optional

Output power customizable

Peak operating wavelength can be specified

Isolation refers to protection against ASE light

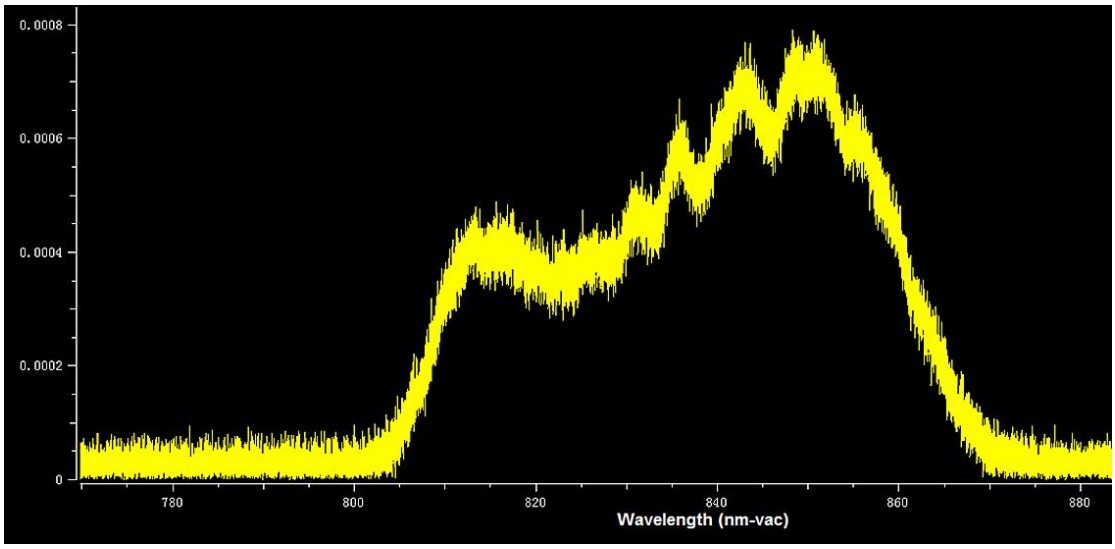
Power stability tested at 25°C after 30-minute warm-up

Maximum power consumption refers to overall consumption under extreme conditions

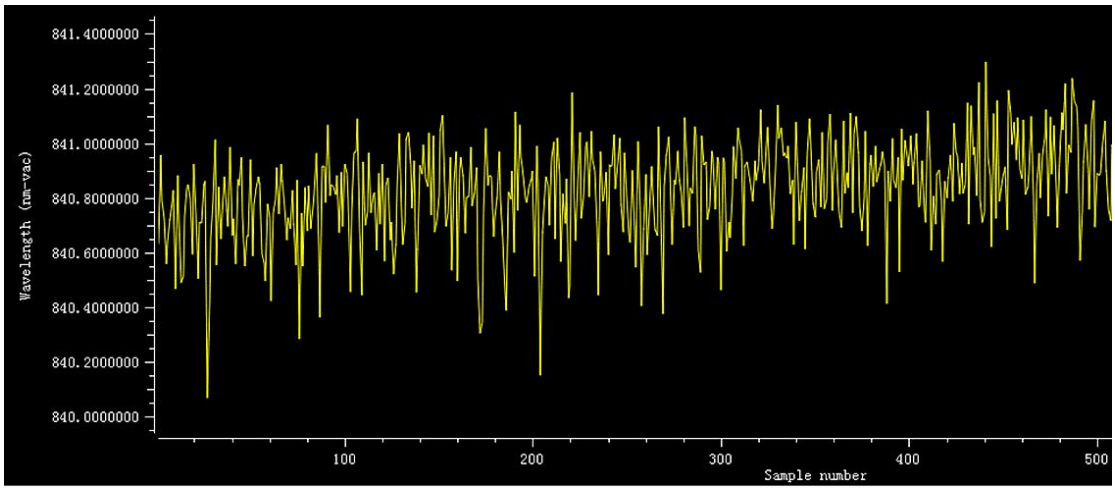
Test Data

Test Spectrum

Test Conditions: Temperature: 20°C; Test Current: 250mA

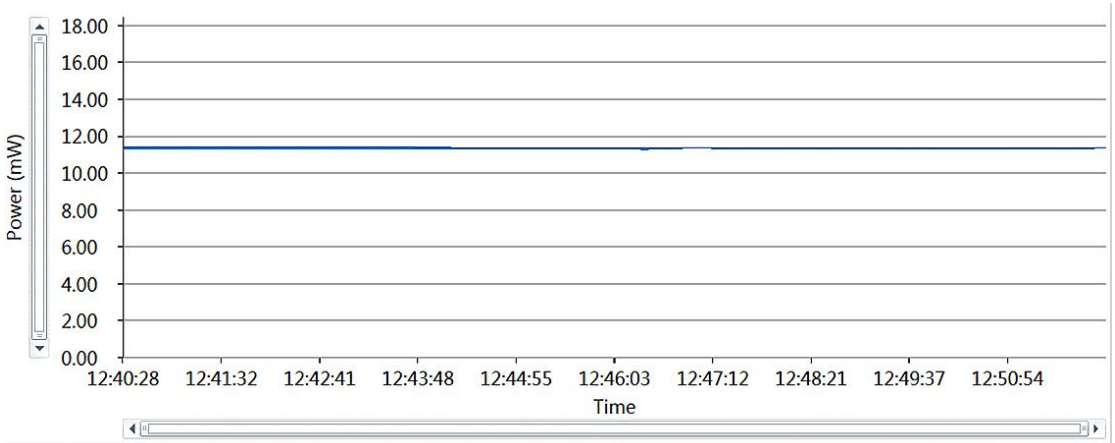


Wavelength Stability



Beam Quality

Power Test Table (@ 250mA) & Power Stability



Most Recent Value	Samples	Time
11.41 mW	100000	00:11:33

SLD light source power stability test curve

Ordering info

Ordering Information

Model:MP-SLDS-850-PG-

PG:

B: Benchtop

M: Module

OPP: Output power in mW (e.g., 10 = 10mW, 50 = 50mW)

BWD :

25: 25nm

40: 40nm

50: 50nm

60: 60nm

80: 80nm

100: 100nm

FT:

SM = HI780

PM = PM850