1470nm Benchtop Single-Mode SLD Light Source 25mW

Product Description

Idealphotonics' Ultra-Width series 1470nm high-stability single-mode pump source utilizes a TEC-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, it achieves highly stable laser output while ensuring quick and intuitive operation of the light source. We can also provide corresponding communication interfaces and control software based on

user requirements to enable computer control. This light source features a Turn-Key pump laser protection function to effectively prevent user errors. It supports coarse power adjustment (1mW steps) and fine power adjustment (0.1mW steps). 1470nm single-mode pump source is a highly integrated desktop system light source with a high-definition LCD display, continuously adjustable output power, and synchronous current and voltage display, making it ideal for experimental scientific research and production testing. Additionally, the company can provide modular packaging based on user needs for easy system integration.

Product features

Single-mode high-power output: up to 25mW、 Spectral width up to 80nm、 ASE optical 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-1470-25-80-SM-B

Application area

Fiber optic gyroscope、 Optical coherence testing、 Test and measurement、 Nonlinear effect research

Core parameters

Wavelength	Power	Spectral Width
1470nm	25mW	80nm

General Parameters

Parameters

Parameters	Unit	Specs		
		Min.	Typ.	Max.
Output Power[1]	mW	3	-	35
Peak Operating Wavelength[2]	nm	1450	1470	1490
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	℃	-	±0.1	±0.2
TEC Operating Range	℃	25	30	35
Operating Voltage	VAC	100	220	240

Parameters	Unit	Specs		
		Min.	Typ.	Max.
Electrical Power Consumption[5]	W	-	-	30
Operating Temperature	℃	0	-	50
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 Specification Notes:

*Software remote control optional

1.Output power selectable;

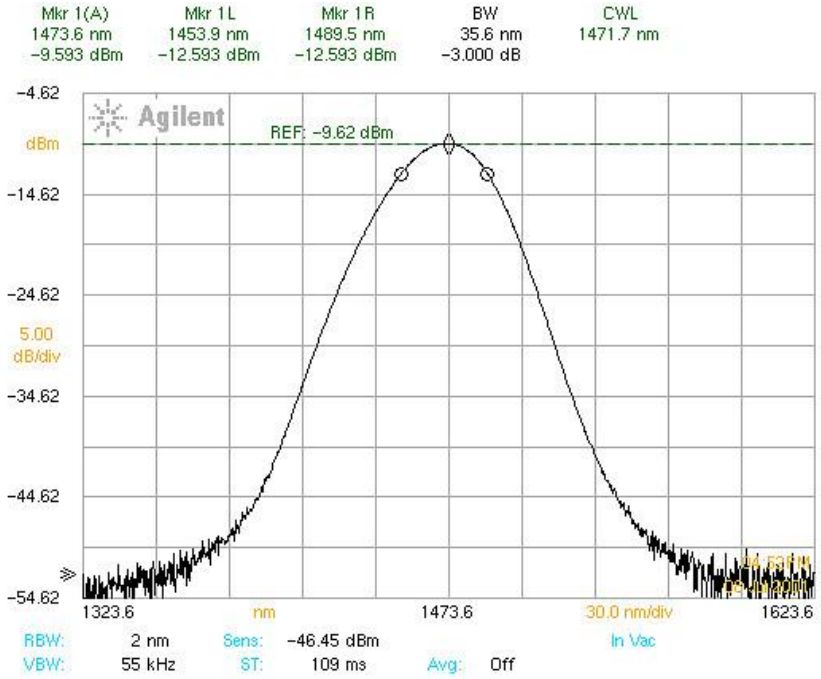
2.Peak operating wavelength customizable;

3.Isolation refers to the isolation against ASE light;

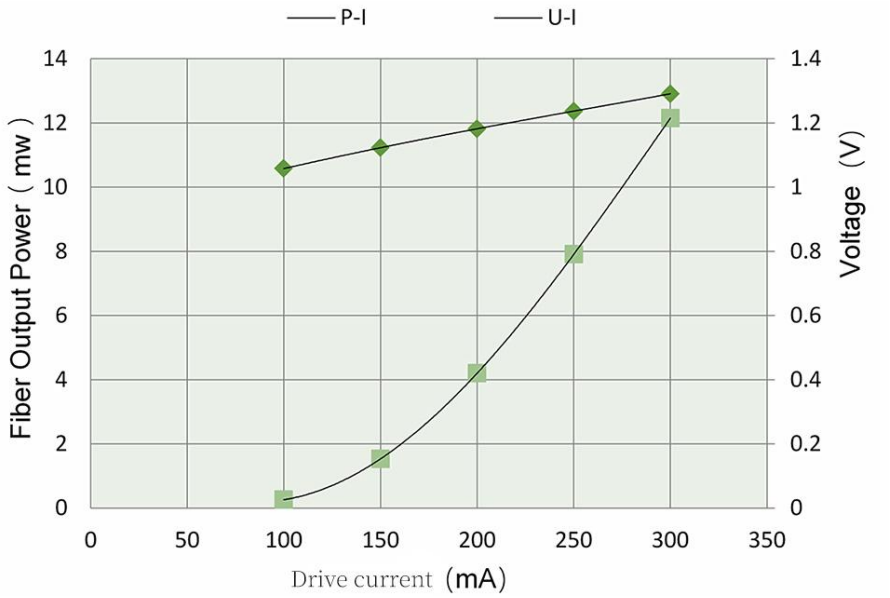
4.Output power stability test conditions: 25°C, tested after a 30-minute warm-up;

5.Maximum power consumption refers to the overall power consumption under extreme operating conditions.

Spectrum Graph:

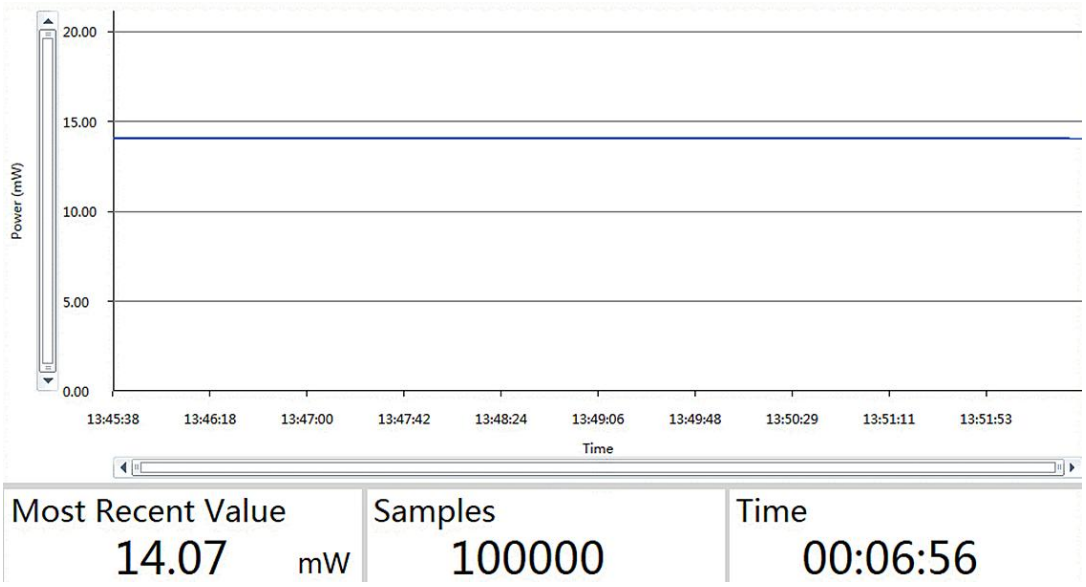


L-I-V Curve



Beam Quality

Power Test Table (@325mA)



SLD Light Source Power Stability Test Curve

Ordering info

MP-SLDS-1470-15-40-PM-B

PG: Packaging Type

B: Benchtop

M: Module

OPP (Output Power): Output power in mW. For example: 10-10mW, 50-50mW

BWD: 25:25nm, 40:40nm, 50:50nm, 60:60nm, 80:80nm, 100:100nm

FT: Fiber Type

SM=SMF-28E+

PM=PM1550