980nm 420mW Benchtop Light Source (with Isolator)

Product Description

Idealphotonics ' Cobrite series 980nm high-stability single-mode pump source utilizes a single-mode semiconductor laser with an FBG wavelength-stabilizing grating, 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 (50mW steps) and fine power adjustment (0.1mW steps). Idealphotonics' Cobrite series 980nm single-mode pump source is a high-stability pump source designed for applications such as high-power fiber amplifiers and mode-locked fiber lasers. Since ASE light generated by active fibers can easily damage the pump laser, Idealphotonics photonics' provides targeted pump protection solutions to further enhance the safety of the pump source. Idealphotonics' Cobrite series 980nm single-mode pump source is a highly integrated benchtop 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 1W、 FBG grating locks wavelength, no drift、 ASE optical isolation protection design、 Output power is stable and continuously adjustable、 LCD status display、 High-precision ACC and ATC control circuit、 Built-in isolator optional、 HI1060 fiber/PM980 fiber optional

Part Number

MP-FP-980-420-B-1-SA

Application area

High power low noise EDFA、 Mode-locked fiber laser、 Ytterbium-doped fiber amplifier、 Test measurement、 Nonlinear effect research

Core parameters

Center Wavelength	Output power	Output fiber connector
980nm	420mW	FC/APC

General Parameters

Parameters

Parameters	Unit	Specs		
		Min.	Typ.	Max.
Output Power1	mW	90	-	1000mW
Peak Operating Wavelength2	nm	970	975	985nm
Spectral Width (FWHM) with FBG	nm	-	0. 5	-
Output Side Mode Suppression Ratio (SMSR)	dB	20	-	-

Output Isolation3	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
Electrical Power Consumption5	W	-	-	30
Operating Temperature	℃	0	-	50
Storage Temperature	℃	-40	-	85
Output Fiber Type		HI1060 fiber/PM980 fiber optional Corning HI - 1060 6/125um NA=0.13		
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

1.Output power selectable;

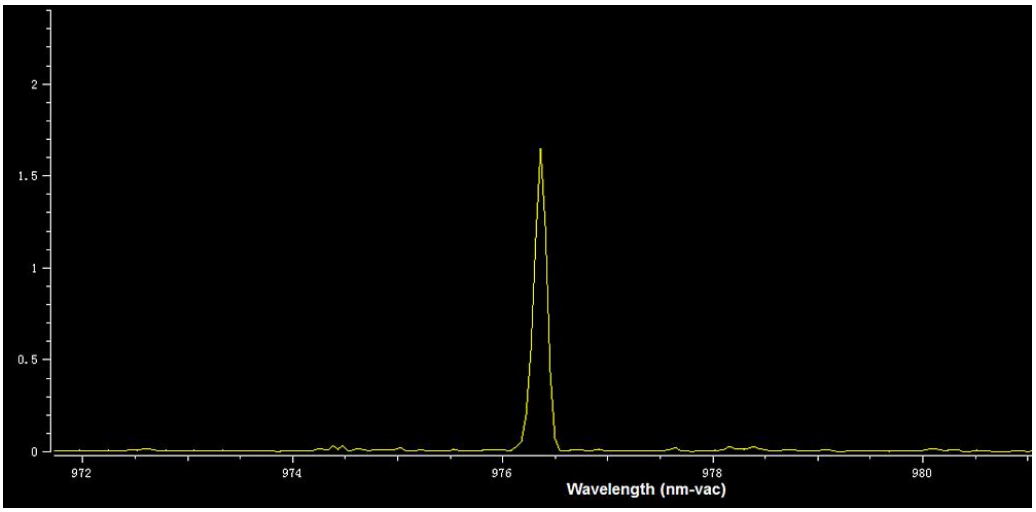
2.Peak operating wavelength customizable;

3.Isolation refers to the isolation against ASE light;

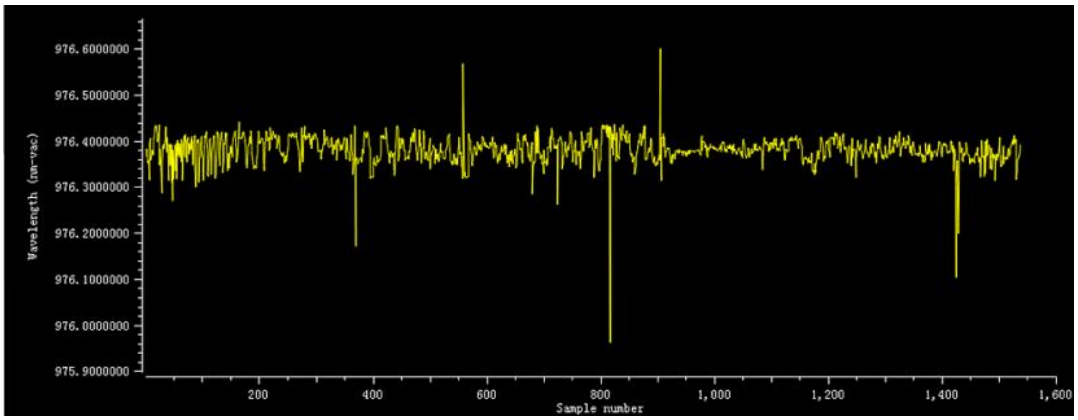
4.Output power stability test conditions: 25°C, tested after a 30-minute warm-up;

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

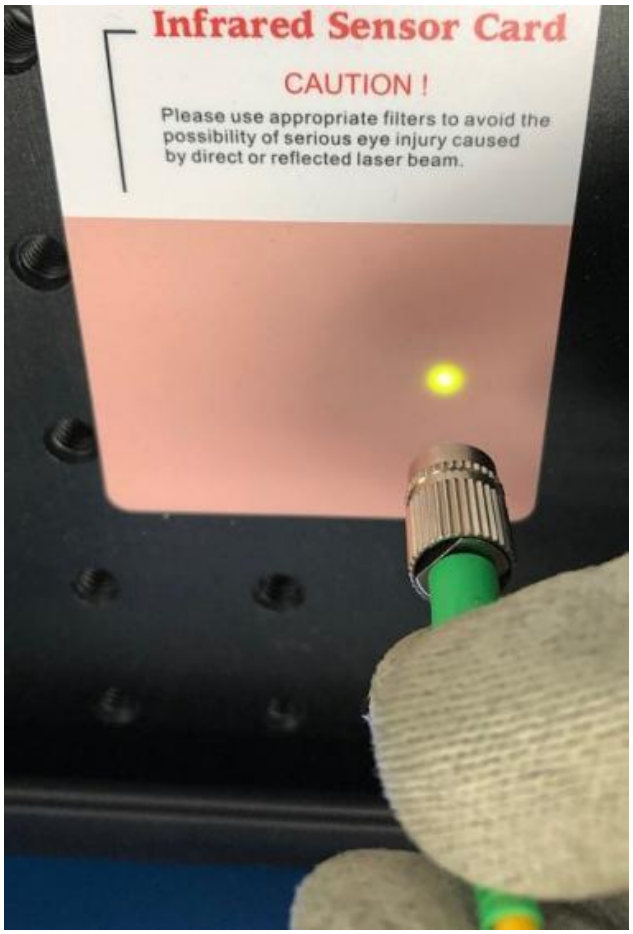
Spectrum Graph



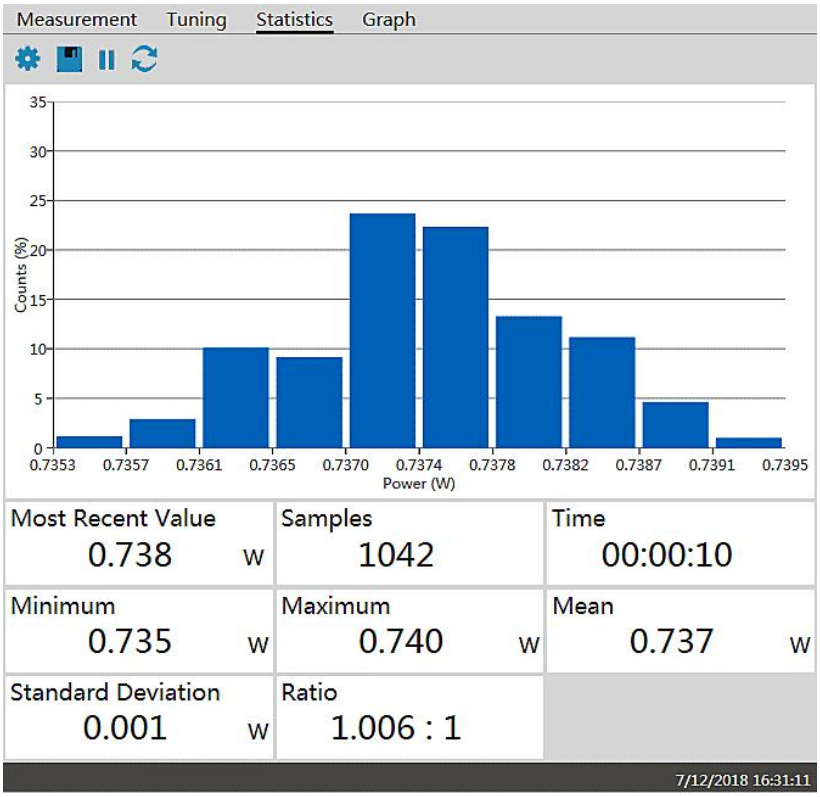
Wavelength Stability Test



Beam Quality



Power Test Table



Order Information

MP-FP-980-OPP-PG-ISO-SA

OPP (Output Power): Output power, unit mW，For example: 300-300mW, 800-800mW.

PG: Package type，B: Benchtop　M: Module

ISO: Built-in 980nm pump isolator protection 0-None, 1-Pump protection