

## 980nm 1W Benchtop light source



- **Product Description**

Our Cobrite series 980nm high-stability single-mode pump light source uses a single-mode semiconductor laser with a FBG wavelength-stabilized grating, which has a stable wavelength and high output power. The control system based on advanced microprocessors, combined with high-precision ATC and ACC (APC) control circuits, achieves high-stability output of the laser, while ensuring that the light source is quick and intuitive to operate. We can also provide corresponding communication interfaces and control software according to user requirements to achieve computer control. This light source uses the Turn-Key pump laser protection function, which can



effectively prevent customers from misoperation. The power can be roughly adjusted (stepped by 50mw) or finely adjusted in steps of 0.1mw. Our Cobrite series 980nm single-mode pump light source is a high-stability pump light source designed for applications such as high-power fiber amplifiers and mode-locked fiber lasers. Since the ASE light generated by active optical fibers can easily damage the pump laser, our Laser provides targeted pump protection solutions to further improve the safety of the pump light source. Our Cobrite series 980nm single-mode pump light source is a highly functional desktop system light source with a high-definition LCD display, continuously adjustable output power, and synchronous display of current and voltage. It is very suitable for experimental scientific research and production testing. In addition, the company can also provide modular packaging according to user requirements to facilitate 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-980-1000-B-0-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	1W	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	-



<b>Output Side Mode Suppression Ratio (SMSR)</b>	<b>dB</b>	<b>20</b>	<b>-</b>	<b>-</b>
<b>Output Isolation<sup>3</sup></b>	<b>dB</b>	<b>-</b>	<b>30</b>	<b>-</b>
<b>Output Power Stability (15 minutes)<sup>4</sup></b>	<b>%</b>	<b>-</b>	<b>±0.5</b>	<b>± 1.0</b>
<b>Output Power Stability (8 hours)<sup>4</sup></b>	<b>%</b>	<b>-</b>	<b>±1.0</b>	<b>±2.0</b>
<b>Output Power Adjustable Range</b>	<b>%</b>	<b>0</b>	<b>-</b>	<b>100</b>
<b>Output Power Adjustment Mode</b>		<b>Coarse/Fine Adjustment</b>		
<b>TEC Stability</b>	<b>°C</b>	<b>-</b>	<b>±0.1</b>	<b>±0.2</b>
<b>TEC Operating Range</b>	<b>°C</b>	<b>25</b>	<b>30</b>	<b>35</b>
<b>Operating Voltage</b>	<b>VAC</b>	<b>100</b>	<b>220</b>	<b>240</b>
<b>Electrical Power Consumption<sup>5</sup></b>	<b>W</b>	<b>-</b>	<b>-</b>	<b>30</b>
<b>Operating Temperature</b>	<b>°C</b>	<b>0</b>	<b>-</b>	<b>50</b>
<b>Storage Temperature</b>	<b>°C</b>	<b>-40</b>	<b>-</b>	<b>85</b>



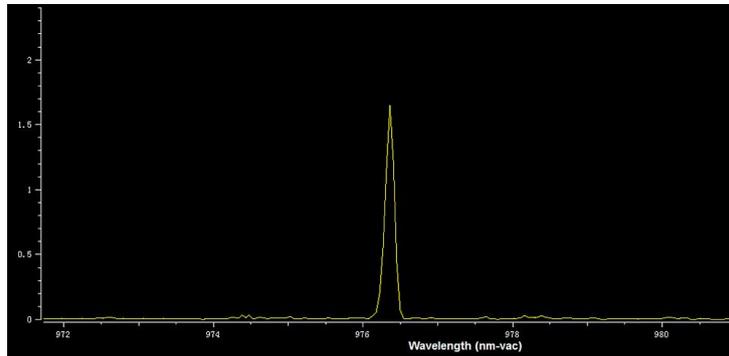
<b>Output Fiber Type</b>		<b>HI1060 fiber/PM980 fiber optional</b>  <b>Corning HI - 1060 6/125um</b>  <b>NA=0.13</b>
<b>Output Fiber Length</b>	<b>m</b>	<b>&gt; 1</b>
<b>Output Fiber Connector</b>		<b>FC/APC, other models optional</b>
<b>Dimensions</b>	<b>mm</b>	<b>340(L) × 240(W) × 100(H)</b>  <b>Benchtop</b>
		<b>150(L) × 125(W) × 25(H) Module</b>

**Technical indicators:**

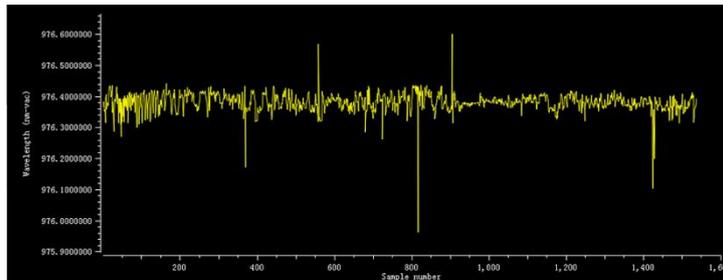
- 1. Output power is optional;**
- 2. Peak operating wavelength can be specified;**
- 3. Isolation refers to the isolation for ASE light;**
- 4 The output power stability test condition is 25 degrees, after 30 minutes of preheating;**
- 5. Maximum power consumption refers to the overall power consumption under extreme working conditions.**



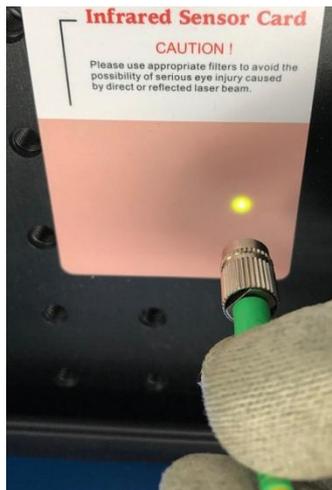
### Spectrum Graph



### Wavelength Stability Test

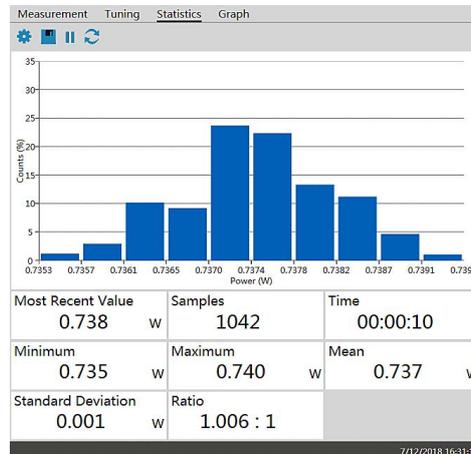


### Spot quality:





## 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