

# 1083nm benchtop with software control DFB laser 10mW



## ● Product Description

Idealphotonics' benchtop software-controlled DFB light source is based on an advanced microprocessor control system, combined with high-precision ATC and ACC (APC) control circuits to achieve high and stable 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 a one-key recovery function (Run/Stop button), which can effectively help customers return to the previous working state. This is a



highly integrated modular system light source, which uses PC-side software intelligent control. Customers can set the required working temperature and current according to their needs. It is very suitable for experimental scientific research and production testing. In addition, we need to modulate the laser for some application fields. We have connected two modulation ports, one for high frequency and one for low frequency, to better meet customers' needs for multiple uses of one machine.

## ● Product features

Support one-key restore function (no need to restart and preheat) 、  
Software remote control, intelligent control 、 Stable output power,  
continuously adjustable、 Compact structure、 High-precision ACC and ATC  
control circuit、 Built-in high and low modulation bandwidth BNC interface

## ● Part Number

MP-DFB-1083-10-A81-14BF-PA-B

## ● Application area

Laser sensor、 Mode-locked fiber laser、 Ytterbium-doped fiber amplifier、  
Test and measurement

## ● Core parameters

Wavelength	Power	Connector
1083nm	10mW	FC/APC

## ● General Parameters

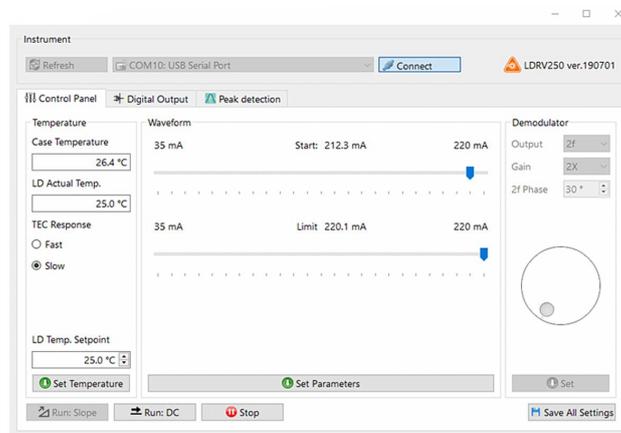
### Parameter

Parameter	Min.	Max.	Unit	Note
Supply voltage	100V	240	VAC	
Power	5	15	W	
Modulation low frequency	20	1000	KHz	
Modulation high frequency	100	1000	MHz	
Output power	10	50	mW	
Linewidth	1	3	MHz	
Center wavelength	1083±0.5		nm	
Output fiber type		HI1060/PM980	optional	
Laser drive current	0	225	mA	
Laser drive voltage	2.5		V@80mA	
NTC	9.7	10.3	Kohm	@25°C
TEC current	-1	1	A	
Temperature control range	0	50	°C	
Analog input (peak-to-peak)	0	5	V	AC coupling



Parameter	Min.	Max.	Unit	Note
Analog output	0	25	V	
Dimensions	22.5 x 15.0 x 6.5		Cm <sup>3</sup>	
Fiber interface	FC/APC			

### Control software interface



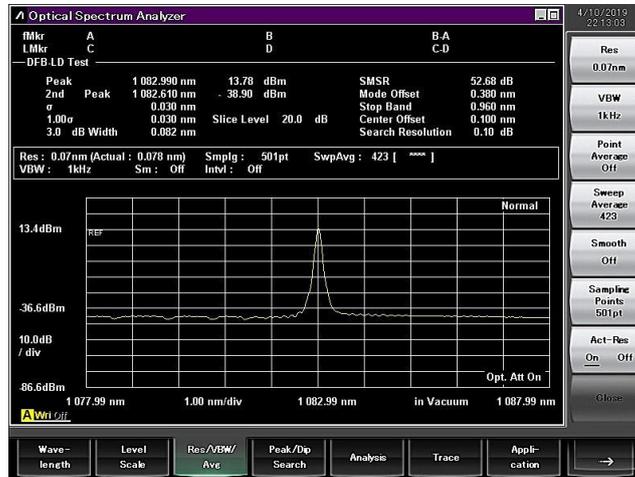
**Note:** You can customize the temperature to set the protection current.

USB communication protocol, plug in three-phase mains power

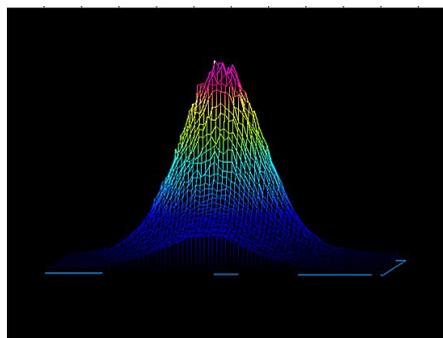
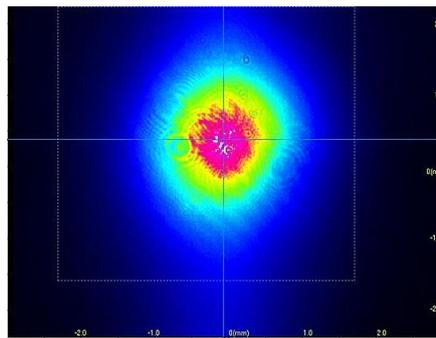




## Spot analysis

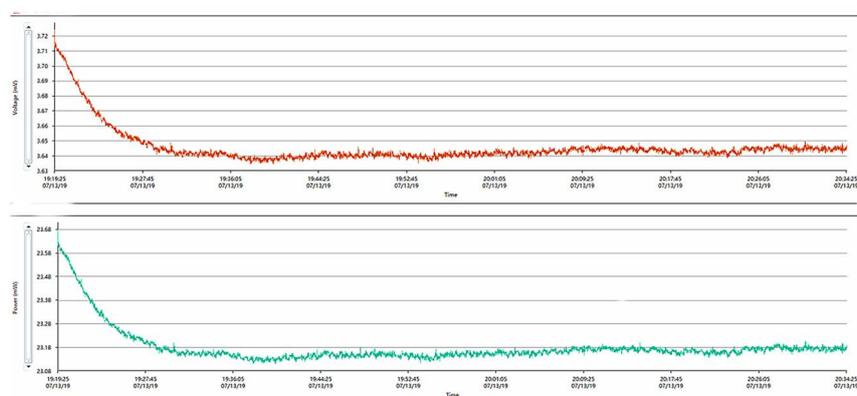


## Spectrum





## Power stability test



### Note:

When running LDPD.1.6.1.exe, if the prompt "Cannot continue to execute code because VCRUNTIME140\_1.dll is not found", please download the new Microsoft VC Runtime x64 version

<https://www.microsoft.com/en-us/download/details.aspx?id=52685>