



# • Product Description

IDEAL The Power of Light PHOTONICS

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.





# Part Number

LDC-250-M-1083

# • 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

# • Application area

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

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	<b>@25</b> ℃	
TEC current	-1	1	А		
Temperature control range	0	50	°C		
Analog input (peak-to-peak)	0	5	V	AC coupling	
Analog output	0 25		V		
Dimensions	22.5 x 15.0 x 6.5		Cm3		
Fiber interface	FC/APC				

## Parameters





### **Control software interface**

Refresh	G COM10: US	8 Serial Port	× 🥖	Connect		📥 LDRV250 ver.19070	
Il Control Panel	≯ Digital Outp	ut 🛛 🕅 Peak detection					
Temperature Case Temperature 26 LD Actual Temp.	Wavefo	rm A	Start: 212.3 mA	220 mA	Demodula Output Gain 2f Phase	tor 2f ~ 2X ~ 30 * 2	
TEC Response Fast Slow	35 m	allancia ne ao allancia	Limit 220.1 mA	220 mA	C		
LD Temp. Setpoin 25.0	nt *C 🗘				Q		

Note: You can customize the temperature to set the protection current. **USB communication protocol, plug in three-phase mains power** 



### Spot analysis

A Optical S	Spectru	m Analyze	r							
fMkr LMkr — DFB-LD Te	A C st ——				B D			B-A C-D		Res 9
Peak 2nd or 1.00o 3.0 di	Peak R Width	1 082.990 1 082.610 0.030 0.030 0.082	nm nm nm nm S nm	13.78 - 38.90 Slice Lev	dBm dBm vel 20.0	dB	SMSR Mode Of Stop Ba Center O Search	fiset nd Offset Resolution	52.68 dB 0.380 nm 0.960 nm 0.100 nm 0.10 dB	VBW 1kHz
Res: 0.07m VBW: 1k	m (Actual Hz	: 0.078 nm Sm : 0	n) Sm ff Int	nplg: vi: O	501pt ff	SwpAv	rg : 423 [	1		Point Average Off
		—							Normal	Sweep Average 423
13.4dBm RE	REF					$\Lambda$				Smooth 9
-36.6dBm	}						~~~~~			Sampling Points 501pt
10.0dB / div		-								Act-Res On Off
-86.6dBm 1 0 <mark>A Wri olf</mark>	77.99 nm		1.00 nr	n/div	10	)82.99 n	m	in Vacuum	Opt. Att On 1 1 087.99 nm	Glose
Wave- length		evel cale	Res/V Ave	BW/	Peak/Dip Search		Analysis	Trace	Appli- cation	





#### Spectrum



2D





### **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

