

445nm Fiber Coupled Blue Diode Laser System
RPKDS3-LC SERIES



- 445nm wavelength
- 120~250W output power
- 105/200 μ m core diameter
- 0.22NA

APPLICATIONS

- 3D Printing
- Medical
- Material processing

Version number	Change content	Change date
1.0	First edition	2021.05.17

445nm Fiber Coupled Blue Diode Laser System

RPKDS3-LC SERIES

Specifications (20°C)		Unit	RPKDS3-LC120	RPKDS3-LC200	RPKDS3-LC250
Optical Data ⁽¹⁾	CW Output Power	W	120	200	250
	Center wavelength	nm	445		
	Spectral width(FWHM)	nm	±20		
	Wavelength shift with temperature	nm	≤6		
	Output power instability (20°C)	%	±3 (5 hours)		
	Power Range	%	10-100		
Fiber Data ⁽¹⁾	Core diameter	μm	105	200	200
	Numeric aperture	-	0.22		
	Fiber length	m	2 / Customized		
	Fiber termination	-	SMA905 / Customized		
Electrical Data	Power supply	V	100~240 (50-60Hz)		
	Power consumption at nom. Power, approx.	kW	<1		
	Drive mode	-	Constant current		
	Emission mode	-	CW or Modulated 1 Hz to 20kHz,		
	Control mode	-	RS232, I/O		
	Modulation frequency	Hz	1~20K		
	Duty Ratio	%	5~95		
	Modulation Rise/Fall Time (Min. Value)	μs	≤10		
	Current	A	<10		
Mechanical Parameters	Dimensions (LxWxH/mm) ⁽³⁾	mm	430*482*130		
	Weight	Kg	<15kg		
Others	Refrigerating method	-	Water-cooling		
	Storage temperature ⁽⁴⁾	°C	5~50		
	Temperature Ambient in Operation ⁽⁴⁾	°C	15~30		
	Cooling requirement	-	Quick coupling: 2" Φ 12 water inlet and outlet interface Circulating water pressure 0.25MPa Circulating water flow 7L / min		
	Relative Humidity	%	5~80		
	Safety class	-	4 (EN 60825-01)		

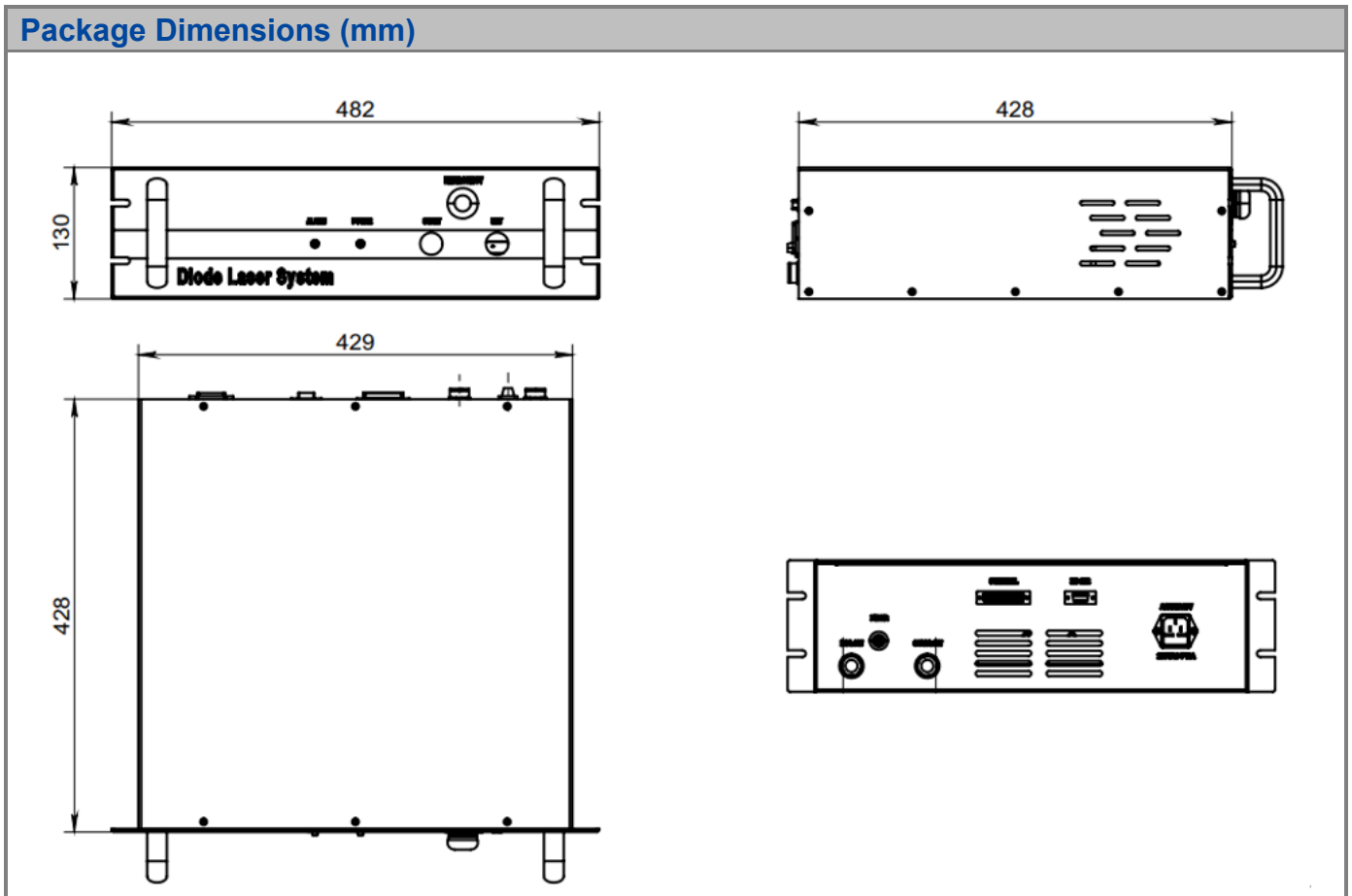
(1) Data measured under operation output at 120W, 200W or 250W@20°C.

(2) A non-condensing environment is required for operation and storage.

(3) Operating temperature defined by the package case. Acceptable operating range is 15°C~35°C, but performance may vary.

445nm Fiber Coupled Blue Diode Laser System RPKDS3-LC SERIES

Package Dimensions (mm)



OPERATING NOTES

- ◆ Avoid eye and skin exposure to direct radiation during operation.
- ◆ Make sure the fiber output end is properly cleaned before operation of laser. Follow safety protocols to avoid injury when handling and cutting the fiber.
- ◆ Laser diode must be used according to the specifications.
- ◆ Temperature Ambient in Operation ranges from 15°C to 30°C.
- ◆ Storage temperature ranges from 5°C to 50°C.

