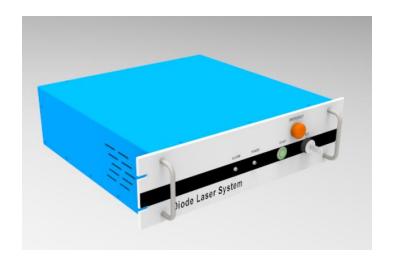


Direct Diode Laser System DS3-51514-LD



#### Features:

- 976nm wavelength
- 300W output power
- 220µm fiber core diameter
- 0.22 NA

#### Applications:

- Plastic Welding
- 3D Printing
- Soldering

BWT, founded in 2003, is committed to the mission of "let the dream drive the light", the vision of becoming the "Global leader in laser solutions", and the value of "Outstanding innovation", providing diode laser, fiber laser, ultra-fast laser products and solutions to global customers.

The company pursues continuous innovation and insists on autonomous and controllable advanced process and technology. With Beijing headquarters as the core, BWT has successively established production and R&D centers in Jiangsu, and Shenzhen, and Invested in the construction of an automated and intelligent production base in Tianjin. To build a high level of technical strength and product quality, BWT set up a German subsidiary in 2020, and taking a solid step for the internationalization of R&D, production and technological innovation.



# Direct Diode Laser System DS3-51514-LD

Specifications (25°C)		Unit	DS3-51514-LD
Optical Data <sup>(1)</sup>	CW Output Power	W	300
	Center Wavelength	nm	976±10
	Spectral Width(FWHM)	nm	≤6
	Wavelength Shift with Temperature	nm/℃	0.3
	Output power instability	%	±3 (2 hours)
	Power Range	%	10-100
Fiber Data	Core Diameter	μm	220
	Numeric aperture	-	0.22
	Fiber length	m	2
	Fiber termination	-	HP-SMA905
Electrical Data	Power supply	V	100~240(50-60Hz)
	Power consumption	W	<800
	Drive mode	-	Constant current
	Emission mode	-	CW or Modulated
	Control mode	-	RS232, I/O
	Modulation frequency	Hz	1~20K
	Duty Cycle	-	5%-95%(Minimum pulse width 20us)
	Modulation Rise/Fall Time (Min. Value)	μs	≤10
Mechanical parameters	Dimensions (L×W×H)	mm	430*482*130
	Weight	kg	<15
Others	Cooling method	-	Water cooling
	Cooling Capacity	w	≥500
	Cooling Water Temperature <sup>(2)</sup>	°C	25±5
	Water Discharge	L/min	7
	Storage temperature <sup>(3)</sup>	°C	5~50
	Relative Humidity	%	5~80
	Safety class	-	4(EN 60825-01)

(1) Data measured under the operating condition with a power output of 300W at 25  $^\circ\!\!\mathbb{C}.$ 

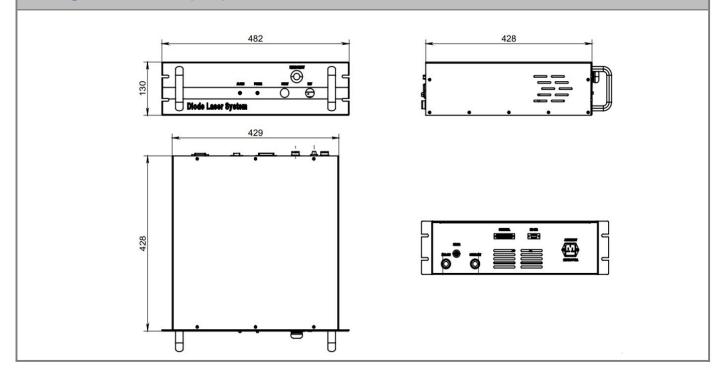
(2) Operating temperature defined by the package case. Acceptable operating range is 20°C~30°C, but performance may vary.

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



# Direct Diode Laser System DS3-51514-LD

## Package Dimensions (mm)



### OPERATING NOTES

- Avoid eye and skin exposure to direct radiation during operation.
- ESD precautions must be taken during storage, transportation and operation.
- Laser diode must work with good cooling.
- Operation temperature ranges from 20°C to 30°C.
- ♦ Storage temperature ranges from -20°C to +70°C.
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Declaration: information and specifications contained herein are deemed to be reliable and accurate. BWT Beijing Ltd.reserves the right to change, alter or modify the design and specifications of these products at any time without notice.25-03