

## BDL Series Diode Laser Subsystem

### BDL-CW100 Series



#### Features:

- ◆ 976/915nm wavelength
- ◆ Up to 100W output power
- ◆ 200 $\mu$ m core diameter, 0.22NA
- ◆ Pluggable fiber

#### Applications:

- ◆ Plastic welding
- ◆ Scientific research
- ◆ Laser 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 intelligent and digital production base in Tianjin. To build a high level of technical strength and product quality, BWT set up a German subsidiary in 2020, introducing European quality standards, and taking a solid step for the internationalization of R&D, production and technological innovation.

Up to now, BWT has traded more than 10 million lasers worldwide. BWT's products are available in more than 70 countries and regions, applications involving industry, medical, commercial, scientific research, information and many other fields.

Version number	Change content	Change date
1.0	First edition	2021.09.17

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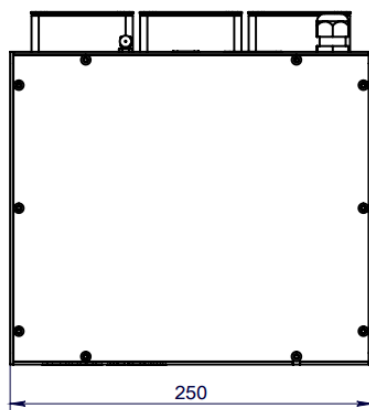
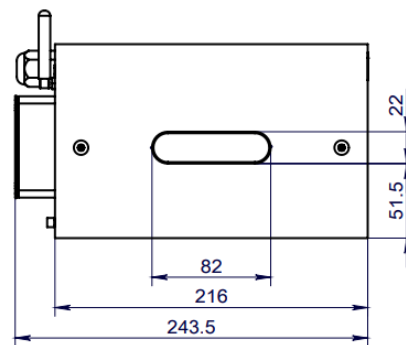
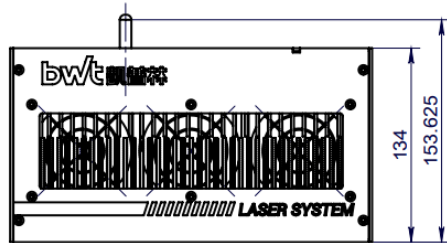
### BDL-CW100 Series

Specifications (25°C)		Unit	BDL-CW100- C200	BDL-CW100- A200	BDL-CW100- D200
Optical Data <sup>(1)</sup>	CW Output Power	W	100	100	60
	Center wavelength	nm	976±10	915±10	808±10
	Spectral width(FWHM)	nm	< 6		
	Wavelength shift with temperature	nm/°C	0.3		
	Output power instability (25°C)	%	±3 ( 5 hours )		
	Power Range	%	10~100		
Fiber Data <sup>(1)</sup>	Core diameter	μm	200		
	Numeric aperture	-	0.22		
	Pluggable fiber	m	5 m/10 m, 3 mm armor, SMA905 male heads at both ends		
	Fiber termination	-	SMA905 female		
Electrical Data	Power supply	V	DC 48V		
	Input Current	A	< 19A		
	Power consumption	W	<500		
	Drive mode	-	Constant current		
	Emission mode	-	CW or Modulated 1 Hz to 10kHz,		
	Control mode	-	RS232, I/O		
	Modulation frequency	Hz	1~20K (DC>0.01%)		
	Modulation Pulse Width	-	20μs -950ms (Pulse)/20μs-999ms (Single Pulse)		
	Modulation Rise/Fall Time (Min. Value)	μs	≤10		
Aiming Beam Data <sup>(2)</sup>	Center wavelength	nm	635±10nm		
	CW Output Power	mW	2		
Mechanical Parameters	Dimensions (L×W×H) <sup>(3)</sup>	mm	250*216*134		
	Weight	kg	<15		
Others	Cooling method	-	Air cooling		
	Storage temperature <sup>(4)</sup>	°C	5~50		
	Temperature Ambient in Operation <sup>(4)</sup>	°C	15~30		
	Cooling requirement	-	Air cooling		
	Relative Humidity	%	5~80		
	Safety class	-	4 ( EN 60825-01 )		

- (1) Consult BWT for other available options.  
 (2) The aiming beam can be customized according to customer requirements.  
 (3) The mechanical dimensions depends on the laser power and cooling mode.  
 (4) A non-condensing environment is required for operation and storage

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**Package Dimensions (mm)-- M size**



**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.



**Declaration:** information and specifications contained herein are deemed to be reliable and accurate. BWT Beijing reserves the right to change, alter or modify the design and specifications of these products at any time without notice.21-10