

50W Pluggable Diode Laser Subsystem

MS-A50/B50/C30



Features:

- ◆ 976/915/808nm wavelength
- ◆ Up to 50W output power
- ◆ 200μm core diameter, 0.22NA
- ◆ Pluggable fiber

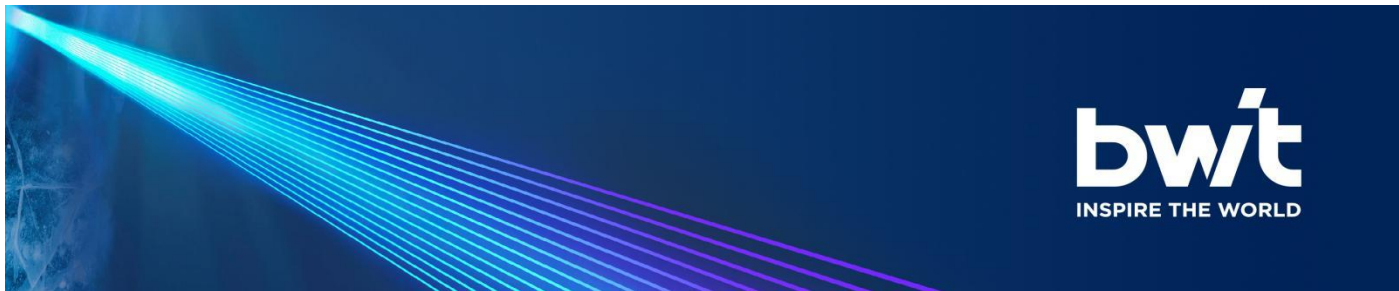
Applications:

- ◆ 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, and taking a solid step for the internationalization of R&D, production and technological innovation.

Version number	Change content	Change date
1.0	First edition	2021.09.17



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Specifications (25°C)		Unit	MS-A50	MS-B50	MS-C30
Optical Data ⁽¹⁾	CW Output Power	W	50	50	30
	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 ⁽¹⁾	Core diameter	µm	200/400		
	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 24V		
	Input Current	A	< 7A		
	Power consumption	W	<150		
	Drive mode	-	Constant current		
	Emission mode	-	CW or Modulated 1 Hz to 20kHz,		
	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 ⁽²⁾	Center wavelength	nm	635±10nm		
	CW Output Power	mW	2		
Mechanical Parameters	Dimensions (L×W×H) ⁽³⁾	mm	242*156*120		
	Weight	kg	<5		
Others	Cooling method	-	Air cooling		
	Storage temperature ⁽⁴⁾	°C	5~50		
	Temperature Ambient in Operation ⁽⁴⁾	°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.

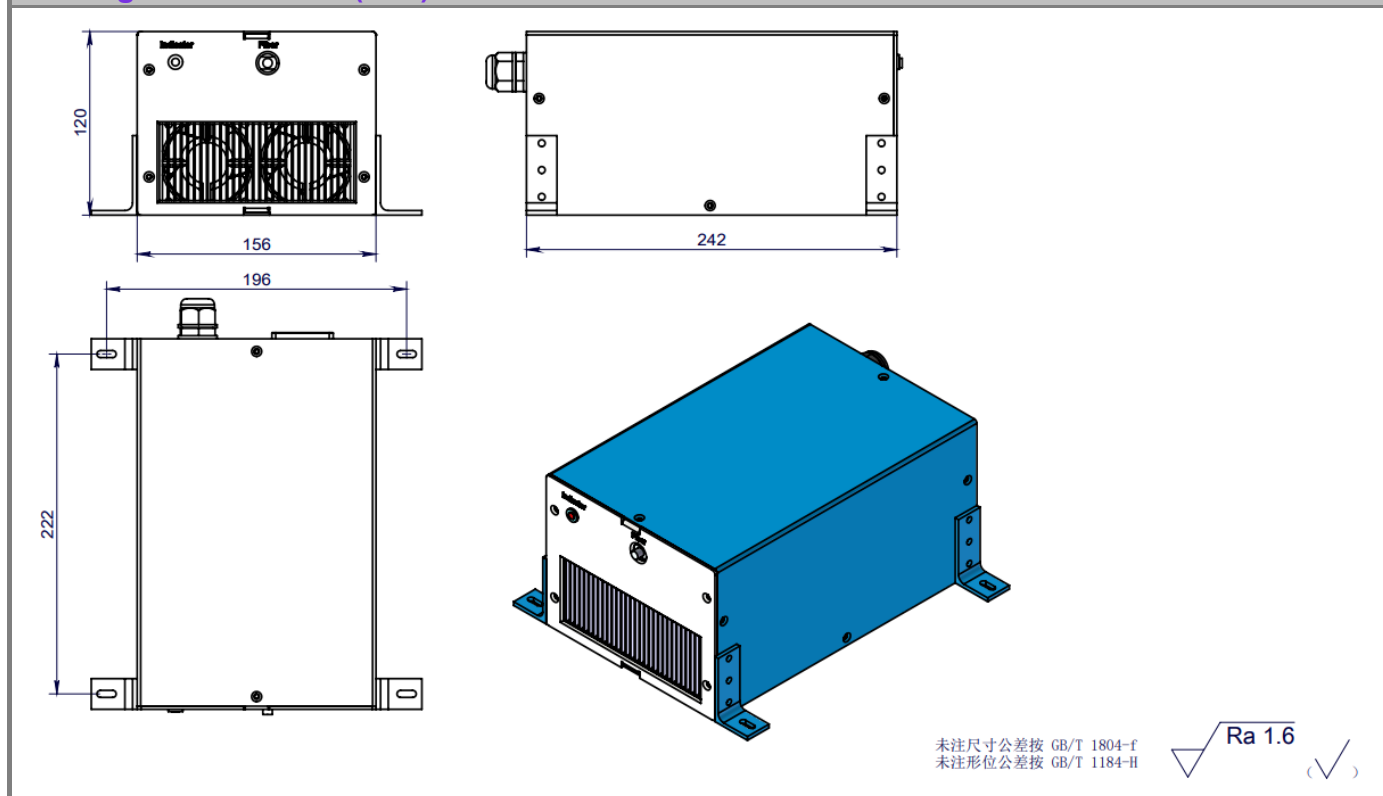
(4) A non-condensing environment is required for operation and storage



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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