

DS3 Fiber Coupled Laser Diode Subsystem

DS3-51522-LD



Features:

- 976nm wavelength
- 50W output power
- 105/200μm core diameter
- 0.22 NA

Applications:

- Plastic Welding
- 3D Printing
- Soldering

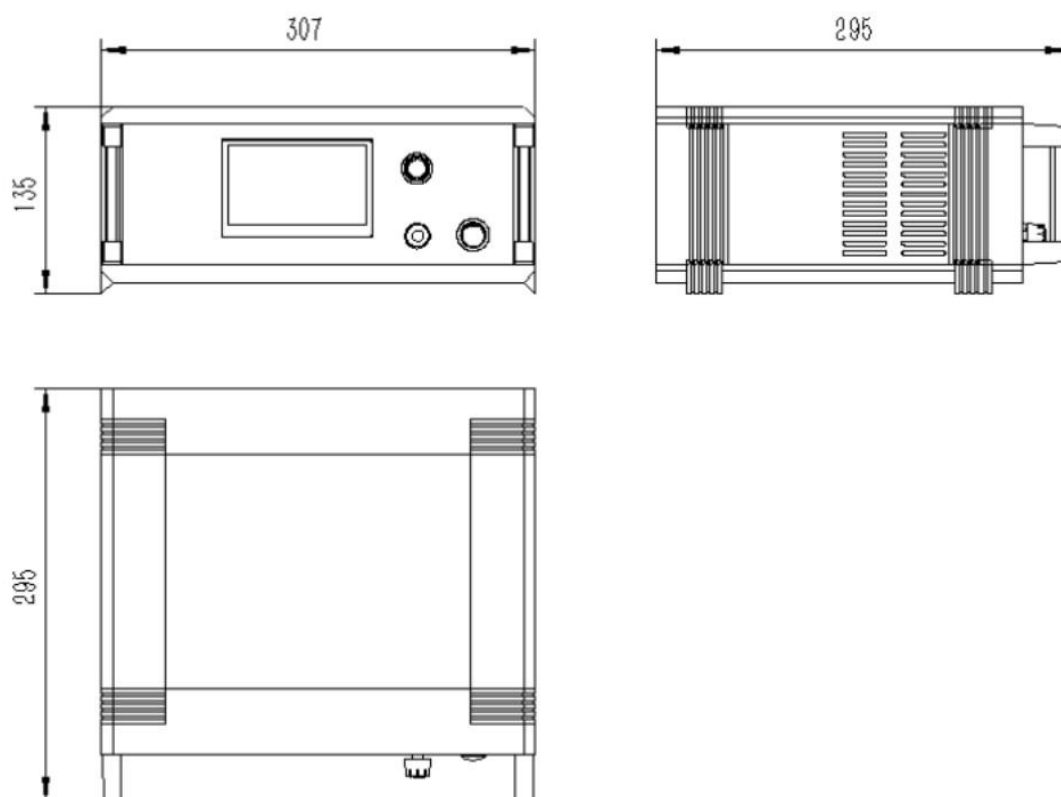
Specifications (25°C)		Unit	DS3-51522-LD
Optical Data ⁽¹⁾	CW Output Power	W	50
	Center wavelength	nm	976±10
	Spectral width (FWHM)	nm	< 6
	Wavelength shift with temperature	nm/°C	0.3
	Output power instability (25°C)	%	±3 (5 hours)
Fiber Data ⁽¹⁾	Power Range	%	10~100
	Core diameter	μm	105/200
	Numeric aperture	-	0.22
	Fiber length	m	2/Customized
Electrical Data	Fiber termination	-	SMA905 / Customized
	Power supply	V	100~240 (50-60Hz)
	Power consumption	W	<400
	Drive mode	-	Constant current
	Emission mode	-	CW or Modulated 1 Hz to 20kHz,
	Control mode	-	Touch screen, RS232, I/O
	Modulation frequency	Hz	1~20K (DC>0.01%)
	Modulation Pulse Width	-	20μs -950ms (Pulse)/20μs-999ms (Single Pulse)
Aiming Beam Data ⁽²⁾	Modulation Rise/Fall Time (Min. Value)	μs	≤10
	Center wavelength	nm	635±10nm
Mechanical Parameters	CW Output Power	mW	2
	Dimensions (L×W×H) ⁽³⁾	mm	S size 307*295*135
Others	Weight	kg	<4.8
	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 Ephotonics for other available options.
 (2) The aiming beam can be customized according to customer requirements.
 (3) The mechanical dimensions depend 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)



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.