



RDS3 Fiber Coupled Diode Laser System

RDS3-51522-RGB

Features :

- ◆ 445nm+525nm+638nm wavelength
- ◆ Total 22W output power
- ◆ 400μm core diameter,0.22NA
- ◆ Multi-wavelength output

Applications:

- ◆ Plastic welding
- ◆ 3D Printing
- ◆ Soldering

| Specifications (25°C) | | Unit | RDS3-51522-RGB |
|-----------------------------|---|-------|---|
| Optical Data ⁽¹⁾ | CW Output Power(total) | W | 22 |
| | CW Output Power(445nm) | W | 8 |
| | CW Output Power (525nm) | W | 8 |
| | CW Output Power(638nm) | W | 6 |
| | Center wavelength | nm | 445±20,525±10,635±10 |
| | 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 | 400 |
| | Numeric aperture | - | 0.22 |
| | Fiber length | m | 2-10 |
| | Fiber termination | - | SMA905 / Customized |
| Electrical Data | Power supply | V | 100~240 (50-60Hz) |
| | Power consumption | W | <150 |
| | 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) |
| | Modulation Rise/Fall Time (Min. Value) | μs | ≤10 |
| | CW Output Power | mW | 2 |
| Mechanical Parameters | Dimensions (L×W×H) ⁽³⁾ | mm | 430*482*130 |
| | Weight | kg | <15 |
| 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 RPMC for other available options.

(2) The aiming beam can be customized according to customer requirements.

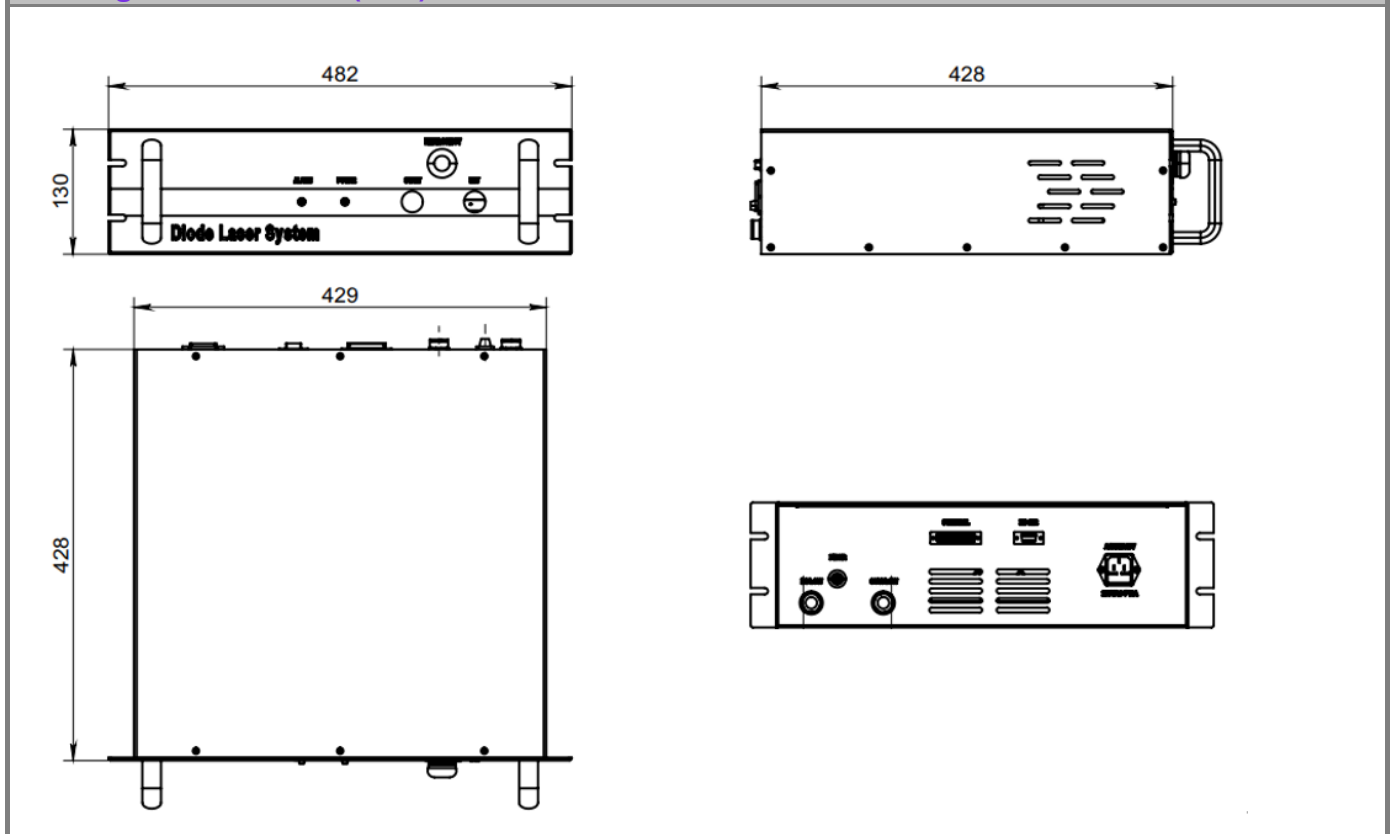
(3) The mechanical dimensions depends on the laser power and cooling mode.

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

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Package Dimensions (mm)



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.

