



# Four Wavelengths Laser System

## RGBV Series

Data Sheet



### Overview

The RGBV series free space output multi-wavelength lasers are ideal for applications that require four wavelengths. The laser emits up to four wavelengths from one aperture and with separate power monitors for each wavelength. The RGBV series can provide various kinds of colors, such as red, orange, yellow, green, indigo, blue, and purple. The RGBV series is widely used for laser scientific research, medical treatment, OEM field and multimedia entertainment.

### Features

- Four wavelengths combined into one output
- CW operating mode
- Optical output power 50mW to 200mW
- Ultra-compact design

### Applications

- Scientific research
- Medical treatment
- OEM field
- Multimedia entertainment

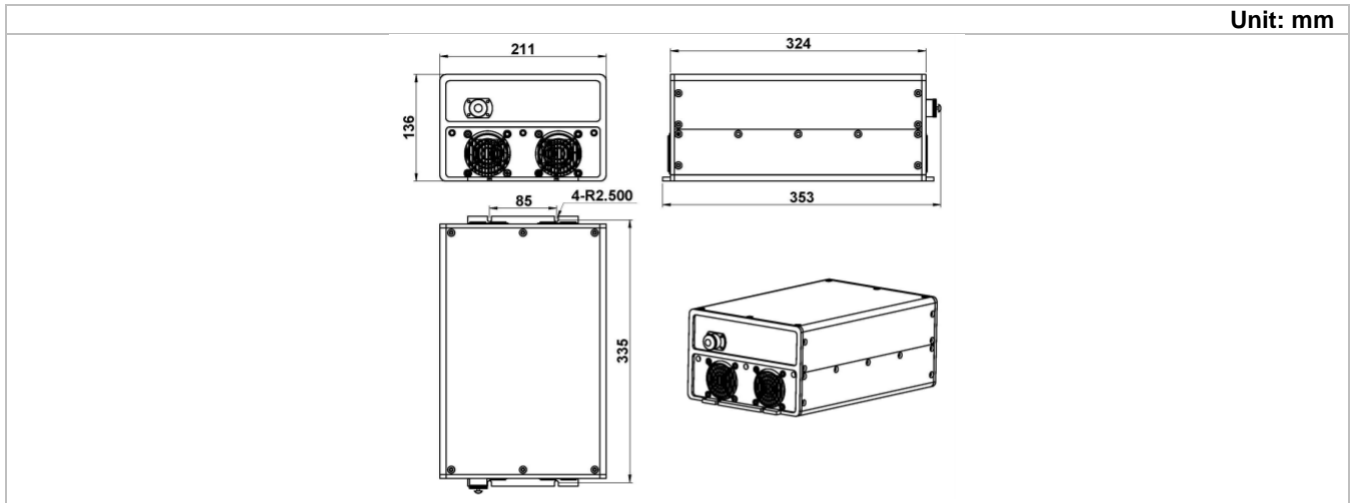
## RGBV Series Specifications

Parameter	RGBV1
Wavelength	Red at 640nm, Yellow Green at 561nm, Blue at 488nm, Violet at 405nm
Total output power	>50mW, >100mW, >200mW
Transverse mode	Near TEM <sub>00</sub> / Near TEM <sub>00</sub> /TEM <sub>00</sub> / Near TEM <sub>00</sub>
Operating mode	CW
Power stability (rms, over 4 hours)	<5%, <3%, ,2%
Beam diameter at aperture (1/e <sup>2</sup> )	~3.5 mm
Beam divergence, full angle	<1.5 mrad
Warm-up time	<10 min
Operating temperature	10-35°C
Modulation option	TTL/Analog: 1Hz-1kHz, 1kHz-10kHz, 10kHz-30kHz
Expected lifetime	10,000 hours
Warranty period	10 months

## Remarks:

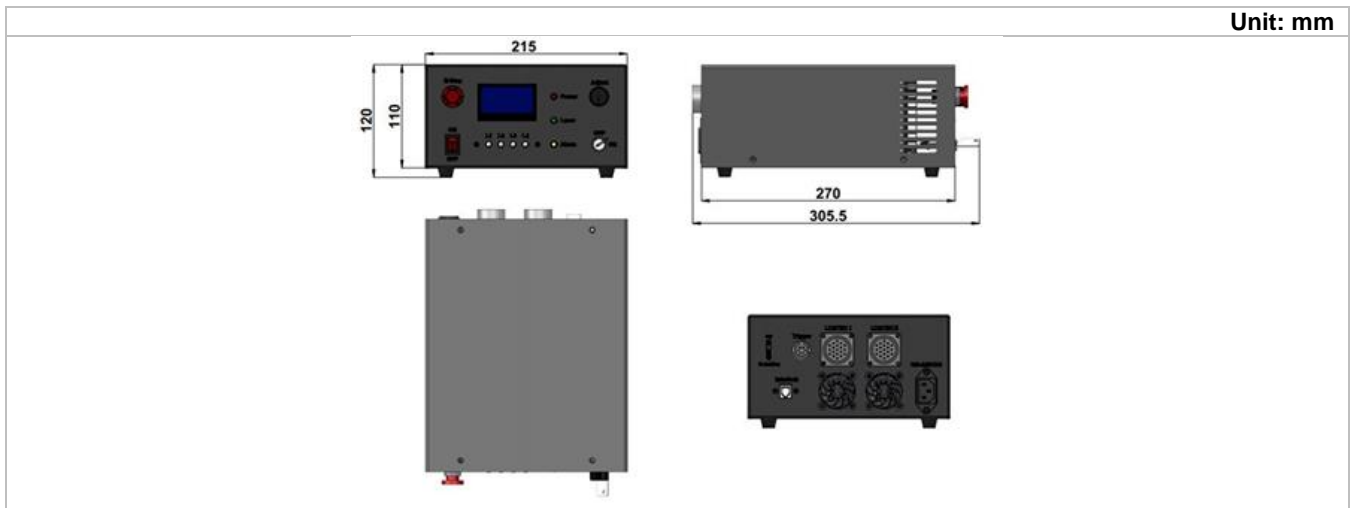
- Specifications of the CW laser is based on the laser performance at full power output after the specified warmup period. The stability of output power may change when output power is adjusted at a different power level.
- The combination of red, green, and blue laser can generate multi-colors, such as red, orange, yellow, green, indigo, blue, purple, etc.

RGBV Series Laser Head Dimensions



<b>Parameter</b>	<b>RGBV Series</b>
Dimensions	353(L)x211(W) x136(H) mm <sup>3</sup>
Weight	13.0 kg

RGBV Series Power Supply Dimensions



<b>Parameter</b>	<b>RGBV Laboratory Power Supply</b>
Dimensions	305.5(L) x215(W) x120(H) mm <sup>3</sup>
Weight	5.0 kg
Input voltage	100-240VAC

**Ordering Information**

For more information, please contact Lasermate directly at [sales@lasermate.com](mailto:sales@lasermate.com).

Part Number Configuration RGBV[1][2][3][4][5]					
RGBV = Laser Model Series	[1] = Wavelength	[2] = Output Power	[3] = Power Supply	[4] = Power Stability	[5] = Modulation
	1= 405/488/561/640 nm	50= >50mW 100= >100mW 200= >200mW	R4= RGBV Laboratory Power Supply	A= <5% E= <3% 2= <2%	0=None T1=TTL 1Hz-1kHz T2=TTL 1kHz-10kHz T3=TTL 10kHz-30kHz A1=Analog 1Hz-1kHz A2=Analog 1kHz-10kHz A3=Analog 10kHz-30kHz

Note: The above specifications are subject to change without notice.