

Multi-line Fiber Coupled Laser



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The laser combines up to 6 wavelengths into one fiber outputs. They can be controlled either separately. The flexible design enables integration of optional AOM modulators that allow fast modulation of DPSS lasers. The robust design provides excellent long-term stability and outstanding flexibility for your application.

FEATURES

- Combines up to 6 wavelengths into one fiber outputs
- Wavelengths from 400 to 671nm
- Customized wavelengths and output power combinations
- Standard fiber connectors or collimated beam output
- Fixed or separable fiber coupling
- Single mode or polarization maintaining fibers
- Optional AOM modulators, modulation up to 1MHz
- Customized configurations and modifications available

APPLICATIONS

- Fluorescence microscopy
- Flow cytometry
- Confocal microscopy
- Optogenetics
- Live-cell imaging
- Light sheet microscopy



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SYSTEM SPECIFICATION¹

Wavelength (nm)	400	405	410	420	450	457	473	488	505	520	532	561	633	640	655	671
Wavelength tolerance (nm, typical)	±5	±5	±5	±5	±5	±1	±1	±5	±5	±5	±1	±1	±3	±5	±10	±1
Max. power after fiber (mW)	100	100	100	30	30	70	70	50	15	30	100	50	20	50	50	100
Power stability (rms, over 4hours)	<1%, <2%, <3%															
Laser operation mode	CW															
Fiber type	SM/PM															
SM Fiber core diameter (μm)	4~5															
Fiber (NA)	0.12															
Fiber connector	FC-PC/ FC-APC															
Fiber length	1m (Other lengths are available on request)															
M ² after SM Fiber	<1.1															
Polarization ratio after PM Fiber	>50:1															
Noise of amplitude (rms, 20Hz~20MHz)	<1%															
Expected lifetime	10,000															

ELECTRICAL SPECIFICATIONS

Power supply	RGB-31	RGB-41
Input voltage (VAC)	100-240	100-240
Modulation	TTL modulation Analog modulation	
Modulation frequency ²	TTL with 1Hz-30kHz, 30kHz-150kHz, 150kHz-1MHz optional Analog with 1Hz-30kHz, 30kHz-150kHz, 150kHz-1MHz optional	

KEYNOTES

¹All testing data under the conditions of temperature 25°C.

²An AOM is needed when high modulation frequency is required, please contact us for more details.



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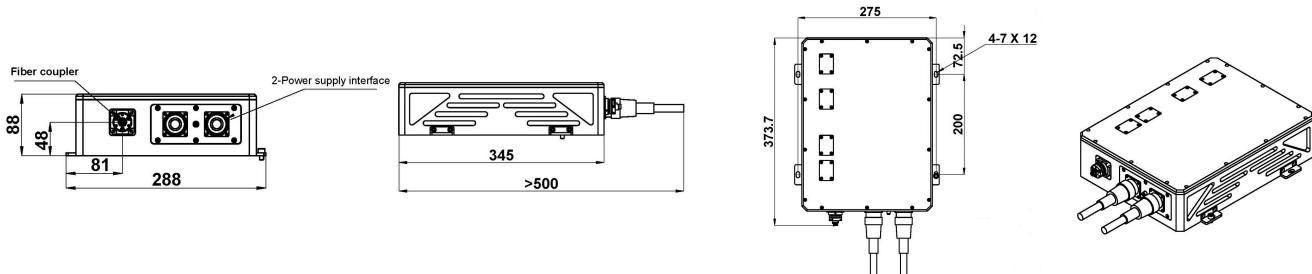
ENVIRONMENTAL CONDITIONS

Operating temperature (°C)	10°C to 35°C
Warm-up time (min)	< 10
Storage temperature (°C)	0 °C to 60 °C
Humidity (%)	< 90 %, non-condensing

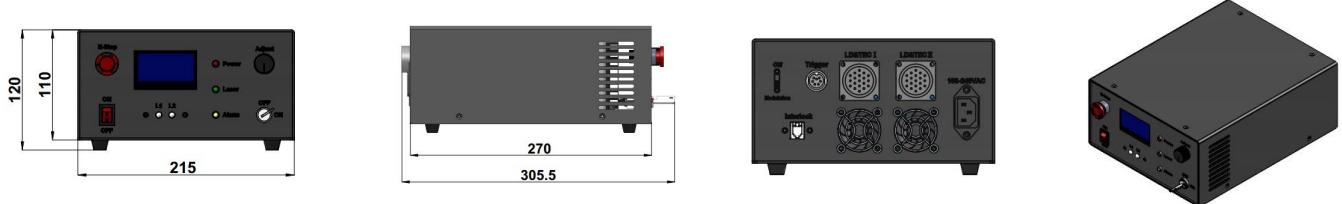
MECHANICAL SPECIFICATIONS

Dimensions of laser combiner (mm) (4 lines)	373.7 x 288 x 88	
Dimensions of power supply (mm)	2-3 lines	4-6 lines
	RGB-31	RGB-41
	305.5 x 215 x 120	305.5 x 215 x 120
Material	Aluminum	

DIMENSIONS OF LASER HEAD (mm):



DIMENSIONS OF POWER SUPPLY FOR RGB-31 (mm):



DIMENSIONS OF POWER SUPPLY FOR RGB-41 (mm):

