

BLAZER-P series

High energy picosecond mode-locked laser



BLAZER-P laser series inherit the robust and hermetically sealed DPSS master oscillator design of BLAZER series. Diode pumped regenerative amplifier and flash lamp pumped energy amplifier produce up to 200mJ picosecond pulses. 24/7 rugged industrial design improves laser reliability and reduces running costs.

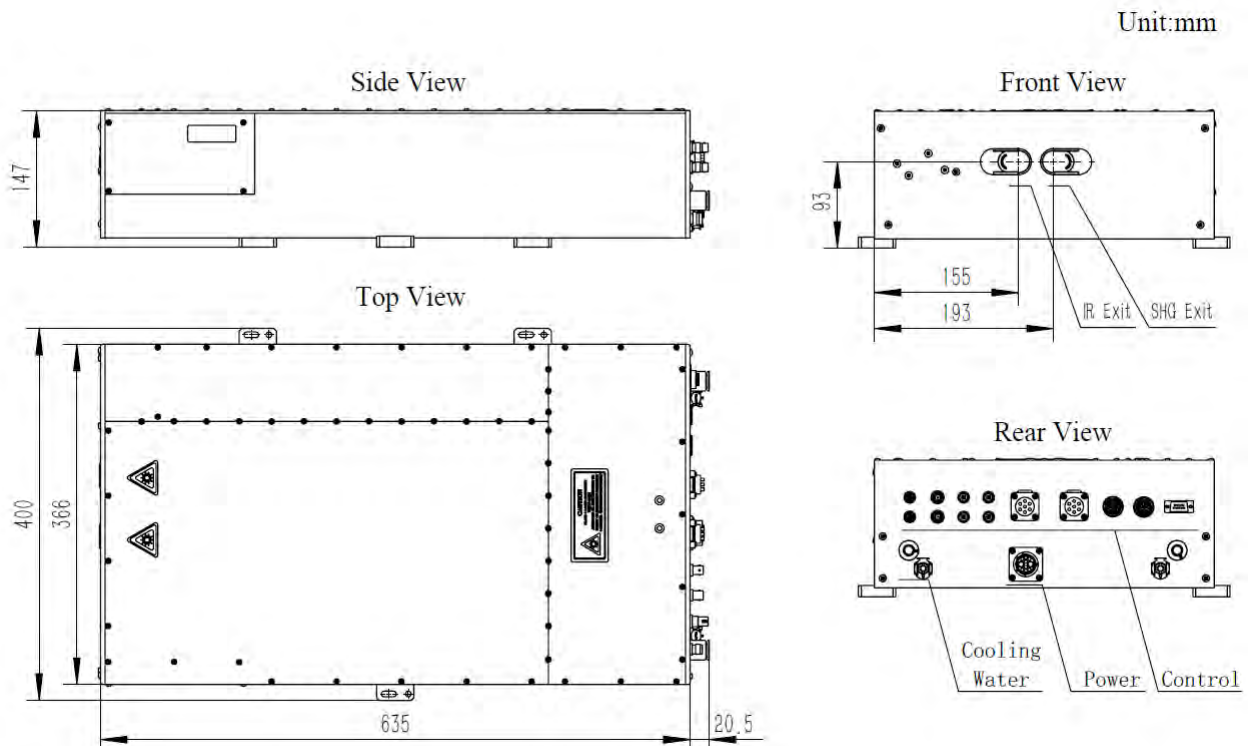
FEATURES

- **1-200mJ** at 1064nm / Harmonics from 532nm to 355nm
- **1Hz-10kHz** repetition rate / **<30 ps** pulse duration
- High beam quality $M^2 < 1.5$
- Compact, sealed and rugged industrial grade design for **24/7** use and ensures long-term thermal and mechanical stability
- RS232 interface for remote operation

APPLICATIONS

- Non-linear optics
- Micromachining
- Pump source
- Satellite laser ranging

BLAZER-50P Laser Head Mechanical Specifications



BLAZER-P series Specifications



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Beam characteristics

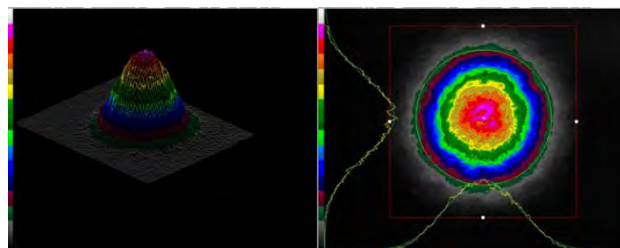
Version	BLAZER-01P	BLAZER-50P	BLAZER-100P	BLAZER-200P
Wavelength (nm)	1064nm (532/355 option)			
Repetition Rate ¹ (Hz)	1Hz-10kHz	1Hz-10Hz		
Pulse Energy (mJ)	Pulse Energy (mJ)			
Wavelength (nm)				
1064nm	1	50	100	200
532nm	0.5	25	50	100
355nm	0.25	15	30	60
Beam Spatial Profile	TEM ₀₀ (M ² <1.5)			
Pulsewidth (ps)	<30ps@1064nm			
Energy Stability (RMS)	<1%			
Polarization Ratio	>100:1			
Beam Circularity (%)	>85%			
Pointing Stability ² (μrad/°C)	<50μrad/°C			
Beam Divergence ³ (mrad)	<2mrad	<0.3mrad	<0.2mrad	<0.2mrad
Beam Diameter ⁴ (mm)	~1mm	~8mm	~12mm	~16mm

General characteristics

AC Input	220 VAC ±5% 50-60Hz
Power Consumption	<2kW
Cooling Type	Closed-loop water cooling
Operating Conditions	Temperature 5-35°C Humidity <80%
Warm-Up Time (mins)	<30mins

NOTES

1. Other repetition rate can be customized.
2. Maximum deviation from beam mean centroid.
3. Full angle for 86.5% of energy.
4. Output of laser head at 1064nm.



Beam profile


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