

BLAZER-P series

High Energy Picosecond Mode-locked Laser



FEATURES

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

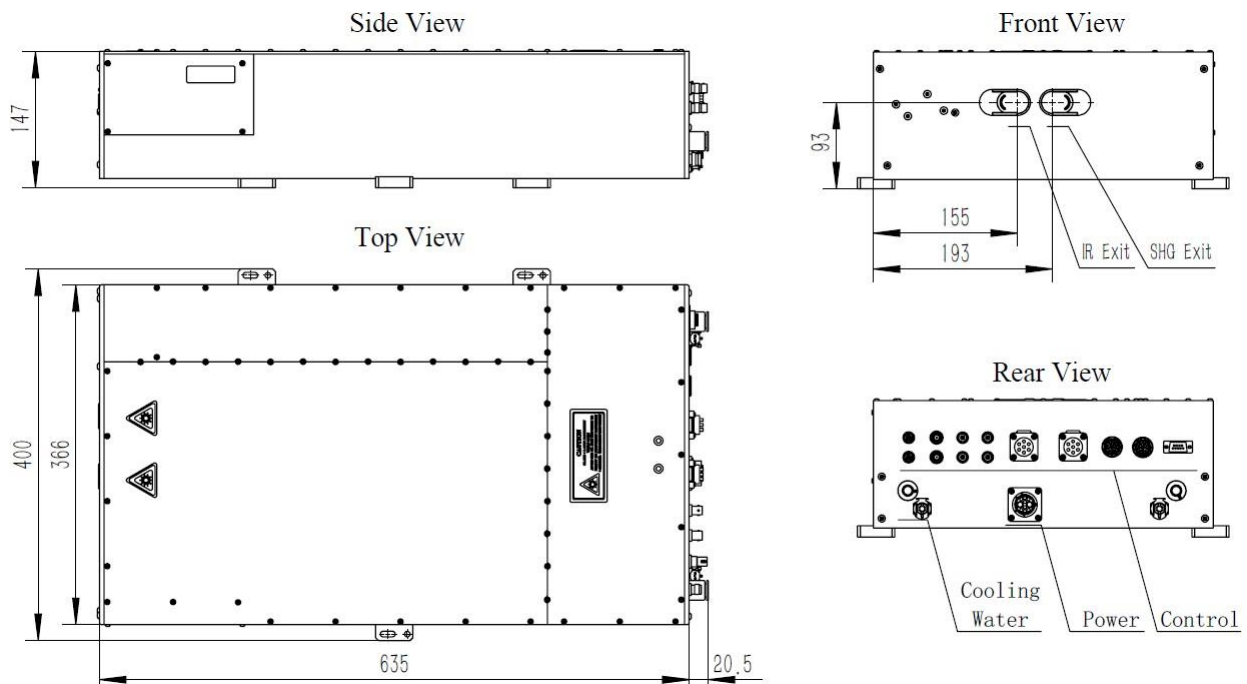
BLAZER-P series inherit the robust and hermetically sealed DPSS master oscillator design of BLAZER series. Diode pumped regenerative amplifier and flash lamp pumped energy amplifier produce up to 200mJ picosecond pulse. 24/7 robust industrial design improves laser reliability and reduces running costs.

APPLICATIONS

- Non-linear optics
- Micro machining
- Pump source
- Satellite laser ranging

BLAZER-50P Laser Head Mechanical Specifications

Unit: mm



High Energy Picosecond Mode-locked Laser

Beam Parameter

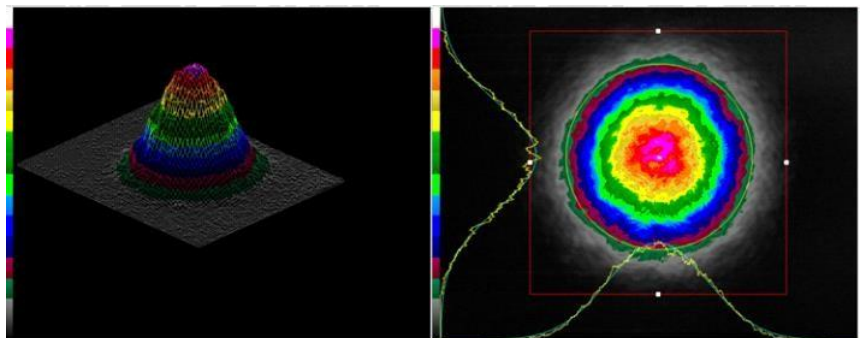
Version	BLAZER-01P	BLAZER-50P	BLAZER-100P	BLAZER-200P
Wavelength(nm)	1064nm(532/355 optional)			
Repetition Rate ¹ (Hz)	1Hz-10kHz	1Hz-10Hz		
Pulse Energy(mJ)	Pulse Energy(mJ)			
Wavelength(nm)				
1064nm	2 ²	50	100	200
532nm	1	25	50	100
355nm	0.5	15	30	60
Beam Spatial Profile	TEM ₀₀ (M ² <1.5)			
Pulsewidth(ps) ³	<30ps@1064nm			
Energy Stability(RMS)	<1%			
Polarization Ratio	>100:1			
Beam Circularity(%)	>85%			
Pointing Stability ⁴ (μrad/°C)	<50μrad/°C			
Beam Divergence ⁵ (mrad)	<2mrad	<0.3mrad	<0.2mrad	<0.2mrad
Beam Diameter ⁶ (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	<30min			

NOTES

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



Beam profile at 50mJ

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