

# EPEE-30

## High Power Industrial Picosecond Laser



**EPEE-30** combines advantages of fiber laser and free-space solid state amplifier technology to get >30W output power with pulse energy over 200  $\mu$ J and pulse duration <15ps.

- The fiber seed enables the EPEE-30 to be more stable, compact and more flexible than the traditional solid-state seed lasers.
- The solid-state amplifier ensures the output of high pulse energy with excellent beam quality and extreme stable operation of the laser.

### KEY HIGHLIGHTS

Repetition rate of single shot to 2 MHz

TEM<sub>00</sub> ( $M^2 < 1.3$ )

Pulse width < 15 ps

Pulse energy >200  $\mu$ J

Burst Mode available

Compact

RS232 and external GATE control

Assembled in 1000 class clean room

### APPLICATIONS

Glass cutting and drilling

Ceramic cutting and drilling

Semiconductor cutting

Precision machining

Injector nozzle drilling

Sapphire cutting and drilling

Thin film cutting

Scientific applications



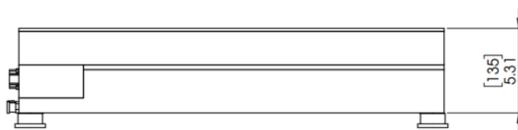
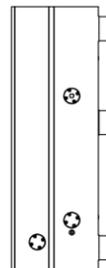
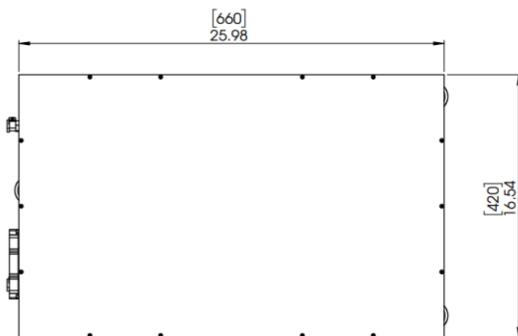
# EPEE-30

## 30 W 1064 nm High Power Industrial Picosecond Laser

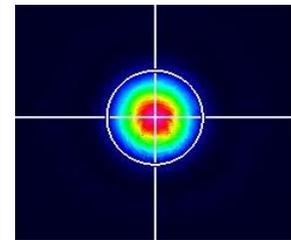
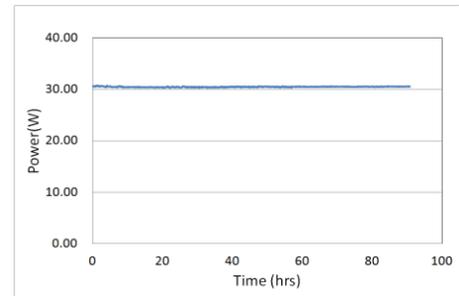
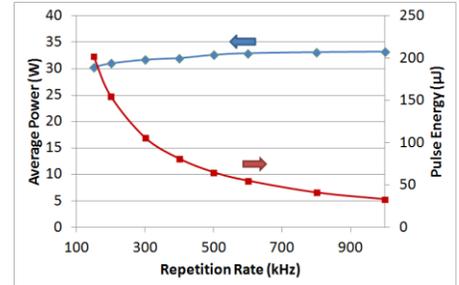
### System Specifications

Center Wavelength	1064 nm
Pulse Repetition Rate	Single shot to 2 MHz
Pulse Duration	<15 ps
Maximum Average Power	> 30 W @ 1 MHz
Average Power Stability	< 2% rms over 8 hours
Pulse-to-pulse Stability	< 3% rms
Spatial Mode	TEM <sub>00</sub> , M <sup>2</sup> < 1.3
Beam Divergence	< 2 mrad (full angle)
1/e <sup>2</sup> Beam Diameter	~1.6 mm
Beam Roundness	> 90%
Pointing Instability	< 50 μrad
Polarization Direction	Vertical
Polarization Ratio	> 100:1
Cooling	Water-cooling
Ambient Temperature	15 to 30°C
Storage Temperature	-10 to 50°C
Relative Humidity	10% to 80% (non-condensing)
Warm-up Time	< 10 minutes
Operating Voltage	85 to 264 V (50/60 Hertz)

### Mechanical Specifications



### Test Data



Elixir Photonics follows a policy of continuous product improvement. Specifications are subject to change without notice. Elixir Photonics offers a limited warranty for all EPEE lasers. For full details of this warranty coverage, please contact Sales Department at sales@elixirphotonics.com.

