

# LaserBlade

## DIRECTED ENERGY FIBER AMPLIFIER MODULE

### FEATURES

- |  |   |   |
|--|---|---|
|  2.5kW Single-Mode Output        |  Low SWaP          |  High-Efficiency           |
|  Narrow or Broad Linewidth       |  Low Pressure Drop |  External or Built-In Seed |
|  Stackable for Unlimited Scaling |  Low Cost          |  Runs Directly Off Battery |



### OWN THE SKY

For over 15 years, OEI has been supplying high-brightness fiber laser solutions for directed energy applications. With advanced optical, electrical, and mechanical design capabilities in-house, OEI continually pushes the envelope of performance and efficiency while shrinking weight and footprint.

Several all-fiber platforms are now available, including this compact LaserBlade amplifier module with up to 2.5kW of single-mode output and integrated drive/control electronics with a wide input voltage range for battery-powered applications. OEI's proprietary, high efficiency diode driver and optical amplifier architecture achieves over 40% wall-plug efficiency and a new, lightweight coldplate design reduces pressure drop in the cooling system.

The standard configuration accepts an external seed signal and an optional internal seed configuration is available. Other customized platforms are available to suit any directed energy application.

### APPLICATIONS

- Directed Energy
- Counter-UAS
- Dichroic Combining
- Spectral Combining
- Coherent Combining
- Crystal Pumping
- Advanced Fiber Testing
- Material Processing



2.5kW LaserBlade



20-30kW LaserBlade Rack  
Stackable for unlimited power scaling



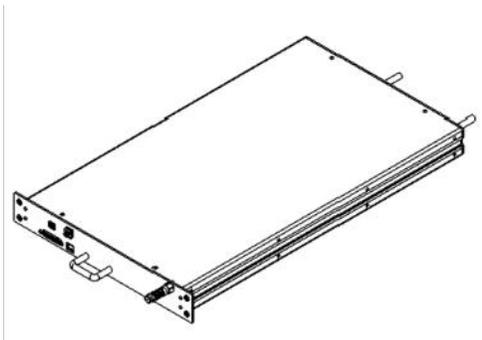
# PERFORMANCE SPECIFICATIONS

## LaserBlade

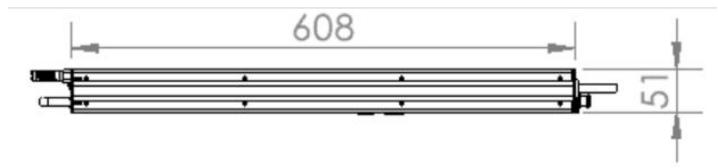
Optical	LaserBlade
Wavelength (nm)	1040-1080
Spectral Width (GHz)	<20
Input Seed Power (mW)	≥ 10mW
Output Power (W)	2500
Beam Quality (M <sup>2</sup> )	Single-mode at M <sup>2</sup> ≤ 1.3
Fiber Length (m)	1-5
Fiber Connector	QBH, Collimator, custom endcap solutions available
Mechanical	
Dimensions (mm, L x W x H)	341 x 51 x 608
Weight (kg)	12
Electrical	
Input Voltage (VDC)	250-400
E/O Efficiency (%)	≥ 40
Communication	Ethernet, Analog
Environmental	
Operating Temperature (°C)	10-40
Storage Temperature (°C)	-20-60
Coolant Temperature (°C)	15-35
Flow Rate (LPM)	10

# MECHANICAL SPECIFICATIONS

ISO VIEW



SIDE VIEW



REAR VIEW

