





# Cut, Weld, Fabricate

## **Materials Processing Laser**

#### **DESCRIPTION**

The ClearCut Laser Engine is engineered for the demanding needs of copper, silver, and gold cutting, welding, and fabrication. The laser's unique wavelength of 450 nm is optimized for maximum absorption of copper, silver and gold. This unique optimization makes the ClearCut up to 20 times faster and more efficient compared to traditional cutting lasers at 1064 nm. The ClearCut provides excellent wall-plug efficiency and lower maintenance costs. The ClearCut Laser Engine offers easy integration thanks to its air cooled architecture. No external liquid cooling is required.

Perfectly engineered for automotive, aerospace, jewelry, and research applications, the ClearCut Laser Engine will reduce your fabrication times, costs, and mistakes. The 105 to 220 um fiber output gives you precise control over the laser, making it ideal for your most demanding applications.

Available in power outputs from 25 Watts to more than 540 Watts, contact us today for a quote that fits your custom requirements. Don't buy on the shelf products when Power Technology can configure the exact ClearCut Laser Engine for your application.

#### **APPLICATIONS**

- Welding
- Cutting
- Fabrication
- Entertainment
- Medical
- Optical Pumping

#### **FEATURES & BENEFITS**

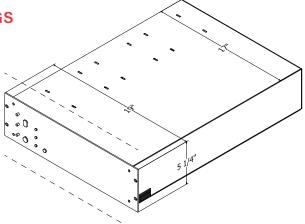
- Multiple power options
- Perfect wavelength for maximum absorption
- Air-cooled design



#### **SPECIFICATIONS**

ClearCut	25	50A	50B	90	180	360	540
Modulation (kHz)	0-100	0-100	0-100	0-100	0-100	0-100	0-100
Output Power (W)	25	50	50	100	200	400	600
Output Fiber Diameter (µm)	105	105	200	105	105	220	220
Numeric Aperture	.15	.22	.22	.22	.22	.22	.22
Fiber Length (m)	5	5	5	5	5	5	5
Fiber Connector (SMA)	SMA	QBH	QBH	QBH	QBH	QBH	QBH
Supply Voltage (VAC)	110/240	110/240	110/240	110/240	110/240	110/240	110/240
Operating Temperature (C)	10-30	10-30	10-30	10-30	10-30	10-30	10-30
Rack Mount Units (Standard 19")	3	3	3	3	3	3	5
Rack Depth (Inches)	26	26	26	26	26	26	30
Power Density (MW/cm²)	.289	.577	.159	1.039	2.085	.950	1.425
Brightness (MW/cm <sup>2-str</sup> )	1.868	3.736	1.041	6.724	13.486	6.144	9.216
BPP (mm-mrad)	7.88	11.55	22.00	11.55	11.55	24.20	24.20





### **SAFETY WARNINGS**



### **COMPLIANT & REGISTERED**





