

# ClearCut<sup>29</sup>



**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 100 to 400 um fiber output gives you precise control over the laser, making it ideal for your most demanding applications.

Available in power outputs from 28 Watts to more than 500 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

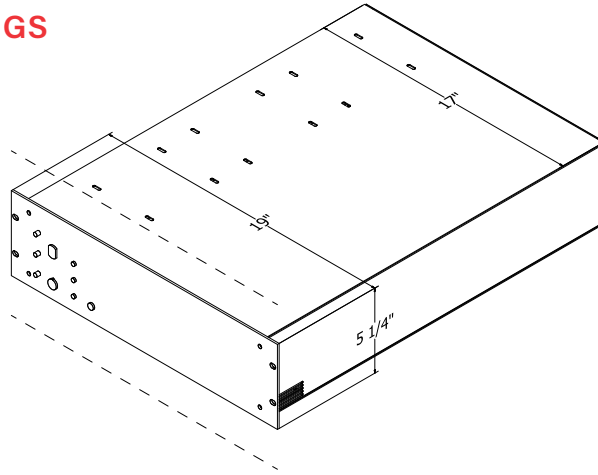
## FEATURES & BENEFITS

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

## SPECIFICATIONS

|                                    | ClearCut28 | ClearCut80 | ClearCut160 | ClearCut480 |
|------------------------------------|------------|------------|-------------|-------------|
| Wavelength (nm)                    | 450 +/- 10 | 450 +/- 10 | 450 +/- 10  | 450 +/- 10  |
| Modulation (kHz)                   | 0-100      | 0-100      | 0-100       | 0-100       |
| Output Power (W)                   | 28         | 80         | 160         | 480         |
| Delivery Fiber Core Diameter (µm)  | 105        | 200        | 220         | 400         |
| Numeric Aperture                   | .22        | .22        | .22         | .22         |
| Fiber Length (m)                   | 5          | 5          | 5           | 5           |
| Fiber Connector (SMA)              | SMA 905    | QBH        | QBH         | QBH         |
| Supply Voltage (VAC)               | 110/240    | 110/240    | 110/240     | 110/240     |
| Supply Current (A)                 | 2/1        | 4/2        | 7/4         | 20/10       |
| Operating Temperature (C)          | 10-30      | 10-30      | 10-30       | 10-30       |
| Rack Mount Units (Standard 19")    | 3          | 3          | 3           | 5           |
| Rack Depth (Inches)                | 26         | 26         | 26          | 30          |
| Power Density (W/cm <sup>2</sup> ) | 323,375    | 254,647    | 420,903     | 381,970     |

## MECHANICAL DRAWINGS



## SAFETY WARNINGS

LASER RADIATION  
AVOID EYE OR SKIN EXPOSURE TO  
DIRECT OR SCATTERED RADIATION  
CLASS 4 LASER PRODUCT

## COMPLIANT & REGISTERED

