

**KERN**

**HIGH PERFORMANCE / LARGE FORMAT  
LASER CUTTING SYSTEMS**

# OptiDual





The OptiDual system is equipped with dual laser sources instantly doubling your laser cutting production. The KCAM laser software controls each laser independently allowing both lasers to be tuned to equal power. This feature ensures consistent cutting results from both lasers over the entire work area. The second laser can be disabled allowing full range of table motion for the master laser.

Model	OPD50	OPD100	OPD60120	OPD80120	OPD86144
Work Area	52" x 50"	52" x 100"	60" x 120"	80" x 120"	86" x 144"
Footprint (W x L x H)	78" x 87" x 53"	78" x 137" x 53"	86" x 157" x 53"	106" x 157" x 53"	112" x 181" x 53"
*Part Clearance	3"	3"	3"	3"	3"
System Weight	3500 lbs	4700 lbs	5500 lbs	6500 lbs	7500 lbs

\* Z-axis height can be customized.

## OptiDual SPECIFICATIONS

Laser Classification	Class 4 CO2 Laser
Laser Wattage	100, 150 and 200 watts
*Positioning Accuracy	+/- .002"/ft
Repeatability	+/- .0005"/ft
Max Cutting Speed	20"/sec
Max Engraving Speed	25"/sec
Electrical	230v/1ph, 230v/3ph
Vacuum Blower	Two Blowers, each 1500 CFM or greater
Air Assist	100 – 250 PSI (9 -17 BAR)
Options Available	Metal Cutting, K-Vision Camera, Pipe Rotary, Multi-Zone Table, and Fume Extractor

\* Mapped table, under controlled conditions.

## STANDARD FEATURES

### Laser Source

High quality metal cavity laser sources manufactured in the USA by Kern Technologies. Liquid-cooled, metal cavity CO2 laser sources with a wide operating power range and exceptional power stability. Manufactured with pride in Minnesota, USA by Kern Technologies.

### Motion Package

Kern's next generation HyperDual motion package features a rack and pinion design driven by powerful servo motors at each side of the table. The result is smooth cut radiuses, quick acceleration rates, and the fastest processing speeds Kern has presented to date. The x-axis is powered by high quality linear motors.

### Exhaust System

A blower package removes fumes and small debris created during laser processing. An integrated downdraft table holds material secure to the table as it is being processed. A vacuum arm elevates the gantry hoses neatly above the working table.

### Chilling Unit

A closed-loop chilling unit will properly cool the laser source, ensuring a long laser lifetime and consistent cutting and engraving results.

### Computer / Software

A high-performance computer and monitor package is included with each system. KCAM laser software, CorelDRAW® and an easy-to-use PDF converter are pre-installed on the computer.

### Safety

A UL certified electrical panel is placed on each laser system which turns on and shuts down components of the laser system. US CDRH compliance requirements are upheld including emergency stop buttons, interlocked access points and a 5 second safety key switch.

### Steel Chassis

Kern's laser systems are built around a solid steel frame. The frame features Blanchard ground flat surfaces and high-temperature stress relieved welds. Kern technicians double check for precision tolerance at the Kern factory.

