

PLS6MW - Multi-Wavelength Laser Platform™

32" x 18" Work Area



Uniquely Universal Features

Laser Interface+™

Universal Laser Systems has developed the world's most advanced, powerful and flexible laser print driver. Laser Interface+ is a materials-based print driver that gives you the choice of automatic or manual control over power, speed, pulses per inch and other system settings.

1-Touch Laser Photo™

We developed this software to make any photographic image suitable for laser engraving. Simply select your target material from a list and 1-Touch Laser Photo will determine the appropriate contrast, filter and grayscale levels and calculate the ideal laser speed and power settings. Then engrave the image onto your material at the touch of a button.

Rapid Reconfiguration™ of Lasers

Every laser cartridge we produce is factory pre-aligned for easy integration into any of our laser platforms. This laser modularity delivers ultimate flexibility when configuring your laser system.



Platform Overview

The PLS6MW is a Multi-Wavelength Laser Platform™ designed for processing both organic and inorganic materials. The PLS6MW is engineered to accept three different wavelength laser sources (1.06 μm - Fiber), (10.6 μm - CO₂) and (9.3 μm - CO₂). Based on our patented Rapid Reconfiguration™ technology, all three laser sources and optics are interchangeable without tools.

Organic and inorganic materials absorb, transmit or reflect certain wavelengths of laser energy. To process the widest range of materials, you need to use the widest possible range of laser wavelengths. The PLS6MW provides three different interchangeable wavelength sources.

- › 1.06 micron laser energy produced by fiber lasers is absorbed very efficiently by metals.
- › 10.6 micron laser energy produced by most CO₂ lasers is absorbed efficiently by a majority of organic materials.
- › 9.3 micron laser energy is applicable for a growing number of organic materials.

The PLS6MW is positioned for a broad range of applications from R&D to batch manufacturing. Utilizing all three laser sources, the materials processing capabilities are greatly enhanced.

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System Specifications

Work Surface Area	32 x 18 in (813 x 457mm)
Maximum Part Size	37 x 23 x 9 in (940 x 584 x 229mm)
Dimensions	44 x 39 x 36 in (1118 x 991 x 914 mm)
Rotary Capacity	Max Diameter 8 in (203 mm)
Motorized Z Axis Lifting Capacity	40 lbs (18 kg)
Available Focus Lenses CO2	1.5 in (38 mm)
	2.0 in (51 mm) *standard
	2.5 in (64 mm)
	4.0 in (102 mm)
Available Focus Lenses Fiber	2.0 in (51 mm)
	4.0 in (102 mm)
Laser Platform Interface Panel	Keypad and LCD display shows current file name, laser power, engraving speed, PPI and run time.
Operating System Compatibility	Requires a dedicated PC to operate. Compatible with Windows XP/Vista/7 32/64 bit
PC Connection	USB 2.0
Optics Protection	Air Assist Available
Cabinet Style	Floor-Standing
1.06 µm (Fiber)	30 Watts
10.6 µm (CO2)	10, 25, 30, 40, 50, 60 and 75 Watts
9.3 µm (CO2)	25 and 50 Watts
Approximate Weight	345 lbs (156 kg)
Power Requirements	220V-240V/15A
Exhaust Connection	Two 4 in (102 mm) ports
	500 CFM @ 6 in static pressure (850 m3/hr at 1.5 kPa)

System Features

Multi-wave safety glass
Cabinet Lighting
Over-temp Alarm (for fire safety)
Multiple Automatic Focusing Modes
Precision Digital Motors
LCD display
Wraparound Top and Front Door
Covered V-Groove Rail System
Multiple Language Support
Permanently Sealed Bearings
Proportional Pulse Control
Stretch-Free Kevlar® Belts

Laser Features

Compatible with CO2 and fiber laser sources
Laser Interface+ print driver
Smart laser cartridge technology
Custom material settings
Auto focus
Red dot pointer
Optics protection
Job time estimator
RoHS compliant electronics

