

# LASERSTAR® PORTABLE LASER CLEANER+ENGRAVER

4102-M Series



## ★ HIGHLIGHTS

- ✓ Robust, Compact, Portable Design
- ✓ 220W or 320W Air Cooled MOPA Fiber Laser
- ✓ Dual Galvo Wand with LED Red Pointers & Lights
- ✓ Wireless Operator Interface Laser Control Device
- ✓ Easy-To-Use / Cost-Effective Solution

Laser Cleaning is effective on a wide range of materials and industries:

➤ Metals	➤ Automotive Industry
➤ Stone	➤ Aerospace Industry
➤ Glass	➤ Marine Industry
➤ Plastics	➤ Oil and Gas Industry
➤ Rubber	➤ Plastic Injection Mold Industry
➤ Wood	➤ Electronics / PCB Industry
➤ Ceramics	➤ Tool, Die & Metal Fabrication
➤ Carbon-Fiber Polymers	➤ Medical Device Industry
➤ Fiber Glass Polymers	➤ Pharmaceutical Industry
➤ Painted or Coated Surfaces	➤ Food Processing Industry
➤ Organic Materials	➤ Nuclear Decontamination

✓ Rust, Corrosion, Paint and Coating Removal

✓ Surface Preparation for Welding or Bonding

✓ Plastic & Rubber Mold Cleaning

✓ Oil, Grease and Oxide Layer Removal

✓ Deburring and Surface Texturing & Finishing

✓ PCB Cleaning / Anilox Print Roll Cleaning

✓ Microbial Cleaning / Sanitizing / Decontamination



Laser cleaning is a versatile and effective technique for removing contaminants, coatings, or oxides from various materials. It is used across a wide range of industries due to its precision, efficiency, and minimal environmental impact.



**LASERSTAR**  
**ACADEMY**

Our education courses are designed to provide you with a solid foundation of fundamental laser skill sets to immediately gain a revenue impact with your new laser device.

[LaserStarAcademy.com](http://LaserStarAcademy.com)

Technical Specifications at [www.LaserStar.net](http://www.LaserStar.net)

## Benefits of Laser Cleaning

**Precision and Control:** Laser cleaning offers precise control over the cleaning process, allowing for the removal of specific layers of material with minimal damage to the underlying surface.

**Non-Abrasive and Gentle:** Unlike traditional methods like sandblasting or chemical cleaning, laser cleaning is non-abrasive and non-corrosive.

**Environmentally Friendly:** Laser cleaning is a dry process that doesn't require consumables such as chemicals, solvents, or abrasive media, reducing environmental impact and waste.

**Cost-Effective:** Over time, laser cleaning can be more cost-effective due to lower maintenance requirements, reduced need for consumables, and automation.

**Versatility:** It can be used on a wide range of materials such as metals, ceramics, plastics, and composites, making it suitable for various industries such as aerospace, automotive, and restoration.

**Safety and Cleanliness:** Laser cleaning reduces the risk of contamination and exposure to harmful chemicals, improving operator safety.

**Reduced Downtime:** The reliability of laser cleaners can minimize downtime in industrial settings, allowing for faster turnaround times and increased productivity.

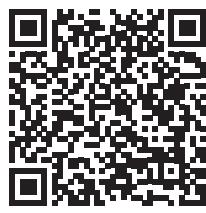
**Minimal Residue:** The process typically leaves minimal residue, simplifying the post-cleaning process and ensuring a cleaner work environment.

**Automation Compatibility:** Laser cleaning systems can be easily integrated into automated production lines, increasing efficiency and consistency in cleaning tasks.

LASER WAVELENGTH	AVE. POWER (MODEL DEPENDENT)	PULSE ENERGY (MODEL DEPENDENT)	F-THETA LENS	SUPPLY CIRCUIT	OUTPUT FIBER LENGTH	WARRANTY
1064 nm	220 W / 320 W	2 mJ or 15 mJ*	254mm	120-240 VAC, 1 Phase	≥5m	1 year

\*15mJ is only a Laser Cleaner

For More Technical Details Scan  
Here and Select the Desired Model:



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