

Galvo CO2

Speed Meets Precision

Compact CO2 Laser Marking & Engraving
for **Non-Metal Materials**



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Product Overview

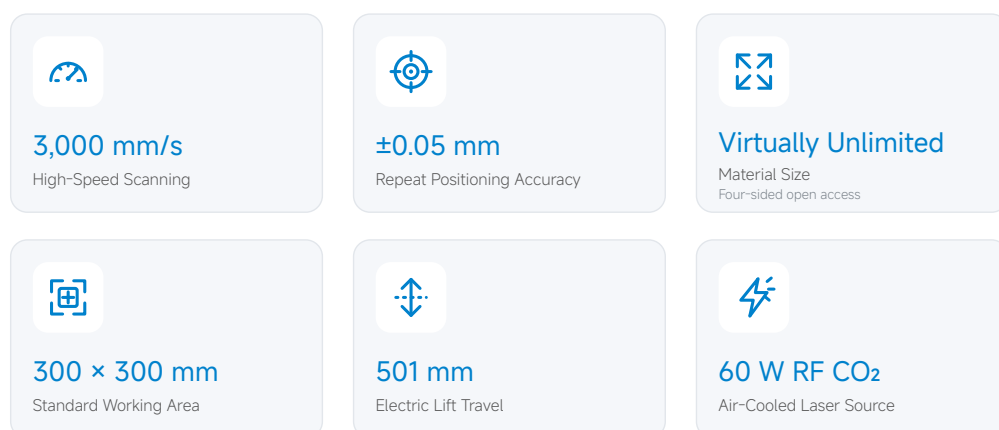


Thunder CO2 Galvo is a compact, high-speed CO2 laser marking and engraving platform designed for precise processing of non-metallic materials.

Featuring a 60W air-cooled CO2 laser source, galvanometer scanning system, and flexible working area options, it delivers consistent quality and efficient throughput for industrial marking, creative crafting, and small-batch production.

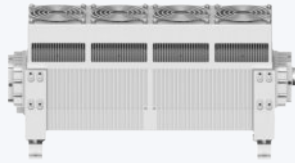
Machine Body & Highlight

Built on a sturdy aluminum-alloy profile frame, the Galvo stays stable during high-speed galvanometer scanning. The compact open-frame design houses the laser source, galvo scanner module and control electronics in a streamlined layout —minimizing footprint while keeping every component easy to reach and service.



Thunder Laser enforces a strict SOP across every stage of production and assembly. Key components are inspected and aligned before final assembly, and each finished machine passes laser power and calibration checks — ensuring long-term stability, high precision and reliable marking performance, unit after unit.

Machine Highlights



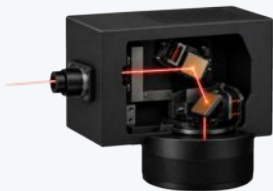
60W CO2 Laser Source

60W air-cooled CO2 laser tube provides stable output for consistent marking and engraving quality across production runs.



Interchangeable Working Area Options

Standard with 300*300mm field lens
Alternative options with 200*200mm;100*100mm working areas to match your application.



High-Speed Galvo Scanner

High-speed galvanometer scanning delivers marking speeds up to 3,000 mm/s with exceptional repeatability for efficient batch processing.



Dual Red-Dot Focusing

Standard dual red-dot guides converge at the focal plane, helping operators set the correct working height quickly and consistently.



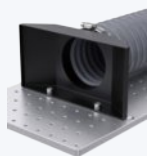
Extended Vertical Capacity

With 501 mm of electric lift travel and up to 341 mm processing height, the system adapts to tall products, fixtures and varied workpiece geometries.



Open-Frame Flexibility

The 640 × 425 mm aluminum worktable supports up to 25 kg, while four-sided open access accommodates oversized sheets, long workpieces and irregular parts.



+



Integrated Fume Extraction

The standard 60W blower delivers 355 m³/h airflow and 530 Pa static pressure, while a table-mounted bell-mouth flange captures fumes close to the processing source.



9000–11000 nm
Broad Protection Range

OD 5+
High Optical Density Protection

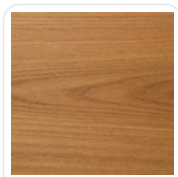
CO₂ Laser Safety Eyewear

Blocks scattered laser radiation to help reduce thermal eye injury risk, while 85% light transmission ensures clear visibility of workpiece details even in dim workshop environments

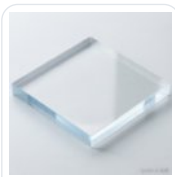
Technical Specifications

Parameter	Specification
Model	Thunder CO2 Galvo
Machine Size (W×D×H)	515 × 930 × 870 mm
Net Weight	44.2 kg
Worktable	640 × 425 mm, fixed-hole aluminum
Worktable Load	25 kg
Working Area	300*300mm (Standard) · 200*200mm · 100*100mm
Repeat Accuracy	±0.05 mm
Beam Expander	8×
Max Material Size	Open structure — Unlimited
Max Lift Distance	501 mm
Max Processing Height	341 mm(Standard 300mm) / 475 mm(200mm) / 640 mm(100mm)
Lifting Mode	Electric
Focusing Mode	Dual red-light manual focus
Laser Type	CO2 RF
Laser Power	60W
Max Fill Speed	3,000 mm/s
Max Line Speed	1,000 mm/s
Total Power	800W
Power Supply	110V / 220V, Single Phase
Frequency	50/60 Hz
Operating Current	110V: 10A / 220V: 4A
Recommended Breaker	110V: 16A / 220V: 6A
Voltage Tolerance	230V ±5% / 110V ±10%
Control Software	LightBurn(Optional) / EZCAD2
Supported Formats	DXF / AI / PDF
Cooling	Air-cooled
Safety Class	FDA Class 4
Warranty	12 months

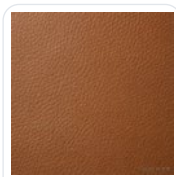
Compatible Materials



Wood



Acrylic



Leather



Fabric



Paper



Glass



Ceramic

Optional Accessories

Rotary Axis

Add-on rotary axis for engraving cylindrical workpieces.



Thunder Air 700

Fume extraction & air purification for clean operation.

700m³/h air flow
4000 Pa pressure
5-stage filtration
Button-to-Top air flow



Lifting Control Handle

Convenient Z-axis lift control at your fingertips.



Laser Protective Enclosure

Optional safety enclosure for open-frame operation.

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