

Market Opportunity

The global desktop laser engraving market is expanding rapidly — valued at nearly \$900M in 2023 and projected to exceed \$1.5B by 2028, with a CAGR of over 10% (MarketsandMarkets, 2023).

7.5 million active sellers, many relying on personalized products such as wooden gifts, tumblers, and home décor, where laser engraving plays a key role.



Why NOVA is the Right Choice for Market

Yet, most leading brands (xTool, Glowforge, Creality) continue to focus on advanced users, emphasizing speed, power, and technical specifications. The largest growth opportunity, however, lies with entry-level users — representing over 60% of potential buyers worldwide.

For this segment, the barriers are clear: a lack of design skills, safety concerns, and overly complex operations.

This gap creates a significant opportunity: a safe, beginner-friendly solution that lowers entry barriers, attracts new users, and opens untapped demand across home, education, and small-business markets.



Truly Designed For Home Use

NOVA is built for creators who want to focus on ideas, not setup.



Al-



36,000 mm/min



Plug & Play



Auto-Airflow



Auto-Focus



Material Recognition



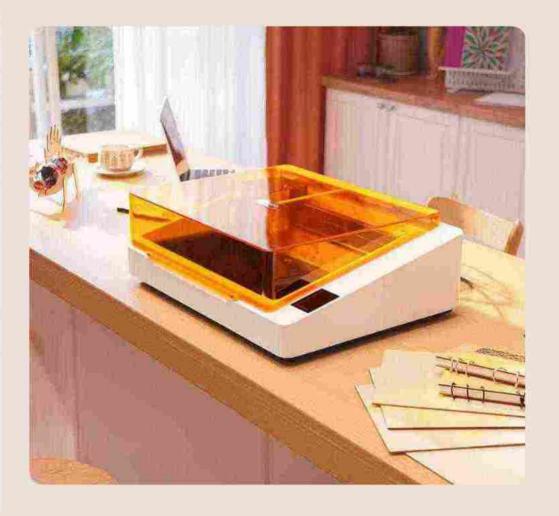
Child-Safety



Build-in Filter



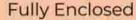
Class 1 Certified



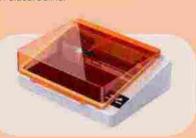


SafeShell™

Laser creation shouldn't come with fear. NOVA is equipped with the SafeShell™ Safety System, combining hardware and smart protection to make laser use safe at home, in classrooms, and in studios.



Certified for strict safety standards, blocking laser hazards and smoke pollution for worry-free use at home or in classrooms.



Smart Flame Detection

Instantly detects fire risks, stops operation, and triggers multi-channel alarms for maximum safety.



Smart Child Safety Lock

Built-in passcode protection prevents unauthorized use, keeping families with children safe.



Tilt Protection

Built-in sensors automatically stop operation if the machine tips or shakes, ensuring complete user and device safety.





Innovative 90° X-Axis Rotary Motion

Patented design for cylindrical and sphierical engraving with stronger structure and higher precision — all without removing the base, reducing costs and boosting efficiency.

Smart Airflow Control

Auto-adjusts airflow based on engraving and cutting parameters to prevent overburning or poor smoke removal, ensuring cleaner and sharper results.

36,000 mm/min High-Speed Engraving

Industry-leading speed that boosts efficiency, shortens production cycles, and brings ideas to life faster

Full-Stack Self-Developed Mainboard

Deep integration of hardware, firmware, and algorithms for faster performance, higher precision, and unlimited future expandability

#RoundWorks

With 90° X-Axis
Rotary Motion,
NOVA makes
rotary engraving
stable, precise, and
hassle-free — all
without removing
the base.



#36,000 mm/min High-Speed Engraving

Get your projects done in a fraction of the time. NOVA's industry-leading speed means faster cuts, quicker results, and more time to focus on new ideas.



#SmartAirPump

No more burnt edges or smoky mess. NOVA's smart airflow keeps every cut clean and every engraving sharp, so your projects look perfect straight off the machine.





#Dual-Vent Exhaust

Dual airflow system improves smoke removal efficiency, keeping the workspace cleaner and engraving results sharper.



Built-in filter removes dust and odors inside the enclosure, providing a healthier and more comfortable workspace.

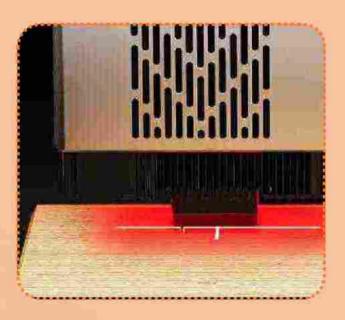






#Auto Focus

- No more manual adjustments + simpler operation
- · Perfect focus every time sharper engravings, cleaner cuts
- Higher success rate → less waste, fewer reworks



#Modular Designed

- 2W Infrared: Precision engraving on metals and plastics.
- 10W Blue Laser: Versatile choice for everyday engraving and cutting.
- 20W Blue Laser: High-power performance for thicker materials and faster production.











As Easy As Canva

Not a designer? Not a problem.

With TOOCAA Studio's Al-powered design tools, you don't need professional skills to start creating.

Al- Genius Design

Type a word or upload a photo — Al instantly creates ready-to-engrave designs.

Massive Template Library

Don't know what to make? Start here.

10,000+ templates and examples for endless inspiration.

Multi-Format Compatibility

Works with SVG, DXF, PNG, JPG and more. Bring your files, no limits.

Multi-Style Filters

Apply multiple artistic filters in one click.

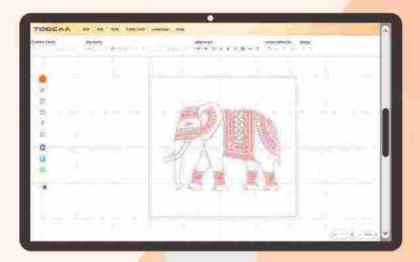
Transform your designs with sketch, engraving, or comic styles.

TOOCAA

Al Online Assistant

Get instant answers about software and engraving.

Never get stuck again — help is always one click away.



One-Click Batch Processing

With the built-in 5MP camera, NOVA auto-arranges and accurately positions multiple designs on your material, ensuring every piece is sharp and consistent.



Engraving Preview

Real-time preview of engraving path and outcome — what you see is what you get.

Visualize the toolpath directly on your material, ensuring every job is accurate and worry-free.

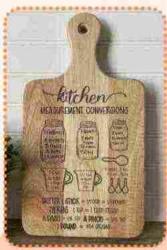


TOOCAA

TOOCAA Selected Material

1000+ Selected Materials

A curated library of over one thousand engraving and cutting materials — including wood, acrylic, leather, stone, metal coatings, paper, and eco-friendly composites — all tested and profiled for optimal laser performance. Each material comes with pre-calibrated parameters in TOOCAA Studio for instant use, ensuring precise results and reduced trial-and-error time for creators at every level.















TOOCAA

With NOVA's Smart Material Recognition, the system automatically detects the material type and instantly applies the best engraving or cutting parameters in the software. Simply place your material and start creating.

From wood to acrylic to leather, NOVA autooptimizes the settings for fast, accurate, and consistent results.

Key Benefits:

- No more trial and error → saves time and material costs
- Auto-matched parameters → ensures stable engraving quality
- Beginner-friendly + makes it easy for anyone to get started









Specification

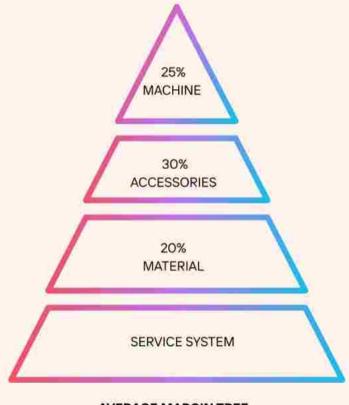
Laser Type	2W IR	Input Voltage	Nova(24V – 8A)
	10W Diode		2W IR(24V - 4A)
	20W Diode		10W Diode(24V = 1.75A)
			20W Diode(24V = 3.5A)
Spot Size	2W IR:0.03*0.03mm	Work Area	297*210mm(A4)
	10W Diode:0.08*0.13mm		
	20W Diode 0.15*0.15mm		
Engraving Speed	36000mm/min(600mm/s)	Machine Weight	8.27kg
Machine Size	593.00*487.00*280.00	Machine Material	Aluminum Alloy Armor, Plastic She



Why NOVA is the Right Choice for Your Business

High gross profit margin

Beyond the machine itself, NOVA's modular ecosystem — Laser Module(2W, 10W, 20W). Rotary Kit, Air filters, and more — creates recurring upsell opportunities. Combined with consumables like wood, acrylic, and leather, this ensures not just one-time revenue but a sustainable profit stream.



AVERAGE MARGIN TREE



Newbie-friendly, reducing sales explanation costs

Most laser machines require extensive demonstrations and explanations before closing a sale. NOVA's beginner-friendly design — Al-assisted creation, autofocus, and smart material recognition — makes it truly "ready out of the box." For channel partners, this means faster sales cycles and higher conversion rates.

Besides, TOOCAA NOVA with TOOCAA Studio is beginner-friendly and free for the lifetime.



