EpilogLaser

FusionPro

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FusionEdge

FusionPro

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Made in **USA**

OVER 30 YEARS OF EXPERIENCE

In 1988, Epilog Laser's revolutionary systems opened the world's eyes, not only to what could be accomplished with a laser, but also to how accessible a laser is to businesses, both large and small.

We are innovators. We are engineers. We are problem solvers. We are committed to designing and manufacturing the highest-quality, fastest laser systems in the industry, right here from our global headquarters in Golden, CO, in the foothills of the Rocky Mountains.

Our worldwide presence continues to grow with corporate offices located in the Netherlands and Canada. We now have even more locations to provide you with the highest level of support and convenience. Contact us to schedule a hands-on demonstration from your local distributor and see how an Epilog Laser can benefit your business with the industry's highest engraving speeds, the most-detailed etching, and fast, accurate cutting. Find out how an Epilog Laser can transform your business.
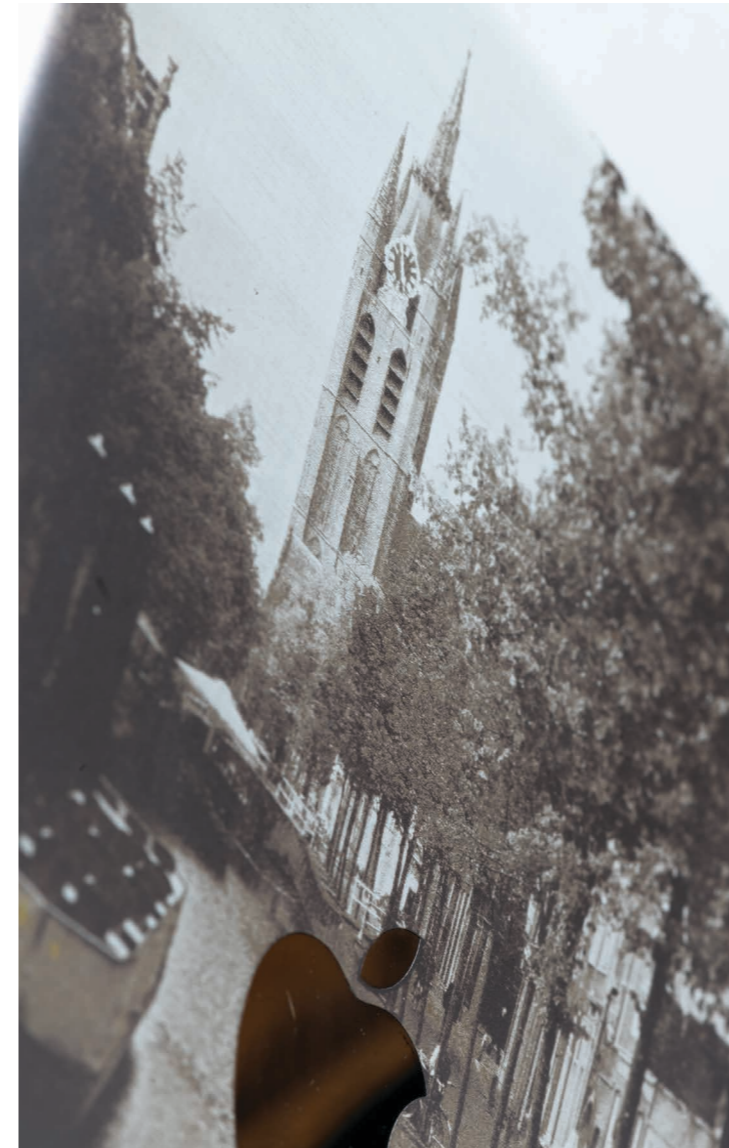
ENGRAVE - CUT - MARK

Electronics Engraving
Wood Engraving & Cutting
Marble & Stone Etching
Acrylic & Wood Signage
Nameplates & Desk Sets
Wedding Memorabilia
Corporate Giveaways
Glass Etching
Sporting Goods

Holiday Ornaments
Corporate & Sporting Awards
Architectural Models
One-of-a-Kind Gifts
Greeting Cards
Guitar Inlays
Custom Jewelry
Acrylic Plaques
Photo Frames

3D Models
Inlaid Signage
Photo Engraving
Barcode Engraving
Engraved Denim Jeans
Logo Engraving on Parts
Etched Business Cards
Tool Identification
Medical Part Marking

Laptop Customization
Paper Invitations
Marble Flooring
Cloth Etching
Memorials
Home Decor
Cabinetry
Product Marking
Industrial Etching

Phone Customization
Custom Pet Tags
Appliqués
Toys & Games
Photo Albums
Wine Bottle Etching
Engraved Mirrors
Photo Etching
And much more!

CHOOSE YOUR LASER

CO₂: Versatility

Engrave and cut a wide variety of materials with our CO₂ laser line. A CO₂ laser system can engrave on all kinds of materials, including wood, acrylic, rubber, plastic, and more.

	Engrave	Cut
Wood	•	•
Acrylic	•	•
Glass	•	
Coated metals	•	
Ceramics	•	
Delrin	•	•
Cloth	•	•
Leather	•	•
Marble	•	
Matboard	•	•
Melamine	•	•
Paper	•	•
Mylar	•	•
Cardboard	•	•
Rubber	•	•
Wood veneer	•	•
Fiberglass	•	•
Painted metals	•	
Tile	•	
Plastic	•	•
Cork	•	•
MDF	•	•
Anodized aluminum	•	
Twill	•	•
Stainless steel	‡	
Brass	‡	
Titanium	‡	
Bare metal	‡	

‡ CO₂ lasers will mark bare metals when coated with a metal marking solution. For more info, call +1 303-277-1188.

Fiber: Metal Etching

Featuring an air-cooled ytterbium fiber laser source, these are the ideal systems for direct metal etching and marking, as well as marking engineered plastics.

Compatible Materials:

ABS (black/white)
Aluminum 6061
Aluminum, yellow chromate
Anodized aluminum
Bayers bayblend FR110
Brass
Brushed aluminum
Carbon fiber
Carbon nanotube
Ceramics
Ceramics, metal-plated
Cobalt chrome steel
Copper
DAP- Diallyl Phthalate
Delrin, colored (black/brown)
GE Plastics polycarbonate resin
Hard coat anodized aluminum
Inconel metals (various)
Iron-phosphate coating
Machine tool steel
Magnesium
Makrolon
Makrolon 2807
Molybdenum

Nickel-plated 1215 mild steel
Nickel-plated brass
Nickel-plated gold
Nickel-plated Kovar
Nickel-plated steel
Nylon
PEEK, white & glass filled
Polybutylene Terephthalate
Polycarbonate, (black/white)
Polycarbonate resin 121-R
Polysulfone
Rynite PET
Santoprene
Silicon carbide
Silicon steel
Silicon wafers
Stainless steel 303
Stainless steel 17-4 PH
Steel 4043
Steel, machine tool
Teflon, glass filled
Various inconel metals
Zinc-plated mild steel
And many more!

EASY PROJECT SETUP

From Design to Finished Product

1 Design your graphic in your favorite graphic design software.
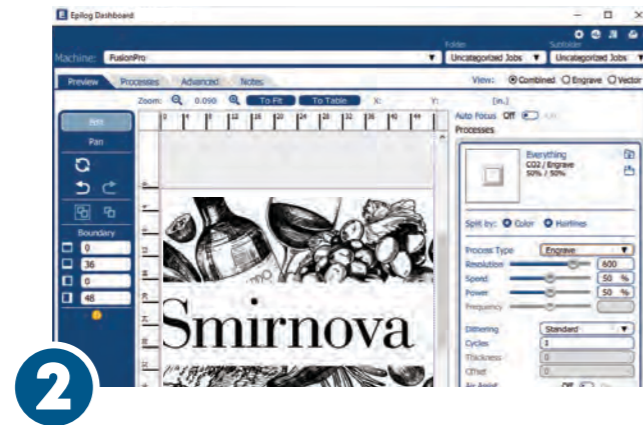
2 Print the design to the Epilog Laser Dashboard™.

3 Choose your settings and start engraving or cutting your design.

Material Settings Library

Epilog's Material Settings Library is your first stop for finding the perfect settings for most materials. This parameter library has been built by testing materials to find the best settings for you to use with your laser system. If you discover your own preferred settings, or have a special material that you use with your laser, save your custom settings so you always have access to your favorite laser parameters at the touch of a button.

Online Training

Register your machine at our free online training suite, training.epiloglaser.com and start learning the latest tips and tricks on project setup and more. Featuring walkthrough demonstrations of how to set up projects, articles on maintenance for your machine, and a thorough library of support videos, the Epilog Laser Training Suite is your online manual for learning how to make the most of your laser system.

IRIS™ Camera Positioning & Job Trace

Positioning your image for engraving has never been easier. The Fusion Edge and Fusion Pro's IRIS™ multi-camera system shows your laser's table on screen in the Laser Dashboard™, allowing you to precisely position your image on screen, then print to the laser. You can also use the camera at the laser head on the Fusion Pro to recognize registration marks in your artwork for extremely precise engraving on preprinted pieces. To ensure your engraving is precisely positioned, run the instant Job Trace to see exactly where your image will be engraved on your product.

Fastest Engraving Speeds: Up to 165 IPS (4.2 m/s)

Higher-speed engraving means more throughput for your business. Epilog prides itself on creating machines with incredibly fast engraving times and the quickest turnaround speeds, while still providing the highest quality results. The Fusion Pro's motion control system allows the laser to reach a top speed of 165 IPS with 5g acceleration for the industry's fastest engraving. Extremely robust motors and an industrially designed motion control system allow us to reach the highest engraving speeds while still providing the high-resolution you expect from an Epilog Laser system.

Epilog Software Suite™

Epilog's powerful software suite allows you to position your artwork and duplicate your image across the screen, and access our materials database quickly and easily. Save your files to the Job Manager and you can access any job you have ever sent to the laser. Organize your jobs, rerun projects, and more.
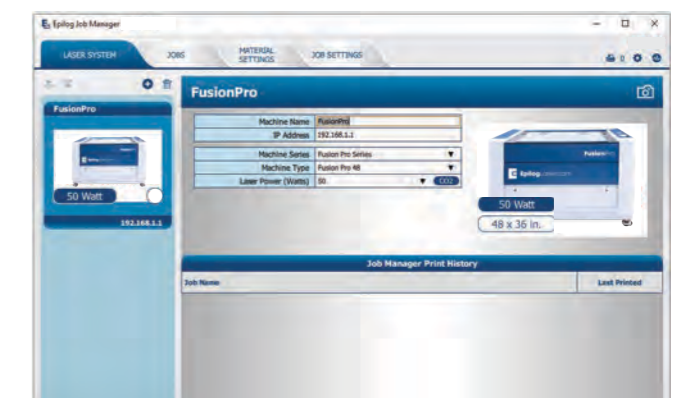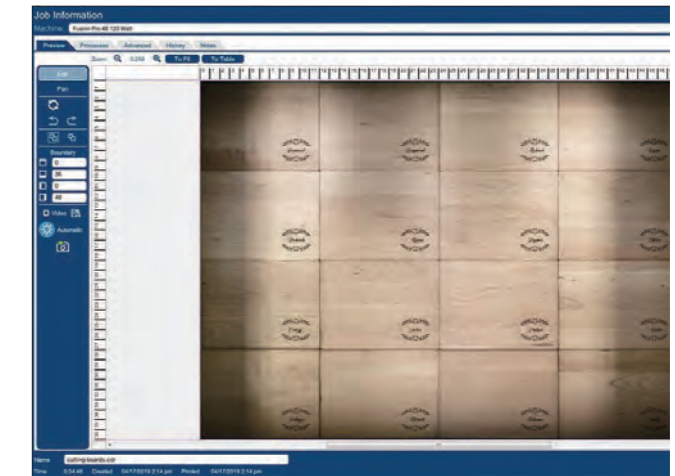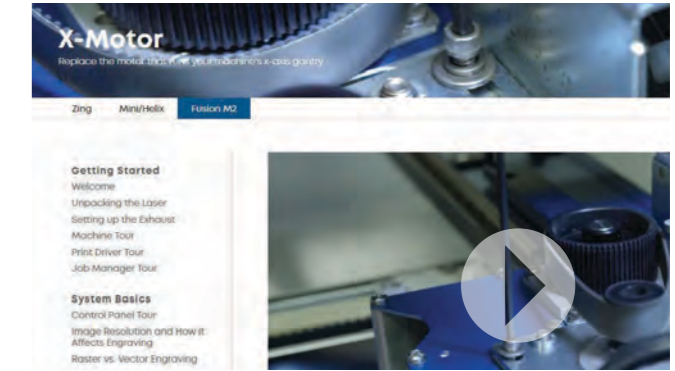
FUSION EDGE LASERS

FUSION EDGE 12

- Available in CO_2 or fiber
- 30 watt fiber laser
- 30, 40, 50, or 60 watt CO_2 laser
- 24" x 12" x 7" (610 x 305 x 178 mm) work area
- IRIS™ Single Overhead Camera

FUSION EDGE 24

- Available in CO_2
- 30, 40, 50, 60, or 80 watt CO_2 laser
- 24" x 24" x 10" (610 x 610 x 254 mm) work area
- IRIS™ Dual Overhead Cameras

FUSION EDGE 36

- Available in CO_2
- 50, 60, or 80 watt CO_2 laser
- 36" x 24" x 10" (914 x 610 x 254 mm) work area
- IRIS™ Dual Overhead Cameras

IRIS™ Camera Positioning

Position your artwork directly on your item using the overhead camera system of the Fusion Edge. Artwork can be quickly duplicated on screen, positioned on your product, and engraved in minutes. It's the fastest method of artwork set up available.

- Drag & drop functionality for positioning artwork
- Duplicate artwork, resize it, and select cut lines on screen
- Quickest and easiest positioning system

System Features

	Edge 12	Edge 24	Edge 36
Made-in-the-USA Quality: Designed, engineered & built in Golden, CO	•	•	•
Epilog Job Manager™: Management & workflow software - easily organize, edit, save & print	•	•	•
5g System Acceleration: Fast acceleration to top speed	•	•	•
IRIS™ Camera Positioning: Overhead camera(s) for easy artwork positioning	•	•	•
SAFEGUARD™ features: Keep the mechanics cleaner and dust-free	•	•	•
Touch-Screen Control: File selection, auto-focus, and more	•	•	•
Air Assist: Remove heat & combustible gases from the cutting surface	•	•	•
Networking Choices: USB, Ethernet & Wireless connections	•	•	•
Permanent Job Storage (1 GB): Keep your most-run jobs at the machine	•	•	•
Auto Focus: Automatically focus the table to the correct focal distance	•	•	•
Software Suite: Dashboard™ and Job Manager Software Package	•	•	•
CO_2, air-cooled, metal/ceramic laser tube, 10.6 micrometers	•	•	•
or 30 watt fiber laser Source, 1064 nm	•		
Radiance™ Beam-Enhancing Optics: Higher resolution optics for detailed engraving	•	•	•
Air Flow: Streamlined air flow for the most efficient smoke and vapor removal	•	•	•
High-Speed, Brushless DC Servo Motors: Withstands rigorous engraving jobs at high speeds	•	•	•
Red Dot Pointer: Provides a visible laser beam to help position your projects	•	•	•
Job Trace: Quickly see where the job will engrave on your material	•	•	•
Removable Front Panel: Easy access to the crumb tray	•	•	•
Super-Silent™ Cooling Fans: Quiet operation suitable for office environments	•	•	•
Rim-Style and 3-Jaw Chuck Rotary Compatibility	•	•	•

FUSION PRO LASERS

FUSION PRO 24

- Available in CO_2, fiber, or dual-source
- 50, 60, or 80 watt CO_2 laser
- 30 or 50 watt fiber laser
- 24" x 24" x 9" (610 x 610 x 228 mm) work area
- IRIS™ Dual Overhead Cameras
- IRIS™ Registration Camera

FUSION PRO 36

- Available in CO_2 or dual-source
- 50, 60, or 80 watt CO_2 laser
- 30 or 50 watt fiber laser
- 36" x 24" x 9" (914 x 610 x 228 mm) work area
- IRIS™ Dual Overhead Cameras
- IRIS™ Registration Camera

FUSION PRO 48

- Available in CO_2, fiber, or dual-source
- 50, 60, 80, or 120 watt CO_2 laser
- 30 or 50 watt fiber laser
- 48" x 36" x 12.25" (1219 x 914 x 311 mm) work area
- IRIS™ Dual Overhead Cameras
- IRIS™ Registration Camera

Industry's Highest-Speed Engraving

Introducing the fastest laser engraving systems on the market. Performance and image quality are at the heart of the Fusion Pro line of laser systems. With a maximum speed of 165 IPS (4.2m/s), and featuring 5g acceleration, the Fusion Pro lasers are the fastest, most productive laser systems available. Whether you're engraving wood, plastic, coated metals, or glass, the Fusion Pro allows you to produce more product in less time than any competitive system.

IRIS™ Camera Positioning

Positioning your artwork is easier than ever with the IRIS™ Camera Positioning feature of the Fusion Pro. Overhead cameras provide a view of your material as it is positioned on the table, allowing you to accurately place your artwork and know exactly where your laser will engrave. A camera at the lens assembly allows you to locate registration marks on your artwork for precise cutting and engraving.

System Features

|	Pro 24	Pro 36	Pro 48
Made-in-the-USA Quality: Designed, engineered & built in Golden, CO	•	•	•
High Speed Engraving: Max speed of 165 IPS (4.2 m/s)	•	•	•
5g System Acceleration: Fast acceleration to top speed	•	•	•
IRIS™ Camera Positioning: Overhead cameras & camera at the carriage for artwork positioning	•	•	•
SAFEGUARD™ features: Keep the mechanics cleaner and dust-free	•	•	•
Touch-Screen Control: File selection, auto-focus, and more	•	•	•
Air Assist & Compressor: Remove heat & combustible gases from the cutting surface	•	•	•
Vacuum Hold-Down Table: Exhaust under the table	•	•	•
Networking Choices: USB, Ethernet & Wireless connections	•	•	•
Permanent Job Storage (1 GB): Keep your most-run jobs at the machine	•	•	•
Auto Focus: Automatically focus the table to the correct focal distance	•	•	•
Software Suite: Dashboard™ and Job Manager™ Software Package	•	•	•
50, 60, 80, or 120 watt CO_2, air-cooled, metal/ceramic laser tube, 10.6 micrometers	•	•	•
or 30 or 50 watt fiber laser Source, 1064 nm	•		•
or Dual Source configuration	•		•
Radiance™ Beam-Enhancing Optics: Higher resolution optics for detailed engraving	•	•	•
Laminar Air Flow: Streamlined air flow for the most efficient smoke and vapor removal	•	•	•
High-Speed, Brushless DC Servo Motors: Withstands rigorous engraving jobs at high speeds	•	•	•
Red Dot Pointer: Provides a visible laser beam to help position your projects	•	•	•
Job Trace: Quickly see where the job will engrave on your material	•	•	•
Easy-Access Drop-Down Door: Front access door for the laser system	•	•	•
Super-Silent™ Cooling Fans: Quiet operation suitable for office environments	•	•	•
Rim-Style and 3-Jaw Chuck Rotary Compatibility	•	•	•

ACCESSORIES

Air Compressor

Epilog's optional Air Compressor is available to work with the included Air Assist feature of the laser systems. Direct a constant stream of air to your cutting surface to remove heat and combustible gases from the work area. This high-quality air compressor unit feeds 30 psi (2.07 bar) of air through the Air Assist structure, giving you the best cutting results available. The vibration-dampening rumber feet reduce the noise level of the compressor.
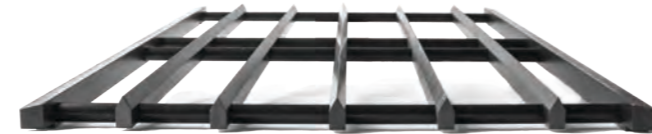
Cutting Tables

Incorporate the gridded cutting table when cutting through materials. By raising the materials off of the table when cutting, you'll be able to reduce any back-side burning on the material.
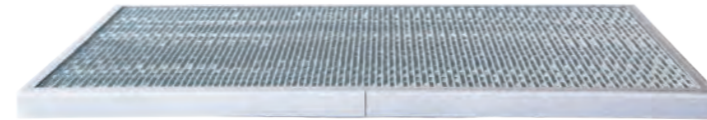
For cutting through materials on the Fusion Pro, choose between a traditional cutting-grid table or a slat table.

Machine Stand

Add the machine stand to your Fusion Edge 12 to turn your desktop laser into a free-standing unit. This optional stand features high-quality wheels to move the laser system throughout your work area with ease, and the shelf makes a great place to store your most used materials.

Rotary Attachments

Add the ability to engrave cylindrical items to your laser, including glasses, bottles, and more. Epilog offers two types of Rotary Attachments. The Standard Rim-Style Rotary is great for general-purpose cylindrical shapes, including glasses, mugs and wine bottles. We offer the 3-Jaw Chuck Rotary Attachment for more demanding applications when you need to mechanically clamp a cylinder or oddly shaped, non-cylindrical item.

Lens Options

1.5" Lens: Highest-Resolution Engraving

Although the standard 2.0" lens provides amazing detail, our 1.5" lens assembly has been designed for the highest-resolution engraving and etching of extremely small fonts.

4.0" Lens: Cutting Thicker Materials and Inside Deep Areas

The 4.0" lens produces a focused beam over a longer vertical distance, which makes it ideal when engraving within a recessed area of a product, such as inside a bowl or plate. The lens is also useful for cutting through very thick materials with a more elongated beam.

Pin Table

The Pin Table incorporates moveable pins designed to raise and support material during cutting. This helps ensure you receive the cleanest laser cut edges from your laser machine. Use the Pin Table with the Fusion Pro's IRIS™ camera system for a visual represenation of each pin's precise location for the highest quality edge cuts on a laser system.

TECH SPECS

	Fusion Edge 12 (CO$_2$)	Fusion Edge 12 (Fiber)	Fusion Edge 24	Fusion Edge 36
Work Area	24"x12" (610x305mm)		24"x24" (610x610mm)	36"x24" (914x610mm)
Max Material Thickness	7" (178mm)		10" (254mm)	10" (254mm)
Laser Tube Wattages	30, 40, 50 or 60 watt, CO$_2$, air-cooled, metal/ceramic tube, 10.6 micrometers	30 watt,fiber, air-cooled, includes collimator. 1064nm. Beam quality: M2 < 1.1	30, 40, 50, 60, or 80 watt, CO$_2$ air-cooled, metal/ceramic tube, 10.6 micrometers	50, 60, or 80 watt, CO$_2$ air-cooled, metal/ceramic tube, 10.6 micrometers
Software				
Memory	Multiple files up to 1GB. Engrave any file size			
Motion Control	High-speed, continuous-loop, brushless DC servo motors on the x-axis using rotary encoding technology for precise positioning			
X-Axis Bearings	Ground & polished stainless steel, teflon-coated, self-lubricating bearings			
Belts	Advanced B-style double-wide Kevlar precision drive belts			
Resolution	User-controlled 75-1200dpi			
Speed & Power	120 IPS (3.05m/s) with 5G acceleration. Computer-controlled in .001 increments up to 100%. Color mapping feature links Speed, Power, Frequency, and Raster/Vector mode			
Print Interface	USB, Wireless, & 10Base-T Ethernet connections. Windows 7/8/10 compatible			
Size (W x D x H)	39.5"x26.5"x17.9" (1003x673x455mm)		41.52"x32.81"x38.04" (1055x834x967mm)	53.52"x32.81"x38.04" (1359x833x966mm)
Weight	138lbs (63kg)		225lbs (102kg)	260lbs (117kg)
Electrical	Auto-switching power supply 110-240volts, 50 or 60Hz, single phase			
Ventilation System	350-400CFM (595-680m³/hr) external exhaust to outside or internal filtration unit required. One output port, 4" (102mm) in diameter			
Class	Class 2 Laser Product - 1 mW CW MAXIMUM 600-700nm			

	Fusion Pro 24 (CO$_2$)	Fusion Pro 24 (Fiber)	Fusion Pro 36 (CO$_2$)	Fusion Pro 36 (Fiber)	Fusion Pro 48 (CO$_2$)	Fusion Pro 48 (Fiber)
Work Area	24"x24" (610x610mm)		36"x24" (914x610mm)		48"x36" (1219x914mm)	
Max Material Thickness	9" (228mm)				12.25" (311mm)	
Laser Tube Wattages	50, 60, or 80 watt, CO$_2$ air-cooled, metal/ceramic tube, 10.6 micrometers	30 or 50 watt,fiber, air-cooled, includes collimator. 1064nm. Beam quality: M2 < 1.1	50, 60, or 80 watt, CO$_2$ air-cooled, metal/ceramic tube, 10.6 micrometers	30 or 50 watt,fiber, air-cooled, includes collimator. 1064nm. Beam quality: M2 < 1.1	50, 60, 80, or 120 watt, CO$_2$, air-cooled, metal/ceramic tube, 10.6 micrometers	30 or 50 watt,fiber, air-cooled, includes collimator. 1064nm. Beam quality: M2 < 1.1
Software	Laser Dashboard™, Epilog Job Manager™					
Memory	Multiple files up to 1GB. Engrave any file size					
Motion Control	High-speed, continuous-loop, brushless DC servo motors on the x-axis using rotary encoding technology for precise positioning					
X-Axis Bearings	Ground & polished stainless steel, teflon-coated, self-lubricating bearings. Dual blocks on X-axis for greater rigidity					
Belts	Advanced B-style double-wide Kevlar precision drive belts					
Resolution	User-controlled 75-1200dpi					
Speed & Power	165 IPS (4.2m/s) with 5g acceleration. Computer-controlled in .001 increments up to 100%. Color mapping feature links speed, power, frequency, & raster/vector mode					
Print Interface	USB, Wireless, & 10Base-T Ethernet connections. Windows 7/8/10 compatible					
Size (W x D x H)	41.52"x32.81"x38.04" (1055x834x967mm)		53.52"x32.81"x40.54" (1359x833x1029mm)		70.6"x51.3"x42.75" (1794x1304x1086mm) Pedestal removed: 34"h (863mm)	
Weight	240lbs (108kg)		275lbs (124kg)		650lbs (295kg)	
Electrical	Auto-switching power supply 110-240volts, 50 or 60Hz, single phase				220/240volts, 50 or 60Hz, single phase	
Ventilation System	350-400CFM (595-680m³/hr) external exhaust to outside or internal filtration unit required. One output port, 4" (102mm) in diameter				Two upper output ports. One lower port. Total 735CFM. All ports 4" (102mm) diameter	
Class	Class 2 Laser Product - 1 mW CW MAXIMUM 600-700nm					

Technical specifications and product configurations subject to change without notice.

LASER RADIATION
DO NOT STARE INTO BEAM
CLASS 2 LASER PRODUCT

1 mW CW MAXIMUM 600-700 nm