



Smart Features.

# Efficient Design.



## MAD SERIES

Minilase™ has smart features that drive efficiency in a compact desktop configuration.

Our Easy Mode™ system provides maximum efficiency to your marking operation. Simply load the part, press start and the entire marking process is automated. A three-sided automatic vertical door provides an ergonomic method for part loading. A powered part-loading table with our focus finder system makes focal adjustment easy. Machine management is simple with the front mounted operator control panel.

A USB connection to a laptop or desktop PC is all that is required to start programming with our Minilase™ Pro SE laser marking software. Quickly mark text, barcodes, serial and date codes, graphics and more. Utilize our micro rotary device for 360° radial part marking.

With our Quick Start Guide, video tutorials and laser programming manual, Minilase™ can be setup and marking within minutes.



### FEATURES:

- Air-Cooled, Maintenance Free Design for Industrial Applications
- Advanced MOPA Fiber Laser Engine with 20 Watt of Power
- Easy Mode with Automated Door Close, Marking and Door Open Sequence
- Three-Sided Access Pneumatic Part Loading Door
- Power Focal Height Adjustment
- T-Slot Work Surface and Front Panel Status Lights
- Easy Focus Finder
- Ideal for marking all Metals, Most Plastics, Painted/Anodized/Coated Materials and a Variety of Other Substrates
- Comprehensive 3-Year Warranty



## Technical Specifications

System Dimensions / Weight	17"W x 34"L x 24"H / 150lbs
Standard Marking Field	160S (100mm x 100mm) (3.93" x 3.93")
Standard Max Part Size (160S Lens)	13.5"W x 9.5"L x 4.625"H (mm) 342W x 241L x 117H
Available Marking Lens Upgrade and Marking Fields	254S (140mm x 140mm, 5.5" x 5.5")
Maximum Part Height with Lens Upgrade	(254S) .625"H/15mm
Laser Type	Ytterbium Fiber
Wavelength	1062nm +/- 3nm
Wattage	20W
Frequency Range	1kHz - 500kHz
Pulse Duration	Selectable, 260ns or 40ns
Operative Ambient Temperature Range	45° F to 110° F
Cooling	Air Cooled
Input Power	Power Sensing 110-240VAC 50/60Hz
Aiming Beam	(2) Class IIM Red Diode (635nm)
PC	Laptop/Desktop PC Required
PC Connection	USB
Available Ports	Pneumatic Required for Door / Diagnostic
Warranty	36 Month Comprehensive Unlimited Hours
Documentation	USB Drive / Quick Start Guide Video Tutorials / Software Manual Safety Manual / Laser Settings Manual (Manuals Provided in Digital Copy)
Optional Accessories	<ul style="list-style-type: none"> <li>• Micro Rotary Device (360° Marking)</li> <li>• Fume Extraction</li> </ul>

Minilase™ is a Class 1 laser product in full compliance with CFR 1040. The system includes proper interlocks, switches, etc.

Laser interaction with materials can create fumes and/or particles. TYKMA ElectroX highly recommends the use of fume extraction equipment to minimize dust, fumes or smoke that can be created during the marking, etching or engraving process.

*TYKMA ElectroX follows a policy of continuous product improvement. Specifications are subject to change without notice.*



**TYKMA**  
**ELECTROX**

(877) 318-9562  
370 Gateway Drive  
Chillicothe, OH 45601  
www.permanentmarking.com