

# Industrial Laser Systems

Technical Guide - Europe





Patented Class 1  
Laser Nozzle

Rugged Scanhead Enclosure

# LASENGO

Introducing the LaseNGo our first Class 1 certified mobile handheld laser marking machine. The unique patented design allows this to be a fully secure Class 1 portable laser marking machine. This patented design guarantees the safety of the user and surrounding employees without the use of protective goggles or shields. It's a MOPA laser engraver on wheels. It offers the flexibility for marking large objects like pipes, large containers, vehicles, and more without extra handling. Simply roll it up to where you need it, lase it, and go!

Designed for mobility, the unit includes a 7.8-foot umbilical cord for flexible reach, a compact dolly-style frame, and multiple interchangeable lens nozzles to accommodate class 1 part requirements. With a USB connection for easy integration with laser control software, and air-cooled, low-maintenance operation, this rugged mobile laser engraver is ideal for manufacturing, aerospace, automotive, and field service applications requiring portable and reliable laser marking capabilities.



## System Features

- 20W MOPA Fiber Laser – Class 1 Operation
- Rugged Handheld Scanhead Design
- Interchangeable Lens Nozzles for Class 1 Compliance
- USB Connection for Laser Control PC
- Air-Cooled and Low Maintenance
- Mobile Dolly design

FULL DETAILS



## System Specifications

|                 |                         |
|-----------------|-------------------------|
| Dimensions      | Varies based on options |
| System Weight   | 23kg / 50lbs            |
| Laser Umbilical | 2.4m / 7.87ft           |
| Max Part Size   | Unlimited               |
| Software        | Minilase Pro SE         |

USA Manufactured Galvos  
& Mechanical Safety Shutter

Private Label, Custom Spec  
MOPA Fiber Laser Source

Manual Fixture Stage

Make it your own with  
Co-Branding out of the box!

# MINILASE™ LBL

Introducing our most compact laser engraving machine built for marking logos, barcodes, text, graphics and more! This new unit is designed to be portable and comes with an optional travel case. Ideal for retail and on the spot customization or can stay tucked away in the corner of your shop, providing a marking solution for all types of businesses.

The compact Minilase LBL is a 20-watt MOPA fiber laser capable of marking and engraving a wide range of materials. From metals to most plastics, our fiber laser engines are tuned specifically by our engineers to be versatile across a wide range of applications. Featuring a 20W MOPA based fiber engine, it delivers high peak power, swift processing, and exceptional application adaptability. Leveraging Minilase LBL enhances marking capabilities compared to basic pulsed fiber laser systems, thanks to selectable pulse durations enabling processing of a wider range of materials and substrates.



## System Features

- MOPA Fiber Laser – Class 1 Operation
- 20W MOPA Fiber Laser
- 4" x 4" marking field
- USB Connection for Laser Control PC
- Air-Cooled and Low Maintenance
- Compact mobile design
- Manual Fixture Stage

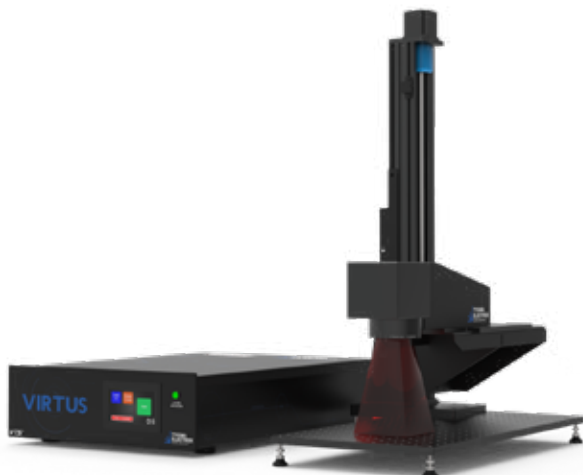
FULL DETAILS



## System Specifications

|                           |                                                  |
|---------------------------|--------------------------------------------------|
| <b>Dimensions (WxLxH)</b> | 224mm x 399mm x 589mm<br>8.8" x 15.7" x 23.2"    |
| <b>System Weight</b>      | 23kg / 50lbs                                     |
| <b>Max Part Size</b>      | 150mm x 209mm x 82.5mm<br>5 7/8" x 8.25" x 3.25" |
| <b>Software</b>           | Minilase Pro 3 64-Bit                            |
| <b>Optional</b>           | Travel Case & Fume Extractor                     |

# VIRTUS™ Defense (NEW) (tool post sold as option)



## VIRTUS Models

| Model      | Part #    |
|------------|-----------|
| VIRTUS 30W | VIRTUS 30 |
| VIRTUS 60W | VIRTUS 60 |

## Lens Options

| Item               | Part #           |
|--------------------|------------------|
| 254mm Lens Upgrade | 254 Lens Upgrade |
| 254mm Lens Add-On  | 254 Lens Add-On  |
| 330mm Lens Upgrade | 330 Lens Upgrade |
| 330mm Lens Add-On  | 330 Lens Add-On  |
| 420mm Lens Upgrade | 420 Lens Upgrade |
| 420mm Lens Add-On  | 420 Lens Add-On  |

## Accessories

| Item                          | Part #                 |
|-------------------------------|------------------------|
| VIRTUS Programmable Tool Post | VIRTUS Prog. Tool Post |
| Laser Safety Glasses          | Laser Safety Glasses   |

See fume extraction and rotary products for complete options

## Technical Specifications

| Laser Specifications        | VIRTUS™                                     |
|-----------------------------|---------------------------------------------|
| Laser Type                  | Ytterbium Fiber                             |
| Wavelength                  | 1062nm +/- 3nm                              |
| Wattage Ratings             | 30W 60W                                     |
| Frequency Range             | 1 - 4,000kHz, CW Mode 1 - 4,000kHz, CW Mode |
| Pulse Duration              | 16 Available, 2-350ns 16 Available, 2-500ns |
| Operative Ambient Air Temp. | 7° - 40° C / 45° - 104° F                   |
| Cooling Type                | Forced Air                                  |
| Red Alignment Laser (RAL)   | Class II Red Diode (635nm)                  |
| Red Focusing Laser (RFL)    | Class II Red Diode (635nm)                  |
| Power Requirement           | Power Sensing 110-240 VAC 50/60 Hz          |

| System Specifications     | VIRTUS™                                                                                               |
|---------------------------|-------------------------------------------------------------------------------------------------------|
| Head Dimensions (LxWxH)   | 429mm x 99mm x 127mm / 16.9" x 3.9" x 4.99"                                                           |
| Rack Dimensions (LxWxH)   | 673mm x 432mm x 146mm / 26.5" x 17" x 5.75"                                                           |
| Weight (approx.)          | Head - 4.9kg / 11lbs / Rack - 22.7kg / 50lbs                                                          |
| Standard Software Package | Minilase Pro 3 64-Bit                                                                                 |
| PC                        | Windows 10 / 11 PC Required for Operation                                                             |
| External Connectors       | USB / Diagnostic / Digital IO / Hardware Interlock / Stepper Motor Output (4)                         |
| Included Accessories      | Laser Enable Keys (2) / Power & USB Cable / USB Drive with Software                                   |
| Documentation             | Digital on USB - System, Software, & Safety Manual / Laser Parameter Guide / Software Video Tutorials |
| Warranty                  | 24 Months                                                                                             |

## Focal Lens Specifications

### Standard F-Theta Focal Lens

| Lens Size        | 163L M85                      |
|------------------|-------------------------------|
| Marking Field    | 100mm x 100mm / 3.93" x 3.93" |
| Working Distance | 189mm / 7.44"                 |

### Optional F-Theta Focal Lens Upgrades

| Lens Size        | 254L M85                    |
|------------------|-----------------------------|
| Marking Field    | 165mm x 165mm / 6.5" x 6.5" |
| Working Distance | 297mm / 11.7"               |

| Lens Size        | 330L M85                      |
|------------------|-------------------------------|
| Marking Field    | 200mm x 200mm / 7.87" x 7.87" |
| Working Distance | 389mm / 15.3"                 |

| Lens Size                 | 420L M85                      |
|---------------------------|-------------------------------|
| Lens Size / Marking Field | 260mm x 260mm / 10.2" x 10.2" |
| Working Distance          | 494mm / 19.4"                 |

# Minilase™ Manual



## MLM Models

| Model               | Part # |
|---------------------|--------|
| Minilase Manual 30W | MLM30  |

## Lens Options

| Item               | Part #           |
|--------------------|------------------|
| 254mm Lens Upgrade | 254 Lens Upgrade |
| 254mm Lens Add-On  | 254 Lens Add-On  |

## Accessories

| Item                                                         | Part #          |
|--------------------------------------------------------------|-----------------|
| Programmable Z Upgrade                                       | Prog. Z Upgrade |
| Class 4 Pass Through                                         | Pass Through    |
| See fume extraction and rotary products for complete options |                 |

## Technical Specifications

| Laser Specifications        | Minilase™ Manual                   |
|-----------------------------|------------------------------------|
| Laser Type                  | MOPA Ytterbium Fiber               |
| Wavelength                  | 1062nm +/- 3nm                     |
| Wattage Ratings             | 30W                                |
| Frequency Range             | 1 - 4,000kHz, CW Mode              |
| Pulse Duration              | 16 Available, 2-350ns              |
| Operative Ambient Air Temp. | 7° - 40° C / 45° - 104° F          |
| Cooling Type                | Forced Air                         |
| Red Alignment Laser (RAL)   | Class II Red Diode (635nm)         |
| Red Focusing Laser (RFL)    | Class II Red Diode (635nm)         |
| Power Requirement           | Power Sensing 110-240 VAC 50/60 Hz |

| System Specifications     | Minilase™ Manual                                                                                      |
|---------------------------|-------------------------------------------------------------------------------------------------------|
| System Dimensions (LxWxH) | 878mm x 427mm x 625mm / 34.6" x 16.8" x 24.6"                                                         |
| Weight (approx.)          | 59kg / 130lbs                                                                                         |
| Max Part Size (LxW)       | 228mm x 254mm / 12" x 9"                                                                              |
| Laser Focus Control       | Power (Programmable Upgrade Available)                                                                |
| Door Type                 | Manual                                                                                                |
| Work Surface              | Anodized Tooling Plate with Mounting Hole Pattern                                                     |
| Standard Software Package | Minilase Pro 3 64-Bit                                                                                 |
| PC                        | Windows 10 / 11 PC Required for Operation                                                             |
| External Connectors       | USB / Diagnostic / Basic IO                                                                           |
| Included Accessories      | Laser Enable Keys (2) / Power & USB Cable / USB Drive with Software                                   |
| Documentation             | Digital on USB - System, Software, & Safety Manual / Laser Parameter Guide / Software Video Tutorials |
| Warranty                  | 24 Months                                                                                             |

## Focal Lens Specifications

### Standard F-Theta Focal Lens

|                 |                               |
|-----------------|-------------------------------|
| Lens Size       | 163L M85                      |
| Marking Field   | 100mm x 100mm / 3.93" x 3.93" |
| Max Part Height | 179mm / 6.9"                  |

### Optional F-Theta Focal Lens Upgrades

|                 |                             |
|-----------------|-----------------------------|
| Lens Size       | 254L M85                    |
| Marking Field   | 165mm x 165mm / 6.5" x 6.5" |
| Max Part Height | 52mm / 2"                   |

# Minilase™



## MAD Models

| Model        | Part # |
|--------------|--------|
| Minilase 20W | MAD20  |

## Accessories

| Item                                                         | Part #          |
|--------------------------------------------------------------|-----------------|
| Programmable Z Upgrade                                       | Prog. Z Upgrade |
| Class 4 Pass Through                                         | Pass Through    |
| See fume extraction and rotary products for complete options |                 |

## Technical Specifications

| Laser Specifications        | Minilase™                          |
|-----------------------------|------------------------------------|
| Laser Type                  | MOPA Ytterbium Fiber               |
| Wavelength                  | 1062nm +/- 3nm                     |
| Wattage Ratings             | 20W                                |
| Frequency Range             | 1 - 4,000kHz, CW Mode              |
| Pulse Duration              | 16 Available, 2-350ns              |
| Operative Ambient Air Temp. | 7° - 40° C / 45° - 104° F          |
| Cooling Type                | Forced Air                         |
| Red Alignment Laser (RAL)   | Class II Red Diode (635nm)         |
| Red Focusing Laser (RFL)    | Class II Red Diode (635nm)         |
| Power Requirement           | Power Sensing 110-240 VAC 50/60 Hz |

## Focal Lens Specifications

### Standard F-Theta Focal Lens

| Lens Size       | 163L M85                      |
|-----------------|-------------------------------|
| Marking Field   | 100mm x 100mm / 3.93" x 3.93" |
| Max Part Height | 89mm / 3.5"                   |

| System Specifications     | Minilase™                                                                                             |
|---------------------------|-------------------------------------------------------------------------------------------------------|
| System Dimensions (LxWxH) | 878mm x 427mm x 625mm / 34.6" x 16.8" x 24.6"                                                         |
| Weight (approx.)          | 59kg / 130lbs                                                                                         |
| Max Part Size (LxW)       | 228mm x 254mm / 12" x 9"                                                                              |
| Laser Focus Control       | Power (Programmable Upgrade Available)                                                                |
| Door Type                 | Pneumatic Vertical with Patented Safety (60-80 psi required)                                          |
| Work Surface              | T-slot Tooling Plate                                                                                  |
| Standard Software Package | Minilase Pro SE                                                                                       |
| PC                        | Windows 10 / 11 PC Required for Operation                                                             |
| External Connectors       | USB / Diagnostic / Basic IO                                                                           |
| Included Accessories      | Laser Enable Keys (2) / Power & USB Cable / USB Drive with Software                                   |
| Documentation             | Digital on USB - System, Software, & Safety Manual / Laser Parameter Guide / Software Video Tutorials |
| Warranty                  | 24 Months                                                                                             |

# Minilase™ XL Manual



## MXLM Models

|  | Model                   | Part #  |
|--|-------------------------|---------|
|  | Minilase XL Manual 20W  | MXLM20  |
|  | Minilase XL Manual 60W  | MXLM60  |
|  | Minilase XL Manual 100W | MXLM100 |

## Lens Options

|  | Item               | Part #           |
|--|--------------------|------------------|
|  | 254mm Lens Upgrade | 254 Lens Upgrade |
|  | 254mm Lens Add-On  | 254 Lens Add-On  |
|  | 330mm Lens Upgrade | 330 Lens Upgrade |
|  | 330mm Lens Add-On  | 330 Lens Add-On  |

## Accessories

|  | Item                   | Part #          |
|--|------------------------|-----------------|
|  | Programmable Z Upgrade | Prog. Z Upgrade |
|  | MXL Mobile Cart        | MXL Cart        |
|  | Class 4 Pass Through   | Pass Through    |

See fume extraction and rotary products for complete options

## Technical Specifications

| Laser Specifications        | Minilase™ XL Manual                |                       |      |
|-----------------------------|------------------------------------|-----------------------|------|
| Laser Type                  | Ytterbium Fiber                    |                       |      |
| Wavelength                  | 1062nm +/- 3nm                     |                       |      |
| Wattage Ratings             | 20W                                | 60W                   | 100W |
| Frequency Range             | 1 - 4,000kHz, CW Mode              | 1 - 4,000kHz, CW Mode |      |
| Pulse Duration              | 16 Available, 2-350ns              | 16 Available, 2-500ns |      |
| Operative Ambient Air Temp. | 7° - 40° C / 45° - 104° F          |                       |      |
| Cooling Type                | Forced Air                         |                       |      |
| Red Alignment Laser (RAL)   | Class II Red Diode (635nm)         |                       |      |
| Red Focusing Laser (RFL)    | Class II Red Diode (635nm)         |                       |      |
| Power Requirement           | Power Sensing 110-240 VAC 50/60 Hz |                       |      |

| System Specifications     | Minilase™ XL Manual                                                                                   |
|---------------------------|-------------------------------------------------------------------------------------------------------|
| System Dimensions (LxWxH) | 1,079mm x 610mm x 851mm / 42.5" x 24" x 33.5"                                                         |
| Weight (approx.)          | 91kg / 200lbs                                                                                         |
| Max Part Size (LxW)       | 317mm x 508mm / 12.5" x 20"                                                                           |
| Laser Focus Control       | Power (Programmable Upgrade Available)                                                                |
| Door Type                 | Manual                                                                                                |
| Work Surface              | Breadboard Tooling Plate with Tapped Holes                                                            |
| Standard Software Package | Minilase Pro 3 64-Bit                                                                                 |
| PC                        | Windows 10 / 11 PC Required for Operation                                                             |
| External Connectors       | USB (2) / Diagnostic                                                                                  |
| Included Accessories      | Laser Enable Keys (2) / Power Cable / USB Drive with Software Backup                                  |
| Documentation             | Digital on USB - System, Software, & Safety Manual / Laser Parameter Guide / Software Video Tutorials |
| Warranty                  | 24 Months                                                                                             |

## Focal Lens Options:

### Standard F-Theta Focal Lens

| Lens Size       | 163L M85                      |
|-----------------|-------------------------------|
| Marking Field   | 100mm x 100mm / 3.93" x 3.93" |
| Max Part Height | 317mm / 12.5"                 |

### Optional F-Theta Focal Lens Upgrades

| Lens Size       | 254L M85                    |
|-----------------|-----------------------------|
| Marking Field   | 165mm x 165mm / 6.5" x 6.5" |
| Max Part Height | 209mm / 8.2"                |

| Lens Size       | 330L M85                      |
|-----------------|-------------------------------|
| Marking Field   | 200mm x 200mm / 7.87" x 7.87" |
| Max Part Height | 117mm / 4.6"                  |

# Minilase™ XL Manual UV



## MXLM UV Models

| Model                     | Part #    |
|---------------------------|-----------|
| Minilase XL Manual 10W UV | MXLM10 UV |

## Lens Options

| Item                  | Part #              |
|-----------------------|---------------------|
| 254mm UV Lens Upgrade | 254 UV Lens Upgrade |
| 254mm UV Lens Add-On  | 254 UV Lens Add-On  |
| 330mm UV Lens Upgrade | 330 UV Lens Upgrade |
| 330mm UV Lens Add-On  | 330 UV Lens Add-On  |

## Accessories

| Item                                                         | Part #          |
|--------------------------------------------------------------|-----------------|
| Programmable Z Upgrade                                       | Prog. Z Upgrade |
| Class 4 Pass Through                                         | PassThrough     |
| See fume extraction and rotary products for complete options |                 |

## Technical Specifications

| Laser Specifications        | Minilase™ XL UV Manual                           |
|-----------------------------|--------------------------------------------------|
| Laser Type                  | Diode Pumped Solid State Ultraviolet             |
| Wavelength                  | 355nm                                            |
| Wattage Ratings             | 10W                                              |
| Frequency Range             | 40 - 300kHz                                      |
| Pulse Duration              | 18ns @ 60kHz                                     |
| Operative Ambient Air Temp. | 7° - 35° C / 45° - 95° F                         |
| Cooling Type                | Closed Loop Chiller (Water/Propylene Glycol Mix) |
| Red Alignment Laser (RAL)   | Class II Red Diode (635nm)                       |
| Red Focusing Laser (RFL)    | Class II Red Diode (635nm)                       |
| Power Requirement           | 220 VAC 50/60 Hz, 30A                            |

| System Specifications     | Minilase™ XL UV Manual                                                                                |
|---------------------------|-------------------------------------------------------------------------------------------------------|
| Enclosure Dims (LxWxH)    | 1,079mm x 610mm x 851mm / 42.5" x 24" x 33.5"                                                         |
| Rack Dims (LxWxH)         | 912mm x 566mm x 627mm / 35.9" x 22.3" x 24.7"                                                         |
| Weight (approx.)          | Enclosure - 91kg / 200lbs<br>Rack - Available Upon Request                                            |
| Max Part Size (LxW)       | 317mm x 508mm / 12.5" x 20"                                                                           |
| Laser Focus Control       | Power (Programmable Upgrade Available)                                                                |
| Door Type                 | Manual                                                                                                |
| Work Surface              | Breadboard Tooling Plate with Tapped Holes                                                            |
| Standard Software Package | Minilase Pro 3 64-Bit                                                                                 |
| PC                        | Windows 10 / 11 PC Required for Operation                                                             |
| External Connectors       | USB (2) / Diagnostic                                                                                  |
| Included Accessories      | Laser Enable Keys (2) / Power Cable / USB Drive with Software Backup                                  |
| Documentation             | Digital on USB - System, Software, & Safety Manual / Laser Parameter Guide / Software Video Tutorials |
| Warranty                  | Mechanical and Controls - 24 Months<br>UV Source - 12 Months<br>Chiller - 12 Months                   |

## Focal Lens Options:

### Standard F-Theta Focal Lens

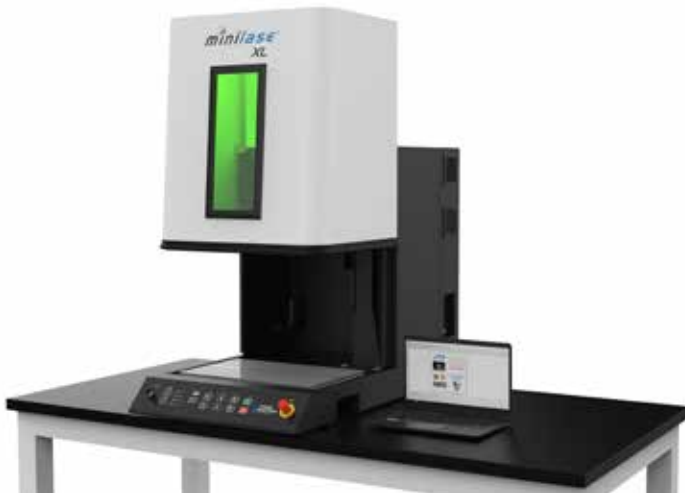
|                 |                               |
|-----------------|-------------------------------|
| Lens Size       | 163L UV M85                   |
| Marking Field   | 100mm x 100mm / 3.93" x 3.93" |
| Max Part Height | Consult TE                    |

### Optional F-Theta Focal Lens Upgrades

|                 |                             |
|-----------------|-----------------------------|
| Lens Size       | 254L UV M85                 |
| Marking Field   | 150mm x 150mm / 5.9" x 5.9" |
| Max Part Height | Consult TE                  |

|                 |                               |
|-----------------|-------------------------------|
| Lens Size       | 330L UV M85                   |
| Marking Field   | 200mm x 200mm / 7.87" x 7.87" |
| Max Part Height | Consult TE                    |

# Minilase™ XL



## MXL Models

| Model            | Part # |
|------------------|--------|
| Minilase XL 20W  | MXL20  |
| Minilase XL 60W  | MXL60  |
| Minilase XL 100W | MXL100 |

## Lens Options

| Item               | Part #           |
|--------------------|------------------|
| 254mm Lens Upgrade | 254 Lens Upgrade |
| 254mm Lens Add-On  | 254 Lens Add-On  |
| 330mm Lens Upgrade | 330 Lens Upgrade |
| 330mm Lens Add-On  | 330 Lens Add-On  |

## Accessories

| Item                   | Part #          |
|------------------------|-----------------|
| Programmable Z Upgrade | Prog. Z Upgrade |
| MXL Mobile Cart        | MXL Cart        |
| Class 4 Pass Through   | PassThrough     |

See fume extraction and rotary products for complete options

## Technical Specifications

| Laser Specifications        | Minilase™ XL                                     |
|-----------------------------|--------------------------------------------------|
| Laser Type                  | MOPA Ytterbium Fiber                             |
| Wavelength                  | 1062nm +/- 3nm                                   |
| Wattage Ratings             | 20W      60W      100W                           |
| Frequency Range             | 1 - 4,000kHz, CW Mode      1 - 4,000kHz, CW Mode |
| Pulse Duration              | 16 Available, 2-350ns      16 Available, 2-500ns |
| Operative Ambient Air Temp. | 7° - 40° C / 45° - 104° F                        |
| Cooling Type                | Forced Air                                       |
| Red Alignment Laser (RAL)   | Class II Red Diode (635nm)                       |
| Red Focusing Laser (RFL)    | Class II Red Diode (635nm)                       |
| Power Requirement           | Power Sensing 110-240 VAC 50/60 Hz               |

| System Specifications     | Minilase™ XL                                                                                          |
|---------------------------|-------------------------------------------------------------------------------------------------------|
| System Dimensions (LxWxH) | 1,079mm x 610mm x 851mm<br>42.5" x 24" x 33.5"                                                        |
| Weight (approx.)          | 91kg / 200lbs                                                                                         |
| Max Part Size (LxW)       | 317mm x 508mm / 12.5" x 20"                                                                           |
| Laser Focus Control       | Power (Programmable Upgrade Available)                                                                |
| Door Type                 | Pneumatic Vertical with Patented Safety (60-80 psi required)                                          |
| Work Surface              | Breadboard Tooling Plate with Tapped Holes                                                            |
| Standard Software Package | Minilase Pro 3 64-Bit                                                                                 |
| PC                        | Windows 10 / 11 PC Required for Operation                                                             |
| External Connectors       | USB (2) / Diagnostic / Ethernet / Automation Mode Connector                                           |
| Included Accessories      | Laser Enable Keys (2) / Power Cable / USB Drive with Software Backup / Class 4 Service Override Key   |
| Documentation             | Digital on USB - System, Software, & Safety Manual / Laser Parameter Guide / Software Video Tutorials |
| Warranty                  | 24 Months                                                                                             |

## Focal Lens Specifications

### Standard F-Theta Focal Lens

| Lens Size       | 163L M85                      |
|-----------------|-------------------------------|
| Marking Field   | 100mm x 100mm / 3.93" x 3.93" |
| Max Part Height | 317mm / 12.5"                 |

### Optional F-Theta Focal Lens Upgrades

| Lens Size        | 254L M85                    |
|------------------|-----------------------------|
| Marking Field    | 165mm x 165mm / 6.5" x 6.5" |
| Mark Part Height | 209mm / 8.2"                |

| Lens Size       | 330L M85                      |
|-----------------|-------------------------------|
| Marking Field   | 200mm x 200mm / 7.87" x 7.87" |
| Max Part Height | 117mm / 4.6"                  |

# Zetalase™ XL



## ZXL Models

| Model            | Part # |
|------------------|--------|
| Zetalase XL 20W  | ZXL20  |
| Zetalase XL 60W  | ZXL60  |
| Zetalase XL 100W | ZXL100 |

## Lens Options

| Item               | Part #           |
|--------------------|------------------|
| 254mm Lens Upgrade | 254 Lens Upgrade |
| 254mm Lens Add-On  | 254 Lens Add-On  |
| 330mm Lens Upgrade | 330 Lens Upgrade |
| 330mm Lens Add-On  | 330 Lens Add-On  |
| 420mm Lens Upgrade | 420 Lens Upgrade |
| 420mm Lens Add-On  | 420 Lens Add-On  |

## Accessories

| Item                 | Part #        |
|----------------------|---------------|
| Gantry Linear Y Axis | ZXLYA         |
| Mobile Casters       | ZXL Casters   |
| Automation Mode      | ZXL Auto Mode |

See fume extraction and rotary products for complete options

## Technical Specifications

| Laser Specifications        | Zetalase™ XL                                     |
|-----------------------------|--------------------------------------------------|
| Laser Type                  | MOPA Ytterbium Fiber                             |
| Wavelength                  | 1062nm +/- 3nm                                   |
| Wattage Ratings             | 20W      60W      100W                           |
| Frequency Range             | 1 - 4,000kHz, CW Mode      1 - 4,000kHz, CW Mode |
| Pulse Duration              | 16 Available, 2-350ns      16 Available, 2-500ns |
| Operative Ambient Air Temp. | 7° - 40° C / 45° - 104° F                        |
| Cooling Type                | Forced Air                                       |
| Red Alignment Laser (RAL)   | Class II Red Diode (635nm)                       |
| Red Focusing Laser (RFL)    | Class II Red Diode (635nm)                       |
| Power Requirement           | Power Sensing 110-240 VAC 50/60 Hz               |

| System Specifications     | Zetalase™ XL                                                                                             |
|---------------------------|----------------------------------------------------------------------------------------------------------|
| System Dimensions (LxWxH) | 1,321mm x 813mm x 1,880mm / 52" x 32" x 74"<br>(not including monitor arm)                               |
| Weight (approx.)          | 227kg / 500lbs                                                                                           |
| Max Part Size (LxW)       | 609mm x 762mm / 24" x 30"<br>1,066mm x 382mm / 42" x 15" (Using Divider Wall Opening)                    |
| Laser Focus Control       | Programmable                                                                                             |
| Door Type                 | Pneumatic Vertical with Patented Safety (60-80 psi required)                                             |
| Work Surface              | T-slot Tooling Plate                                                                                     |
| Standard Software Package | Minilase Pro 3 64-Bit                                                                                    |
| PC                        | Integrated Windows 10 PC w/Monitor, Keyboard, and Mouse                                                  |
| External Connectors       | VGA / USB (3) / Diagnostic / Ethernet                                                                    |
| Included Accessories      | Laser Enable Keys (2) / Power Cable / USB Drive with Software Backup<br>/ Class 4 Service Override Key   |
| Documentation             | Digital on USB - System, Software, & Safety Manual / Laser Parameter<br>Guide / Software Video Tutorials |
| Warranty                  | 24 Months                                                                                                |

## Focal Lens Specifications

### Standard F-Theta Focal Lens

| Lens Size       | 163L M85                      |
|-----------------|-------------------------------|
| Marking Field   | 100mm x 100mm / 3.93" x 3.93" |
| Max Part Height | 495mm / 19.5"                 |

### Optional F-Theta Focal Lens Upgrades

| Lens Size       | 254L M85                    |
|-----------------|-----------------------------|
| Marking Field   | 165mm x 165mm / 6.5" x 6.5" |
| Max Part Height | 384mm / 15.1"               |

| Lens Size       | 330L M85                      |
|-----------------|-------------------------------|
| Marking Field   | 200mm x 200mm / 7.87" x 7.87" |
| Max Part Height | 300mm / 11.8"                 |

| Lens Size                 | 420L M85                      |
|---------------------------|-------------------------------|
| Lens Size / Marking Field | 260mm x 260mm / 10.2" x 10.2" |
| Max Part Height           | 224mm / 8.8"                  |

# Zetalase™ XL CO2



## ZXL CO2 Models

| Model                | Part #      |
|----------------------|-------------|
| Zetalase XL CO2 60W  | ZXL CO2 60  |
| Zetalase XL CO2 100W | ZXL CO2 100 |

## Lens Options (No Standard Lens Included)

| Item          | Part #        |
|---------------|---------------|
| F150 CO2 Lens | F150 CO2 Lens |
| F200 CO2 Lens | F200 CO2 Lens |
| F250 CO2 Lens | F250 CO2 Lens |
| F300 CO2 Lens | F300 CO2 Lens |

## Accessories

| Item                                                         | Part #        |
|--------------------------------------------------------------|---------------|
| Mobile Casters                                               | ZXL Casters   |
| Automation Mode                                              | ZXL Auto Mode |
| See fume extraction and rotary products for complete options |               |

## Technical Specifications

| Laser Specifications        | Zetalase™ XL CO2           |
|-----------------------------|----------------------------|
| Laser Type                  | CO2                        |
| Wavelength                  | 10,600nm                   |
| Wattage Ratings             | 60W 100W                   |
| Operative Ambient Air Temp. | 10° - 35° C / 50° - 95° F  |
| Cooling Type                | Forced Air                 |
| Red Alignment Laser (RAL)   | Class II Red Diode (635nm) |
| Red Focusing Laser (RFL)    | Class II Red Diode (635nm) |
| Power Requirement           | 220-240 VAC 50/60 Hz       |

| System Specifications     | Zetalase™ XL CO2                                                                                         |
|---------------------------|----------------------------------------------------------------------------------------------------------|
| System Dimensions (LxWxH) | 1,321mm x 813mm x 1,880mm / 52" x 32" x 74"<br>(not including monitor arm)                               |
| Weight (approx.)          | 227kg / 500lbs                                                                                           |
| Max Part Size (LxW)       | 609mm x 762mm / 24" x 30"<br>1,066mm x 382mm / 42" x 15" (Using Divider Wall Opening)                    |
| Laser Focus Control       | Programmable                                                                                             |
| Door Type                 | Pneumatic Vertical with Patented Safety (60-80 psi required)                                             |
| Work Surface              | T-slot Tooling Plate                                                                                     |
| Standard Software Package | Minilase Pro 3 64-Bit                                                                                    |
| PC                        | Integrated Windows 10 PC w/Monitor, Keyboard, and Mouse                                                  |
| External Connectors       | VGA / USB (3) / Diagnostic / Ethernet                                                                    |
| Included Accessories      | Laser Enable Keys (2) / Power Cable / USB Drive with Software Backup<br>/ Class 4 Service Override Key   |
| Documentation             | Digital on USB - System, Software, & Safety Manual / Laser Parameter<br>Guide / Software Video Tutorials |
| Warranty                  | Mechanical and Controls - 24 Months<br>CO2 Source - 24 Months                                            |

## Focal Lens Specifications

### F-Theta Focal Lens Options

| Lens Size       | F150                        |
|-----------------|-----------------------------|
| Marking Field   | 110mm x 110mm / 4.3" x 4.3" |
| Max Part Height | 558mm / 21.9"               |

| Lens Size       | F200                        |
|-----------------|-----------------------------|
| Marking Field   | 140mm x 140mm / 5.5" x 5.5" |
| Max Part Height | Consult TE                  |

| Lens Size       | F250                          |
|-----------------|-------------------------------|
| Marking Field   | 175mm x 175mm / 6.88" x 6.88" |
| Max Part Height | 462mm / 18.1"                 |

| Lens Size                 | F300                        |
|---------------------------|-----------------------------|
| Lens Size / Marking Field | 210mm x 210mm / 8.2" x 8.2" |
| Max Part Height           | 336mm / 13.2"               |

# Zetalase™ XL UV



## ZXL UV Models

| Model              | Part #  |
|--------------------|---------|
| Zetalase XL UV 10W | ZXLUV10 |

## Lens Options

| Item                  | Part #         |
|-----------------------|----------------|
| 254mm UV Lens Upgrade | 254 UV Upgrade |
| 254mm UV Lens Add-On  | 254 UV Add-On  |
| 330mm UV Lens Upgrade | 330 UV Upgrade |
| 330mm UV Lens Add-On  | 330 UV Add-On  |
| 420mm UV Lens Upgrade | 420 UV Upgrade |
| 420mm UV Lens Add-On  | 420 UV Add-On  |

## Accessories

| Item                                                         | Part #        |
|--------------------------------------------------------------|---------------|
| Gantry Linear Y Axis                                         | ZXLYA         |
| Automation Mode                                              | ZXL Auto Mode |
| See fume extraction and rotary products for complete options |               |

## Technical Specifications

| Laser Specifications        | Zetalase™ XL UV                                  |
|-----------------------------|--------------------------------------------------|
| Laser Type                  | Diode Pumped Solid State Ultraviolet             |
| Wavelength                  | 355nm                                            |
| Wattage Ratings             | 10W                                              |
| Frequency Range             | 40 - 300kHz                                      |
| Pulse Duration              | 18ns @ 60kHz                                     |
| Operative Ambient Air Temp. | 7° - 35° C / 45° - 95° F                         |
| Cooling Type                | Closed Loop Chiller (Water/Propylene Glycol Mix) |
| Red Alignment Laser (RAL)   | Class II Red Diode (635nm)                       |
| Red Focusing Laser (RFL)    | Class II Red Diode (635nm)                       |
| Power Requirement           | 220 VAC 50/60 Hz, 30A                            |

| System Specifications     | Zetalase™ XL UV                                                                                          |
|---------------------------|----------------------------------------------------------------------------------------------------------|
| System Dimensions (LxWxH) | 1,321mm x 813mm x 1,880mm / 52" x 32" x 74"<br>(not including monitor arm)                               |
| Weight (approx.)          | 227kg / 500lbs                                                                                           |
| Max Part Size (LxW)       | 609mm x 762mm / 24" x 30"<br>1,066mm x 382mm / 42" x 15" (Using Divider Wall Opening)                    |
| Laser Focus Control       | Programmable                                                                                             |
| Door Type                 | Pneumatic Vertical with Patented Safety (60-80 psi required)                                             |
| Work Surface              | T-slot Tooling Plate                                                                                     |
| Standard Software Package | Minilase Pro 3 64-Bit                                                                                    |
| PC                        | Integrated Windows 10 PC w/Monitor, Keyboard, and Mouse                                                  |
| External Connectors       | VGA / USB (3) / Diagnostic / Ethernet                                                                    |
| Included Accessories      | Laser Enable Keys (2) / Power Cable / USB Drive with Software Backup<br>/ Class 4 Service Override Key   |
| Documentation             | Digital on USB - System, Software, & Safety Manual / Laser Parameter<br>Guide / Software Video Tutorials |
| Warranty                  | Mechanical and Controls - 24 Months<br>UV Source - 12 Months<br>Chiller - 12 Months                      |

## Focal Lens Specifications

### Standard F-Theta Focal Lens

| Lens Size       | 163L UV M85                   |
|-----------------|-------------------------------|
| Marking Field   | 100mm x 100mm / 3.93" x 3.93" |
| Max Part Height | 438mm / 17.2"                 |

### Optional F-Theta Focal Lens Upgrades

| Lens Size       | 254L UV M85                 |
|-----------------|-----------------------------|
| Marking Field   | 150mm x 150mm / 5.9" x 5.9" |
| Max Part Height | 330mm / 13"                 |

| Lens Size       | 330L UV M85                   |
|-----------------|-------------------------------|
| Marking Field   | 200mm x 200mm / 7.87" x 7.87" |
| Max Part Height | 243mm / 9.6"                  |

| Lens Size                 | 420L UV M85                   |
|---------------------------|-------------------------------|
| Lens Size / Marking Field | 260mm x 260mm / 10.2" x 10.2" |
| Max Part Height           | 167mm / 6.5"                  |

# Zetalase™ XL UV 3D



## ZXL UV 3D Models

| Model                 | Part #    |
|-----------------------|-----------|
| Zetalase XL UV 3D 10W | ZXL3DUV10 |

## Lens Options

| Item                  | Part #         |
|-----------------------|----------------|
| 330mm UV Lens Upgrade | 330 UV Upgrade |
| 330mm UV Lens Add-On  | 330 UV Add-On  |

## Accessories

| Item                                                         | Part #        |
|--------------------------------------------------------------|---------------|
| Gantry Linear Y Axis                                         | ZXLYA         |
| Automation Mode                                              | ZXL Auto Mode |
| See fume extraction and rotary products for complete options |               |

## Technical Specifications

| Laser Specifications        | Zetalase™ XL UV 3D                               |
|-----------------------------|--------------------------------------------------|
| Laser Type                  | Diode Pumped Solid State Ultraviolet             |
| Wavelength                  | 355nm                                            |
| Wattage Ratings             | 10W                                              |
| Frequency Range             | 40 - 300kHz                                      |
| Pulse Duration              | 18ns @ 60kHz                                     |
| Operative Ambient Air Temp. | 7° - 35° C / 45° - 95° F                         |
| Cooling Type                | Closed Loop Chiller (Water/Propylene Glycol Mix) |
| Red Alignment Laser (RAL)   | Class II Red Diode (635nm)                       |
| Red Focusing Laser (RFL)    | Class II Red Diode (635nm)                       |
| Power Requirement           | 220 VAC 50/60 Hz, 30A                            |

| System Specifications     | Zetalase™ XL UV 3D                                                                                    |
|---------------------------|-------------------------------------------------------------------------------------------------------|
| System Dimensions (LxWxH) | 1,321mm x 813mm x 1,880mm / 52" x 32" x 74" (not including monitor arm)                               |
| Weight (approx.)          | 227kg / 500lbs                                                                                        |
| Max Part Size (LxW)       | 609mm x 762mm / 24" x 30" / 1,066mm x 382mm / 42" x 15" (Using Divider Wall Opening)                  |
| Laser Focus Control       | Programmable                                                                                          |
| Door Type                 | Pneumatic Vertical with Patented Safety (60-80 psi required)                                          |
| Work Surface              | T-slot Tooling Plate                                                                                  |
| Standard Software Package | Minilase Pro 3 64-Bit                                                                                 |
| PC                        | Integrated Windows 10 PC w/Monitor, Keyboard, and Mouse                                               |
| External Connectors       | VGA / USB (3) / Diagnostic / Ethernet                                                                 |
| Included Accessories      | Laser Enable Keys (2) / Power Cable / USB Drive with Software Backup / Class 4 Service Override Key   |
| Documentation             | Digital on USB - System, Software, & Safety Manual / Laser Parameter Guide / Software Video Tutorials |
| Warranty                  | Mechanical and Controls - 24 Months<br>UV Source - 12 Months<br>Chiller - 12 Months                   |

## Focal Lens & 3D Specifications

### Standard F-Theta Focal Lens

| Lens Size              | 254L M85                    |
|------------------------|-----------------------------|
| Marking Field          | 150mm x 150mm / 5.9" x 5.9" |
| Max Part Height        | 384mm / 15.1"               |
| 3D Dynamic Focus Range | 40mm / 1.57"                |

### Optional F-Theta Focal Lens Upgrades

| Lens Size              | 330L M85                      |
|------------------------|-------------------------------|
| Marking Field          | 200mm x 200mm / 7.87" x 7.87" |
| Max Part Height        | 300mm / 11.8"                 |
| 3D Dynamic Focus Range | 40mm / 1.57"                  |

# Zetalase™ XL 3D



## ZXL 3D Models

| Model               | Part #    |
|---------------------|-----------|
| Zetalase XL 3D 20W  | ZXL20 3D  |
| Zetalase XL 3D 50W  | ZXL50 3D  |
| Zetalase XL 3D 100W | ZXL100 3D |

## Lens Options

| Item               | Part #           |
|--------------------|------------------|
| 330mm Lens Upgrade | 330 Lens Upgrade |
| 330mm Lens Add-On  | 330 Lens Add-On  |

## Accessories

| Item                 | Part #        |
|----------------------|---------------|
| Gantry Linear Y Axis | ZXLYA         |
| Mobile Casters       | ZXL Casters   |
| Automation Mode      | ZXL Auto Mode |

See fume extraction and rotary products for complete options

## Technical Specifications

| Laser Specifications        | Zetalase™ XL 3D                                     |
|-----------------------------|-----------------------------------------------------|
| Laser Type                  | MOPA Ytterbium Fiber                                |
| Wavelength                  | 1062nm +/- 3nm                                      |
| Wattage Ratings             | 20W    50W    100W                                  |
| Frequency Range             | 1 - 500kHz    1 - 2,000kHz                          |
| Pulse Duration              | 2 Available, 40 or 260ns    49 Available, 6-2,020ns |
| Operative Ambient Air Temp. | 7° - 40° C / 45° - 104° F                           |
| Cooling Type                | Forced Air                                          |
| Red Alignment Laser (RAL)   | Class II Red Diode (635nm)                          |
| Red Focusing Laser (RFL)    | Class II Red Diode (635nm)                          |
| Power Requirement           | Power Sensing 110-240 VAC 50/60 Hz                  |

| System Specifications     | Zetalase™ XL 3D                                                                                       |
|---------------------------|-------------------------------------------------------------------------------------------------------|
| System Dimensions (LxWxH) | 1,321mm x 813mm x 1,880mm / 52" x 32" x 74" (not including monitor arm)                               |
| Weight (approx.)          | 227kg / 500lbs                                                                                        |
| Max Part Size (LxW)       | 609mm x 762mm / 24" x 30" / 1,066mm x 382mm / 42" x 15" (Using Divider Wall Opening)                  |
| Laser Focus Control       | Programmable                                                                                          |
| Door Type                 | Pneumatic Vertical with Patented Safety (60-80 psi required)                                          |
| Work Surface              | T-slot Tooling Plate                                                                                  |
| Standard Software Package | Minilase Pro 3 64-Bit                                                                                 |
| PC                        | Integrated Windows 10 PC w/Monitor, Keyboard, and Mouse                                               |
| External Connectors       | VGA / USB (3) / Diagnostic / Ethernet                                                                 |
| Included Accessories      | Laser Enable Keys (2) / Power Cable / USB Drive with Software Backup / Class 4 Service Override Key   |
| Documentation             | Digital on USB - System, Software, & Safety Manual / Laser Parameter Guide / Software Video Tutorials |
| Warranty                  | 24 Months                                                                                             |

## Focal Lens & 3D Specifications

### Standard F-Theta Focal Lens

| Lens Size              | 254L M85                    |
|------------------------|-----------------------------|
| Marking Field          | 165mm x 165mm / 6.5" x 6.5" |
| Max Part Height        | 384mm / 15.1"               |
| 3D Dynamic Focus Range | 40mm / 1.57"                |

### Optional F-Theta Focal Lens Upgrades

| Lens Size              | 330L M85                      |
|------------------------|-------------------------------|
| Marking Field          | 200mm x 200mm / 7.87" x 7.87" |
| Max Part Height        | 300mm / 11.8"                 |
| 3D Dynamic Focus Range | 40mm / 1.57"                  |

# Zetalase™ XL LFSS 3D



## ZXL LFSS 3D Models

| Model                    | Part #         |
|--------------------------|----------------|
| Zetalase XL LFSS 3D 20W  | ZXL20 LFSS 3D  |
| Zetalase XL LFSS 3D 50W  | ZXL50 LFSS 3D  |
| Zetalase XL LFSS 3D 100W | ZXL100 LFSS 3D |

## Accessories

| Item                 | Part #        |
|----------------------|---------------|
| Gantry Linear Y Axis | ZXLYA         |
| Mobile Casters       | ZXL Casters   |
| Automation Mode      | ZXL Auto Mode |

See fume extraction and rotary products for complete options

## Technical Specifications

| Laser Specifications        | Zetalase™ XL LFSS 3D                                |
|-----------------------------|-----------------------------------------------------|
| Laser Type                  | MOPA Ytterbium Fiber                                |
| Wavelength                  | 1062nm +/- 3nm                                      |
| Wattage Ratings             | 20W    50W    100W                                  |
| Frequency Range             | 1 - 500kHz    1 - 2,000kHz                          |
| Pulse Duration              | 2 Available, 40 or 260ns    49 Available, 6-2,020ns |
| Operative Ambient Air Temp. | 7° - 40° C / 45° - 104° F                           |
| Cooling Type                | Forced Air                                          |
| Red Alignment Laser (RAL)   | Class II Red Diode (635nm)                          |
| Power Requirement           | Power Sensing 110-240 VAC 50/60 Hz                  |

## Marking Field & 3D Specifications

| Marking Field Specifications | Zetalase XL LFSS 3D       |
|------------------------------|---------------------------|
| Marking Field                | 457mm x 457mm / 18" x 18" |
| Max Part Height              | 254mm / 10"               |
| 3D Dynamic Focus Range       | 100mm / 3.93"             |

| System Specifications     | Zetalase™ XL LFSS 3D                                                                                     |
|---------------------------|----------------------------------------------------------------------------------------------------------|
| System Dimensions (LxWxH) | 1,321mm x 813mm x 1,880mm / 52" x 32" x 74"<br>(not including monitor arm)                               |
| Weight (approx.)          | 227kg / 500lbs                                                                                           |
| Max Part Size (LxW)       | 609mm x 762mm / 24" x 30"<br>1,066mm x 382mm / 42" x 15" (Using Divider Wall Opening)                    |
| Laser Focus Control       | Programmable                                                                                             |
| Door Type                 | Pneumatic Vertical with Patented Safety (60-80 psi required)                                             |
| Work Surface              | T-slot Tooling Plate                                                                                     |
| Standard Software Package | Minilase Pro 3 64-Bit                                                                                    |
| PC                        | Integrated Windows 10 PC w/Monitor, Keyboard, and Mouse                                                  |
| External Connectors       | VGA / USB (3) / Diagnostic / Ethernet                                                                    |
| Included Accessories      | Laser Enable Keys (2) / Power Cable / USB Drive with Software Backup<br>/ Class 4 Service Override Key   |
| Documentation             | Digital on USB - System, Software, & Safety Manual / Laser Parameter<br>Guide / Software Video Tutorials |
| Warranty                  | 24 Months                                                                                                |

# EMS400 XYZ



## EMS400 Models

| Model       | Part #     |
|-------------|------------|
| EMS400 20W  | EMS400 20  |
| EMS400 60W  | EMS400 60  |
| EMS400 100W | EMS400 100 |

## Lens Options

| Item               | Part #           |
|--------------------|------------------|
| 254mm Lens Upgrade | 254 Lens Upgrade |
| 254mm Lens Add-On  | 254 Lens Add-On  |
| 330mm Lens Upgrade | 330 Lens Upgrade |
| 330mm Lens Add-On  | 330 Lens Add-On  |
| 420mm Lens Upgrade | 420 Lens Upgrade |
| 420mm Lens Add-On  | 420 Lens Add-On  |

## Accessories

| Item                         | Part #     |
|------------------------------|------------|
| Footswitch for Start Marking | Footswitch |

See fume extraction and rotary products for complete options

## Technical Specifications

| Laser Specifications        | EMS400                                           |
|-----------------------------|--------------------------------------------------|
| Laser Type                  | MOPA Ytterbium Fiber                             |
| Wavelength                  | 1062nm +/- 3nm                                   |
| Wattage Ratings             | 20W      60W      100W                           |
| Frequency Range             | 1 - 4,000kHz, CW Mode      1 - 4,000kHz, CW Mode |
| Pulse Duration              | 16 Available, 2-350ns      16 Available, 2-500ns |
| Operative Ambient Air Temp. | 7° - 40° C / 45° - 104° F                        |
| Cooling Type                | Forced Air                                       |
| Red Alignment Laser (RAL)   | Class II Red Diode (635nm)                       |
| Red Focusing Laser (RFL)    | Class II Red Diode (635nm)                       |
| Power Requirement           | Power Sensing 110-240 VAC 50/60 Hz               |

| System Specifications     | EMS400                                                                                                   |
|---------------------------|----------------------------------------------------------------------------------------------------------|
| System Dimensions (LxWxH) | 1,672mm x 1,504mm x 2,235mm / 66" x 59" x 88"<br>(not including monitor arm)                             |
| Weight (approx.)          | 817kg / 1,800lbs                                                                                         |
| Max Part Size (LxW)       | 610m x 610mm / 24" x 24"                                                                                 |
| Laser Focus Control       | Programmable                                                                                             |
| Door Type                 | Pneumatic Vertical with Patented Safety (60-80 psi required)                                             |
| XY Stage Work Surface     | Custom Tooling Plate with Tapped Holes (Imperial or Metric Available)                                    |
| Standard Software Package | Minilase Pro 3 64-Bit                                                                                    |
| PC                        | Integrated Windows 10 PC w/Monitor, Keyboard, and Mouse                                                  |
| External Connectors       | VGA / USB (3) / Diagnostic / Ethernet                                                                    |
| Included Accessories      | Laser Enable Keys (2) / Power Cable / USB Drive with Software Backup<br>/ Class 4 Service Override Key   |
| Documentation             | Digital on USB - System, Software, & Safety Manual / Laser Parameter<br>Guide / Software Video Tutorials |
| Warranty                  | 24 Months                                                                                                |

## XY Field & Focal Lens Specifications

### XY Stage

| XY Stage      | EMS400    |
|---------------|-----------|
| Marking Field | 24" x 24" |

### Standard F-Theta Focal Lens

| Lens Size       | 163L M85                      |
|-----------------|-------------------------------|
| Marking Field   | 100mm x 100mm / 3.93" x 3.93" |
| Max Part Height | 454mm / 17.8"                 |

### Optional F-Theta Focal Lens Upgrades

| Lens Size       | 254L M85                    |
|-----------------|-----------------------------|
| Marking Field   | 165mm x 165mm / 6.5" x 6.5" |
| Max Part Height | 343mm / 13.5"               |

| Lens Size       | 330L M85                      |
|-----------------|-------------------------------|
| Marking Field   | 200mm x 200mm / 7.87" x 7.87" |
| Max Part Height | 259mm / 10"                   |

| Lens Size                 | 420L M85                      |
|---------------------------|-------------------------------|
| Lens Size / Marking Field | 260mm x 260mm / 10.2" x 10.2" |
| Max Part Height           | 183mm / 7.2"                  |

# EMS400 XYZ 3D



## EMS400 3D Models

|  | Model          | Part #        |
|--|----------------|---------------|
|  | EMS400 3D 20W  | EMS400 3D 20  |
|  | EMS400 3D 50W  | EMS400 3D 50  |
|  | EMS400 3D 100W | EMS400 3D 100 |

## Lens Options

|  | Item               | Part #          |
|--|--------------------|-----------------|
|  | 330mm Lens Upgrade | Lens 330mm 9283 |
|  | 330mm Lens Add-On  | 660330          |

## Accessories

|  | Item                         | Part #     |
|--|------------------------------|------------|
|  | Footswitch for Start Marking | Footswitch |

See fume extraction and rotary products for complete options

## Technical Specifications

| Laser Specifications        | EMS400 3D                                              |
|-----------------------------|--------------------------------------------------------|
| Laser Type                  | MOPA Ytterbium Fiber                                   |
| Wavelength                  | 1062nm +/- 3nm                                         |
| Wattage Ratings             | 20W      50W      100W                                 |
| Frequency Range             | 1 - 500kHz      1 - 2,000kHz                           |
| Pulse Duration              | 2 Available, 40ns & 260ns      49 Available, 6-2,020ns |
| Operative Ambient Air Temp. | 7° - 40° C / 45° - 104° F                              |
| Cooling Type                | Forced Air                                             |
| Red Alignment Laser (RAL)   | Class II Red Diode (635nm)                             |
| Red Focusing Laser (RFL)    | Class II Red Diode (635nm)                             |
| Power Requirement           | Power Sensing 110-240 VAC 50/60 Hz                     |

| System Specifications     | EMS400 3D                                                                                             |
|---------------------------|-------------------------------------------------------------------------------------------------------|
| System Dimensions (LxWxH) | 1,672mm x 1,504mm x 2,235mm / 66" x 59" x 88"<br>(not including monitor arm)                          |
| Weight (approx.)          | 817kg / 1,800lbs                                                                                      |
| Max Part Size (LxW)       | 610m x 610mm / 24" x 24"                                                                              |
| Laser Focus Control       | Programmable                                                                                          |
| Door Type                 | Pneumatic Vertical with Patented Safety (60-80 psi required)                                          |
| XY Stage Work Surface     | Custom Tooling Plate with Tapped Holes (Imperial or Metric Available)                                 |
| Standard Software Package | Minilase Pro 3 64-Bit                                                                                 |
| PC                        | Integrated Windows 10 PC w/Monitor, Keyboard, and Mouse                                               |
| External Connectors       | VGA / USB (3) / Diagnostic / Ethernet                                                                 |
| Included Accessories      | Laser Enable Keys (2) / Power Cable / USB Drive with Software Backup / Class 4 Service Override Key   |
| Documentation             | Digital on USB - System, Software, & Safety Manual / Laser Parameter Guide / Software Video Tutorials |
| Warranty                  | 24 Months                                                                                             |

## XY Field, 3D, & Focal Lens Specifications

### XY Stage

| XY Stage      | EMS400 3D |
|---------------|-----------|
| Marking Field | 24" x 24" |

### Standard F-Theta Focal Lens

| Lens Size              | 254L M85                    |
|------------------------|-----------------------------|
| Marking Field          | 165mm x 165mm / 6.5" x 6.5" |
| Max Part Height        | 343mm / 13.5"               |
| 3D Dynamic Focus Range | 40mm / 1.57"                |

### Optional F-Theta Focal Lens Upgrades

| Lens Size              | 330L M85                      |
|------------------------|-------------------------------|
| Marking Field          | 200mm x 200mm / 7.87" x 7.87" |
| Max Part Height        | 259mm / 10"                   |
| 3D Dynamic Focus Range | 40mm / 1.57"                  |

# ATLAS™ XYZ



## ATLAS Models

|  | Model      | Part #    |
|--|------------|-----------|
|  | ATLAS 20W  | ATLAS 20  |
|  | ATLAS 60W  | ATLAS 60  |
|  | ATLAS 100W | ATLAS 100 |

## Lens Options

|  | Item               | Part #           | Distributor Price |
|--|--------------------|------------------|-------------------|
|  | 254mm Lens Upgrade | 254 Lens Upgrade |                   |
|  | 254mm Lens Add-On  | 254 Lens Add-On  |                   |
|  | 330mm Lens Upgrade | 330 Lens Upgrade |                   |
|  | 330mm Lens Add-On  | 330 Lens Add-On  |                   |
|  | 420mm Lens Upgrade | 420 Lens Upgrade |                   |
|  | 420mm Lens Add-On  | 420 Lens Add-On  |                   |

## Accessories

|  | Item                         | Part #     |
|--|------------------------------|------------|
|  | Footswitch for Start Marking | Footswitch |

See fume extraction and rotary products for complete options

## Technical Specifications

| Laser Specifications        | ATLAS                                            |
|-----------------------------|--------------------------------------------------|
| Laser Type                  | MOPA Ytterbium Fiber                             |
| Wavelength                  | 1062nm +/- 3nm                                   |
| Wattage Ratings             | 20W      60W      100W                           |
| Frequency Range             | 1 - 4,000kHz, CW Mode      1 - 4,000kHz, CW Mode |
| Pulse Duration              | 16 Available, 2-350ns      16 Available, 2-500ns |
| Operative Ambient Air Temp. | 7° - 40° C / 45° - 104° F                        |
| Cooling Type                | Forced Air                                       |
| Red Alignment Laser (RAL)   | Class II Red Diode (635nm)                       |
| Red Focusing Laser (RFL)    | Class II Red Diode (635nm)                       |
| Power Requirement           | Power Sensing 110-240 VAC 50/60 Hz               |

| System Specifications     | ATLAS                                                                                                 |
|---------------------------|-------------------------------------------------------------------------------------------------------|
| System Dimensions (LxWxH) | 1,449mm x 1,975mm x 2,334mm / 57" x 77.8" x 92"<br>(not including stack light)                        |
| Weight (approx.)          | 1,134kg / 2,500lbs                                                                                    |
| Max Part Size (LxW)       | 610m x 1,219mm / 24" x 48"                                                                            |
| Laser Focus Control       | Programmable                                                                                          |
| Door Type                 | Pneumatic Vertical with Patented Safety (60-80 psi required)                                          |
| Work Surface              | Breadboard Tooling Plate with Tapped Holes                                                            |
| Standard Software Package | Minilase Pro 3 64-Bit                                                                                 |
| PC                        | Integrated Windows 10 PC w/Monitor, Keyboard, and Mouse                                               |
| External Connectors       | USB / Diagnostic / Ethernet                                                                           |
| Included Accessories      | Laser Enable Keys (2) / Power Cable / USB Drive with Software Backup                                  |
| Documentation             | Digital on USB - System, Software, & Safety Manual / Laser Parameter Guide / Software Video Tutorials |
| Warranty                  | 24 Months                                                                                             |

## XY Field & Focal Lens Specifications

### XY Gantry/Stage

|                     | XY | ATLAS     |
|---------------------|----|-----------|
| Total Marking Field |    | 24" x 48" |

### Standard F-Theta Focal Lens

| Lens Size       | 163L M85                      |
|-----------------|-------------------------------|
| Marking Field   | 100mm x 100mm / 3.93" x 3.93" |
| Max Part Height | 339mm / 13.375"               |

### Optional F-Theta Focal Lens Upgrades

| Lens Size       | 254L M85                    |
|-----------------|-----------------------------|
| Marking Field   | 165mm x 165mm / 6.5" x 6.5" |
| Max Part Height | 228mm / 8.9"                |

| Lens Size       | 330L M85                      |
|-----------------|-------------------------------|
| Marking Field   | 200mm x 200mm / 7.87" x 7.87" |
| Max Part Height | 144mm / 5.66"                 |

| Lens Size                 | 420L M85                      |
|---------------------------|-------------------------------|
| Lens Size / Marking Field | 260mm x 260mm / 10.2" x 10.2" |
| Max Part Height           | 68mm / 2.7"                   |

# ATLAS™ XYZ 3D



## ATLAS 3D Models

| Model         | Part #      |
|---------------|-------------|
| ATLAS 3D 20W  | ATLAS20 3D  |
| ATLAS 3D 50W  | ATLAS50 3D  |
| ATLAS 3D 100W | ATLAS100 3D |

## Lens Options

| Item               | Part #           |
|--------------------|------------------|
| 330mm Lens Upgrade | 330 Lens Upgrade |
| 330mm Lens Add-On  | 330 Lens Add-On  |

## Accessories

| Item                         | Part #     |
|------------------------------|------------|
| Footswitch for Start Marking | Footswitch |

See fume extraction and rotary products for complete options

## Technical Specifications

| Laser Specifications        | ATLAS                                               |
|-----------------------------|-----------------------------------------------------|
| Laser Type                  | MOPA Ytterbium Fiber                                |
| Wavelength                  | 1062nm +/- 3nm                                      |
| Wattage Ratings             | 20W    50W    100W                                  |
| Frequency Range             | 1 - 500kHz    1 - 2,000kHz                          |
| Pulse Duration              | 2 Available, 40 or 260ns    49 Available, 6-2,020ns |
| Operative Ambient Air Temp. | 7° - 40° C / 45° - 104° F                           |
| Cooling Type                | Forced Air                                          |
| Red Alignment Laser (RAL)   | Class II Red Diode (635nm)                          |
| Red Focusing Laser (RFL)    | Class II Red Diode (635nm)                          |
| Power Requirement           | Power Sensing 110-240 VAC 50/60 Hz                  |

| System Specifications     | ATLAS                                                                                                 |
|---------------------------|-------------------------------------------------------------------------------------------------------|
| System Dimensions (LxWxH) | 1,449mm x 1,975mm x 2,334mm / 57" x 77.8" x 92" (not including stack light)                           |
| Weight (approx.)          | 1,134kg / 2,500lbs                                                                                    |
| Max Part Size (LxW)       | 610mm x 1,219mm / 24" x 48"                                                                           |
| Laser Focus Control       | Programmable                                                                                          |
| Door Type                 | Pneumatic Vertical with Patented Safety (60-80 psi required)                                          |
| Work Surface              | Breadboard Tooling Plate with Tapped Holes                                                            |
| Standard Software Package | Minilase Pro 3 64-Bit                                                                                 |
| PC                        | Integrated Windows 10 PC w/Monitor, Keyboard, and Mouse                                               |
| External Connectors       | USB / Diagnostic / Ethernet                                                                           |
| Included Accessories      | Laser Enable Keys (2) / Power Cable / USB Drive with Software Backup                                  |
| Documentation             | Digital on USB - System, Software, & Safety Manual / Laser Parameter Guide / Software Video Tutorials |
| Warranty                  | 24 Months                                                                                             |

## XY Field, 3D, & Focal Lens Specifications

### XY Gantry/Stage

| XY       | ATLAS     |
|----------|-----------|
| XY Field | 24" x 48" |

### Standard F-Theta Focal Lens

| Lens Size              | 254L M85                    |
|------------------------|-----------------------------|
| Marking Field          | 165mm x 165mm / 6.5" x 6.5" |
| Max Part Height        | 228mm / 8.9"                |
| 3D Dynamic Focus Range | 40mm / 1.57"                |

### Optional F-Theta Focal Lens Upgrades

| Lens Size              | 330L M85                      |
|------------------------|-------------------------------|
| Marking Field          | 200mm x 200mm / 7.87" x 7.87" |
| Working Distance       | 144mm / 5.66"                 |
| 3D Dynamic Focus Range | 40mm / 1.57"                  |

# ATLAS™ XYZ LFSS 3D



## ATLAS LFSS 3D Models

| Model              | Part #           |
|--------------------|------------------|
| ATLAS LFSS 3D 20W  | ATLAS30 LFSS 3D  |
| ATLAS LFSS 3D 50W  | ATLAS50 LFSS 3D  |
| ATLAS LFSS 3D 100W | ATLAS100 LFSS 3D |

## Accessories

| Item                         | Part #     |
|------------------------------|------------|
| Footswitch for Start Marking | Footswitch |

See fume extraction and rotary products for complete options

## Technical Specifications

| Laser Specifications        | ATLAS LFSS 3D                      |     |                         |
|-----------------------------|------------------------------------|-----|-------------------------|
| Laser Type                  | MOPA Ytterbium Fiber               |     |                         |
| Wavelength                  | 1062nm +/- 3nm                     |     |                         |
| Wattage Ratings             | 20W                                | 50W | 100W                    |
| Frequency Range             | 1 - 500kHz                         |     | 1 - 2,000kHz            |
| Pulse Duration              | 2 Available, 40 or 260ns           |     | 49 Available, 6-2,020ns |
| Operative Ambient Air Temp. | 7° - 40° C / 45° - 104° F          |     |                         |
| Cooling Type                | Forced Air                         |     |                         |
| Red Alignment Laser (RAL)   | Class II Red Diode (635nm)         |     |                         |
| Power Requirement           | Power Sensing 110-240 VAC 50/60 Hz |     |                         |

## XY Field & 3D Specifications

### XY Gantry/Stage

| XY Stage      | ATLAS     |
|---------------|-----------|
| Marking Field | 24" x 48" |

| Marking Field Specifications | ATLAS LFSS 3D             |
|------------------------------|---------------------------|
| Marking Field                | 457mm x 457mm / 18" x 18" |
| Max Part Height              | Consult TE                |
| 3D Dynamic Focus Range       | 100mm / 3.93"             |

| System Specifications     | ATLAS LFSS 3D                                                                                         |
|---------------------------|-------------------------------------------------------------------------------------------------------|
| System Dimensions (LxWxH) | 1,449mm x 1,975mm x 2,334mm / 57" x 77.8" x 92"<br>(not including stack light)                        |
| Weight (approx.)          | 1,134kg / 2,500lbs                                                                                    |
| Max Part Size (LxW)       | 610m x 1,219mm / 24" x 48"                                                                            |
| Laser Focus Control       | Programmable                                                                                          |
| Door Type                 | Pneumatic Vertical with Patented Safety (60-80 psi required)                                          |
| Work Surface              | Breadboard Tooling Plate with Tapped Holes                                                            |
| Standard Software Package | Minilase Pro 3 64-Bit                                                                                 |
| PC                        | Integrated Windows 10 PC w/Monitor, Keyboard, and Mouse                                               |
| External Connectors       | USB / Diagnostic / Ethernet                                                                           |
| Included Accessories      | Laser Enable Keys (2) / Power Cable / USB Drive with Software Backup                                  |
| Documentation             | Digital on USB - System, Software, & Safety Manual / Laser Parameter Guide / Software Video Tutorials |
| Warranty                  | 24 Months                                                                                             |

# Zetalase™ Duo (Dial Index)



## Zetalase Duo Models

| Model             | Part #  |
|-------------------|---------|
| Zetalase Duo 20W  | DISE20  |
| Zetalase Duo 60W  | DISE60  |
| Zetalase Duo 100W | DISE100 |

## Lens Options

| Item               | Part #           |
|--------------------|------------------|
| 254mm Lens Upgrade | 254 Lens Upgrade |
| 254mm Lens Add-On  | 254 Lens Add-On  |
| 330mm Lens Upgrade | 330 Lens Upgrade |
| 330mm Lens Add-On  | 330 Lens Add-On  |
| 420mm Lens Upgrade | 420 Lens Upgrade |
| 420mm Lens Add-On  | 420 Lens Add-On  |

## Accessories

| Item                                                         | Part # |
|--------------------------------------------------------------|--------|
| See fume extraction and rotary products for complete options |        |

## Technical Specifications

| Laser Specifications        | Zetalase Duo                                     |
|-----------------------------|--------------------------------------------------|
| Laser Type                  | MOPA Ytterbium Fiber                             |
| Wavelength                  | 1062nm +/- 3nm                                   |
| Wattage Ratings             | 20W      60W      100W                           |
| Frequency Range             | 1 - 4,000kHz, CW Mode      1 - 4,000kHz, CW Mode |
| Pulse Duration              | 16 Available, 2-350ns      16 Available, 2-500ns |
| Operative Ambient Air Temp. | 7° - 40° C / 45° - 104° F                        |
| Cooling Type                | Forced Air                                       |
| Red Alignment Laser (RAL)   | Class II Red Diode (635nm)                       |
| Red Focusing Laser (RFL)    | Class II Red Diode (635nm)                       |
| Power Requirement           | Power Sensing 110-240 VAC 50/60 Hz               |

| System Specifications     | Zetalase Duo                                                                                          |
|---------------------------|-------------------------------------------------------------------------------------------------------|
| System Dimensions (LxWxH) | 1,260mm x 880mm x 1,751mm / 49.6" x 34.6" x 69"<br>(not including monitor arm)                        |
| Weight (approx.)          | 362kg / 800lbs                                                                                        |
| Max Part Size (LxW)       | 240mm x 240mm / 9.45" x 9.45"                                                                         |
| Laser Focus Control       | Programmable                                                                                          |
| Door Type                 | Front Rotary Indexing Table / Side Service Access Door                                                |
| Work Surface              | Aluminum Index Plate with Mounting Hole Pattern                                                       |
| Standard Software Package | Minilase Pro 3 64-Bit                                                                                 |
| PC                        | Integrated Windows 10 PC w/Monitor, Keyboard, and Mouse                                               |
| External Connectors       | USB / Diagnostic / Ethernet                                                                           |
| Included Accessories      | Laser Enable Keys (2) / Power Cable / USB Drive with Software Backup                                  |
| Documentation             | Digital on USB - System, Software, & Safety Manual / Laser Parameter Guide / Software Video Tutorials |
| Warranty                  | 24 Months                                                                                             |

## Focal Lens Specifications

### Standard F-Theta Focal Lens

| Lens Size       | 163L M85                                                                              |
|-----------------|---------------------------------------------------------------------------------------|
| Marking Field   | 100mm x 100mm / 3.93" x 3.93"                                                         |
| Max Part Height | 227mm / 9" (Limited by index divider wall, fixture must raise component 37mm / 1.45") |

### Optional F-Theta Focal Lens Upgrades

| Lens Size       | 254L M85                                   |
|-----------------|--------------------------------------------|
| Marking Field   | 165mm x 165mm / 6.5" x 6.5"                |
| Max Part Height | 227mm / 9" (Limited by index divider wall) |

| Lens Size       | 330L M85                      |
|-----------------|-------------------------------|
| Marking Field   | 200mm x 200mm / 7.87" x 7.87" |
| Max Part Height | 183mm / 7.2"                  |

| Lens Size                 | 420L M85                      |
|---------------------------|-------------------------------|
| Lens Size / Marking Field | 260mm x 260mm / 10.2" x 10.2" |
| Max Part Height           | 78mm / 3"                     |

# Zetalase™ Duo 3D (Dial Index)



## Zetalase Duo 3D Models

|  | Model                | Part #     |
|--|----------------------|------------|
|  | Zetalase Duo 3D 20W  | DISE20 3D  |
|  | Zetalase Duo 3D 50W  | DISE50 3D  |
|  | Zetalase Duo 3D 100W | DISE100 3D |

## Lens Options

|  | Item               | Part #           |
|--|--------------------|------------------|
|  | 330mm Lens Upgrade | 330 Lens Upgrade |
|  | 330mm Lens Add-On  | 330 Lens Add-On  |

## Accessories

|                                                              | Item | Part # |
|--------------------------------------------------------------|------|--------|
| See fume extraction and rotary products for complete options |      |        |

## Technical Specifications

| Laser Specifications        | Zetalase Duo 3D                    |     |                         |
|-----------------------------|------------------------------------|-----|-------------------------|
| Laser Type                  | MOPA Ytterbium Fiber               |     |                         |
| Wavelength                  | 1062nm +/- 3nm                     |     |                         |
| Wattage Ratings             | 20W                                | 50W | 100W                    |
| Frequency Range             | 1 - 500kHz                         |     | 1 - 2,000kHz            |
| Pulse Duration              | 2 Available, 40 or 260ns           |     | 49 Available, 6-2,020ns |
| Operative Ambient Air Temp. | 7° - 40° C / 45° - 104° F          |     |                         |
| Cooling Type                | Forced Air                         |     |                         |
| Red Alignment Laser (RAL)   | Class II Red Diode (635nm)         |     |                         |
| Red Focusing Laser (RFL)    | Class II Red Diode (635nm)         |     |                         |
| Power Requirement           | Power Sensing 110-240 VAC 50/60 Hz |     |                         |

| System Specifications     | Zetalase Duo 3D                                                                                       |
|---------------------------|-------------------------------------------------------------------------------------------------------|
| System Dimensions (LxWxH) | 1,260mm x 880mm x 1,751mm / 49.6" x 34.6" x 69" (not including monitor arm)                           |
| Weight (approx.)          | 362kg / 800lbs                                                                                        |
| Max Part Size (LxW)       | 240mm x 240mm / 9.45" x 9.45"                                                                         |
| Laser Focus Control       | Programmable                                                                                          |
| Door Type                 | Front Rotary Indexing Table / Side Service Access Door                                                |
| Work Surface              | Aluminum Index Plate with Mounting Hole Pattern                                                       |
| Standard Software Package | Minilase Pro 3 64-Bit                                                                                 |
| PC                        | Integrated Windows 10 PC w/Monitor, Keyboard, and Mouse                                               |
| External Connectors       | USB / Diagnostic / Ethernet                                                                           |
| Included Accessories      | Laser Enable Keys (2) / Power Cable / USB Drive with Software Backup                                  |
| Documentation             | Digital on USB - System, Software, & Safety Manual / Laser Parameter Guide / Software Video Tutorials |
| Warranty                  | 24 Months                                                                                             |

## Focal Lens & 3D Specifications

### Standard F-Theta Focal Lens

| Lens Size              | 254L M85                                                                              |
|------------------------|---------------------------------------------------------------------------------------|
| Marking Field          | 165mm x 165mm / 6.5" x 6.5"                                                           |
| Max Part Height        | 227mm / 9" (Limited by index divider wall, fixture must raise component 37mm / 1.45") |
| 3D Dynamic Focus Range | 40mm / 1.57"                                                                          |

### Optional F-Theta Focal Lens Upgrades

| Lens Size              | 330L M85                      |
|------------------------|-------------------------------|
| Marking Field          | 200mm x 200mm / 7.87" x 7.87" |
| Max Part Height        | 183mm / 7.2"                  |
| 3D Dynamic Focus Range | 40mm / 1.57"                  |

# SCORPION™ LMRC (Standard Variant)

Scorpion LMRC is now available in place of the Scorpion G2 product, which faces extended lead times and increasing costs. As we transition to this product, please ensure you review the application requirements with your sales manager. This version will be shipped with Scriba and TYKMA ElectroX will conduct a runoff test of the customer's existing .elc marking files for compatibility prior to shipment. In addition, this product is only available to existing Scorpion G2 users and is not recommended for sale to new clients until our new motion board, pendant, and Sparq software are ready to ship.



## SCORPION LMRC Models

| Model              | Part #            |
|--------------------|-------------------|
| SCORPION LMRC 20W  | SCORPION LMRC 20  |
| SCORPION LMRC 60W  | SCORPION LMRC 60  |
| SCORPION LMRC 100W | SCORPION LMRC 100 |

## Lens Options

| Item               | Part #           |
|--------------------|------------------|
| 254mm Lens Upgrade | 254 Lens Upgrade |
| 254mm Lens Add-On  | 254 Lens Add-On  |
| 330mm Lens Upgrade | 330 Lens Upgrade |
| 330mm Lens Add-On  | 330 Lens Add-On  |
| 420mm Lens Upgrade | 420 Lens Upgrade |
| 420mm Lens Add-On  | 420 Lens Add-On  |

## Accessories

| Item                 | Part #               |
|----------------------|----------------------|
| Laser Safety Glasses | Laser Safety Glasses |

See fume extraction and rotary products for complete options

## Technical Specifications

| Laser Specifications        | SCORPION LMRC                                    |
|-----------------------------|--------------------------------------------------|
| Laser Type                  | MOPA Ytterbium Fiber                             |
| Wavelength                  | 1062nm +/- 3nm                                   |
| Wattage Ratings             | 20W      60W      100W                           |
| Frequency Range             | 1 - 4,000kHz, CW Mode                            |
| Pulse Duration              | 16 Available, 2-350ns      16 Available, 2-500ns |
| Operative Ambient Air Temp. | 7° - 40° C / 45° - 104° F                        |
| Cooling Type                | Forced Air                                       |
| Red Alignment Laser (RAL)   | Class II Red Diode (635nm)                       |
| Red Focusing Laser (RFL)    | Class II Red Diode (635nm)                       |
| Power Requirement           | Power Sensing 110-240 VAC 50/60 Hz               |

| System Specifications     | SCORPION LMRC                                                                                         |
|---------------------------|-------------------------------------------------------------------------------------------------------|
| Head Dimensions (LxWxH)   | 514mm x 102mm x 134mm / 20.2" x 4" x 5.3"                                                             |
| Rack Dimensions (LxWxH)   | 656mm x 419mm x 142mm / 25.8" x 16.6" x 5.6"                                                          |
| Weight (approx.)          | Head - 6.3kg / 14lbs / Rack - 22.7kg / 50lbs                                                          |
| Standard Software Package | Scriba                                                                                                |
| PC                        | Windows 10 / 11 PC Required for Programming Only                                                      |
| External Connectors       | USB / Diagnostic / Digital IO / Hardware Interlock / Stepper Motor Output (4)                         |
| Included Accessories      | Basic 3 Button Handheld Pendant / Laser Enable Keys (2) / Power & USB Cable / USB Drive with Software |
| Documentation             | Digital on USB - System, Software, & Safety Manual / Laser Parameter Guide                            |
| Warranty                  | 24 Months                                                                                             |

## Focal Lens Specifications

### Standard F-Theta Focal Lens

| Lens Size        | 163L M85                      |
|------------------|-------------------------------|
| Marking Field    | 100mm x 100mm / 3.93" x 3.93" |
| Working Distance | 189mm / 7.44"                 |

### Optional F-Theta Focal Lens Upgrades

| Lens Size        | 254L M85                    |
|------------------|-----------------------------|
| Marking Field    | 165mm x 165mm / 6.5" x 6.5" |
| Working Distance | 297mm / 11.7"               |

| Lens Size        | 330L M85                      |
|------------------|-------------------------------|
| Marking Field    | 200mm x 200mm / 7.87" x 7.87" |
| Working Distance | 389mm / 15.3"                 |

| Lens Size                 | 420L M85                      |
|---------------------------|-------------------------------|
| Lens Size / Marking Field | 260mm x 260mm / 10.2" x 10.2" |
| Working Distance          | 494mm / 19.4"                 |

# SCORPION™ RAPIDE LMRC (SPI EPZ Variant)

Scorpion LMRC is now available in place of the Scorpion G2 product, which faces extended lead times and increasing costs. As we transition to this product, please ensure you review the application requirements with your sales manager. This version will be shipped with Scriba and TYKMA ElectroX will conduct a runoff test of the customer's existing .elc marking files for compatibility prior to shipment. In addition, this product is only available to existing Scorpion G2 users and is not recommended for sale to new clients until our new motion board, pendant, and Sparq software are ready to ship.



## SCORPION RAPIDE LMRC Models

| Model                    | Part #                  |
|--------------------------|-------------------------|
| SCORPION RAPIDE LMRC 20W | SCORPION RAPIDE LMRC 20 |
| SCORPION RAPIDE LMRC 50W | SCORPION RAPIDE LMRC 50 |
| SCORPION RAPIDE LMRC 70W | SCORPION RAPIDE LMRC 70 |

## Lens Options

| Item               | Part #           |
|--------------------|------------------|
| 254mm Lens Upgrade | 254 Lens Upgrade |
| 254mm Lens Add-On  | 254 Lens Add-On  |
| 330mm Lens Upgrade | 330 Lens Upgrade |
| 330mm Lens Add-On  | 330 Lens Add-On  |
| 420mm Lens Upgrade | 420 Lens Upgrade |
| 420mm Lens Add-On  | 420 Lens Add-On  |

## Accessories

| Item                 | Part #               |
|----------------------|----------------------|
| Laser Safety Glasses | Laser Safety Glasses |

See fume extraction and rotary products for complete options

## Technical Specifications

| Laser Specifications        | SCORPION RAPIDE LMRC               |                    |                     |
|-----------------------------|------------------------------------|--------------------|---------------------|
| Laser Type                  | MOPA Ytterbium Fiber               |                    |                     |
| Wavelength                  | 1062nm +/- 3nm                     |                    |                     |
| Wattage Ratings             | 20W                                | 50W                | 100W                |
| Frequency Range             | 1 - 1,000kHz                       |                    |                     |
| Pulse Duration              | 40 Avail., 3-500ns                 | 38 Avail., 6-500ns | 37 Avail., 10-500ns |
| Operative Ambient Air Temp. | 7° - 40° C / 45° - 104° F          |                    |                     |
| Cooling Type                | Forced Air                         |                    |                     |
| Red Alignment Laser (RAL)   | Class II Red Diode (635nm)         |                    |                     |
| Power Requirement           | Power Sensing 110-240 VAC 50/60 Hz |                    |                     |

| System Specifications     | SCORPION RAPIDE LMRC                                                                                  |  |  |
|---------------------------|-------------------------------------------------------------------------------------------------------|--|--|
| Head Dimensions (LxWxH)   | 514mm x 102mm x 134mm / 20.2" x 4" x 5.3"                                                             |  |  |
| Rack Dimensions (LxWxH)   | 656mm x 419mm x 142mm / 25.8" x 16.6" x 5.6"                                                          |  |  |
| Weight (approx.)          | Head - 6.3kg / 14lbs / Rack - 22.7kg / 50lbs                                                          |  |  |
| Standard Software Package | Scriba                                                                                                |  |  |
| PC                        | Windows 10 / 11 PC Required for Programming Only                                                      |  |  |
| External Connectors       | USB / Diagnostic / Digital IO / Hardware Interlock / Stepper Motor Output (4)                         |  |  |
| Included Accessories      | Basic 3 Button Handheld Pendant / Laser Enable Keys (2) / Power & USB Cable / USB Drive with Software |  |  |
| Documentation             | Digital on USB - System, Software, & Safety Manual / Laser Parameter Guide                            |  |  |
| Warranty                  | 24 Months                                                                                             |  |  |

## Focal Lens Specifications

### Standard F-Theta Focal Lens

| Lens Size        | 163L M85                      |
|------------------|-------------------------------|
| Marking Field    | 100mm x 100mm / 3.93" x 3.93" |
| Working Distance | 189mm / 7.44"                 |

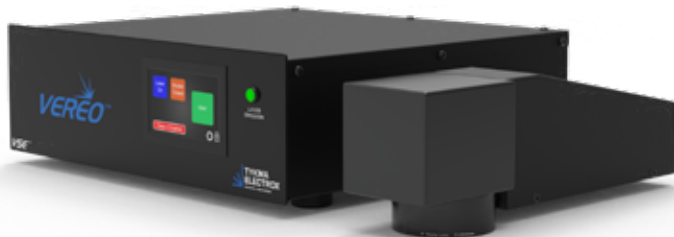
### Optional F-Theta Focal Lens Upgrades

| Lens Size        | 254L M85                    |
|------------------|-----------------------------|
| Marking Field    | 165mm x 165mm / 6.5" x 6.5" |
| Working Distance | 297mm / 11.7"               |

| Lens Size        | 330L M85                      |
|------------------|-------------------------------|
| Marking Field    | 200mm x 200mm / 7.87" x 7.87" |
| Working Distance | 389mm / 15.3"                 |

| Lens Size                 | 420L M85                      |
|---------------------------|-------------------------------|
| Lens Size / Marking Field | 260mm x 260mm / 10.2" x 10.2" |
| Working Distance          | 494mm / 19.4"                 |

# VEREO™



## VEREO Models

| Model      | Part #  |
|------------|---------|
| VEREO 20W  | VSE 20  |
| VEREO 60W  | VSE 60  |
| VEREO 100W | VSE 100 |

## Lens Options

| Item               | Part #           |
|--------------------|------------------|
| 254mm Lens Upgrade | 254 Lens Upgrade |
| 254mm Lens Add-On  | 254 Lens Add-On  |
| 330mm Lens Upgrade | 330 Lens Upgrade |
| 330mm Lens Add-On  | 330 Lens Add-On  |
| 420mm Lens Upgrade | 420 Lens Upgrade |
| 420mm Lens Add-On  | 420 Lens Add-On  |

## Accessories

| Item                 | Part #               |
|----------------------|----------------------|
| Rack Mount Accessory | VSE Rack Mount       |
| Laser Safety Glasses | Laser Safety Glasses |

*See fume extraction and rotary products for complete options*

## Technical Specifications

| Laser Specifications        | VEREO                                            |
|-----------------------------|--------------------------------------------------|
| Laser Type                  | MOPA Ytterbium Fiber                             |
| Wavelength                  | 1062nm +/- 3nm                                   |
| Wattage Ratings             | 20W      60W      100W                           |
| Frequency Range             | 1 - 4,000kHz, CW Mode      1 - 4,000kHz, CW Mode |
| Pulse Duration              | 16 Available, 2-350ns      16 Available, 2-500ns |
| Operative Ambient Air Temp. | 7° - 40° C / 45° - 104° F                        |
| Cooling Type                | Forced Air                                       |
| Red Alignment Laser (RAL)   | Class II Red Diode (635nm)                       |
| Red Focusing Laser (RFL)    | Class II Red Diode (635nm)                       |
| Power Requirement           | Power Sensing 110-240 VAC 50/60 Hz               |

| System Specifications     | VEREO                                                                                                 |
|---------------------------|-------------------------------------------------------------------------------------------------------|
| Head Dimensions (LxWxH)   | 429mm x 97mm x 127mm / 16.9" x 3.8" x 4.9"                                                            |
| Rack Dimensions (LxWxH)   | 483mm x 432mm x 146mm / 19" x 17" x 5.76"<br>(100W Rack Drawing Available Upon Request)               |
| Weight (approx.)          | Head - 4.9kg / 11lbs / Rack - 22.7kg / 50lbs                                                          |
| Standard Software Package | Minilase Pro SE                                                                                       |
| PC                        | Windows 10 / 11 PC Required for Operation                                                             |
| External Connectors       | USB / Diagnostic / Digital IO / Hardware Interlock / Stepper Motor Output (4)                         |
| Included Accessories      | Laser Enable Keys (2) / Power & USB Cable / USB Drive with Software                                   |
| Documentation             | Digital on USB - System, Software, & Safety Manual / Laser Parameter Guide / Software Video Tutorials |
| Warranty                  | 24 Months                                                                                             |

## Focal Lens Specifications

### Standard F-Theta Focal Lens

| Lens Size        | 163L M85                      |
|------------------|-------------------------------|
| Marking Field    | 100mm x 100mm / 3.93" x 3.93" |
| Working Distance | 189mm / 7.44"                 |

### Optional F-Theta Focal Lens Upgrades

| Lens Size        | 254L M85                    |
|------------------|-----------------------------|
| Marking Field    | 165mm x 165mm / 6.5" x 6.5" |
| Working Distance | 297mm / 11.7"               |

| Lens Size        | 330L M85                      |
|------------------|-------------------------------|
| Marking Field    | 200mm x 200mm / 7.87" x 7.87" |
| Working Distance | 389mm / 15.3"                 |

| Lens Size                 | 420L M85                      |
|---------------------------|-------------------------------|
| Lens Size / Marking Field | 260mm x 260mm / 10.2" x 10.2" |
| Working Distance          | 494mm / 19.4"                 |

# VEREO™ Smart Integration Laser



## Technical Specifications

| Laser Specifications        | VEREO                                            |
|-----------------------------|--------------------------------------------------|
| Laser Type                  | MOPA Ytterbium Fiber                             |
| Wavelength                  | 1062nm +/- 3nm                                   |
| Wattage Ratings             | 20W      60W      100W                           |
| Frequency Range             | 1 - 4,000kHz, CW Mode      1 - 4,000kHz, CW Mode |
| Pulse Duration              | 16 Available, 2-350ns      16 Available, 2-500ns |
| Operative Ambient Air Temp. | 7° - 40° C / 45° - 104° F                        |
| Cooling Type                | Forced Air                                       |
| Red Alignment Laser (RAL)   | Class II Red Diode (635nm)                       |
| Red Focusing Laser (RFL)    | Class II Red Diode (635nm)                       |
| Power Requirement           | Power Sensing 110-240 VAC 50/60 Hz               |

| System Specifications     | VEREO Smart                                                                                           |
|---------------------------|-------------------------------------------------------------------------------------------------------|
| Head Dimensions (LxWxH)   | 429mm x 97mm x 127mm / 16.9" x 3.8" x 4.9"                                                            |
| Rack Dimensions (LxWxH)   | 483mm x 432mm x 146mm / 19" x 17" x 5.76"<br>(100W Rack Drawing Available Upon Request)               |
| Weight (approx.)          | Head - 4.9kg / 11lbs / Rack - 22.7kg / 50lbs                                                          |
| Standard Software Package | Minilase Pro SE                                                                                       |
| PC                        | Required for Programming Only, Onboard Controller for Standalone Operation Included                   |
| External Connectors       | USB / Diagnostic / Digital IO / Hardware Interlock / Stepper Motor Output (4)                         |
| Included Accessories      | Laser Enable Keys (2) / Power & USB Cable / USB Drive with Software                                   |
| Documentation             | Digital on USB - System, Software, & Safety Manual / Laser Parameter Guide / Software Video Tutorials |
| Warranty                  | 24 Months                                                                                             |

## VEREO Smart Models

| Model            | Part # |
|------------------|--------|
| VEREO Smart 20W  | VSM 20 |
| VEREO Smart 60W  | VSM 60 |
| VEREO Smart 100W | VSM100 |

## Lens Options

| Item               | Part #           |
|--------------------|------------------|
| 254mm Lens Upgrade | 254 Lens Upgrade |
| 254mm Lens Add-On  | 254 Lens Add-On  |
| 330mm Lens Upgrade | 330 Lens Upgrade |
| 330mm Lens Add-On  | 330 Lens Add-On  |
| 420mm Lens Upgrade | 420 Lens Upgrade |
| 420mm Lens Add-On  | 420 Lens Add-On  |

## Accessories

| Item                 | Part #               |
|----------------------|----------------------|
| Rack Mount Accessory | VSE Rack Mount       |
| Laser Safety Glasses | Laser Safety Glasses |

*See fume extraction and rotary products for complete options*

## Focal Lens Specifications

### Standard F-Theta Focal Lens

| Lens Size        | 163L M85                      |
|------------------|-------------------------------|
| Marking Field    | 100mm x 100mm / 3.93" x 3.93" |
| Working Distance | 189mm / 7.44"                 |

### Optional F-Theta Focal Lens Upgrades

| Lens Size        | 254L M85                    |
|------------------|-----------------------------|
| Marking Field    | 165mm x 165mm / 6.5" x 6.5" |
| Working Distance | 297mm / 11.7"               |

| Lens Size        | 330L M85                      |
|------------------|-------------------------------|
| Marking Field    | 200mm x 200mm / 7.87" x 7.87" |
| Working Distance | 389mm / 15.3"                 |

| Lens Size                 | 420L M85                      |
|---------------------------|-------------------------------|
| Lens Size / Marking Field | 260mm x 260mm / 10.2" x 10.2" |
| Working Distance          | 494mm / 19.4"                 |

# VEREO™ 3D



## VEREO 3D Models

| Model         | Part #     |
|---------------|------------|
| VEREO 3D 20W  | VSE 3D 20  |
| VEREO 3D 50W  | VSE 3D 50  |
| VEREO 3D 100W | VSE 3D 100 |

## Lens Options

| Item               | Part #           |
|--------------------|------------------|
| 330mm Lens Upgrade | 330 Lens Upgrade |
| 330mm Lens Add-On  | 330 Lens Add-On  |

## Accessories

| Item                                                         | Part #               |
|--------------------------------------------------------------|----------------------|
| Rack Mount Accessory                                         | VSE Rack Mount       |
| Laser Safety Glasses                                         | Laser Safety Glasses |
| See fume extraction and rotary products for complete options |                      |

## Technical Specifications

| Laser Specifications        | VEREO 3D                           |     |                         |
|-----------------------------|------------------------------------|-----|-------------------------|
| Laser Type                  | Ytterbium Fiber                    |     |                         |
| Wavelength                  | 1062nm +/- 3nm                     |     |                         |
| Wattage Ratings             | 20W                                | 50W | 100W                    |
| Frequency Range             | 1 - 500kHz                         |     | 1 - 2,000kHz            |
| Pulse Duration              | 2 Available, 40 or 260ns           |     | 49 Available, 6-2,020ns |
| Operative Ambient Air Temp. | 7° - 40° C / 45° - 104° F          |     |                         |
| Cooling Type                | Forced Air                         |     |                         |
| Red Alignment Laser (RAL)   | Class II Red Diode (635nm)         |     |                         |
| Red Focusing Laser (RFL)    | Class II Red Diode (635nm)         |     |                         |
| Power Requirement           | Power Sensing 110-240 VAC 50/60 Hz |     |                         |

| System Specifications     | VEREO 3D                                                                                              |
|---------------------------|-------------------------------------------------------------------------------------------------------|
| Head Dimensions (LxWxH)   | 617mm x 997mm x 128.5mm / 24.3" x 3.9" x 5"                                                           |
| Rack Dimensions (LxWxH)   | 483mm x 432mm x 146mm / 19" x 17" x 5.76"<br>(100W Rack Drawing Available Upon Request)               |
| Weight (approx.)          | Head - 4.9kg / 11lbs / Rack - 22.7kg / 50lbs                                                          |
| Standard Software Package | Minilase Pro 3 64-Bit                                                                                 |
| PC                        | Windows 10 / 11 PC Required for Operation                                                             |
| External Connectors       | USB / Diagnostic / Digital IO / Hardware Interlock / Stepper Motor Output (4)                         |
| Included Accessories      | Laser Enable Keys (2) / Power & USB Cable / USB Drive with Software                                   |
| Documentation             | Digital on USB - System, Software, & Safety Manual / Laser Parameter Guide / Software Video Tutorials |
| Warranty                  | 24 Months                                                                                             |

## Focal Lens & 3D Specifications

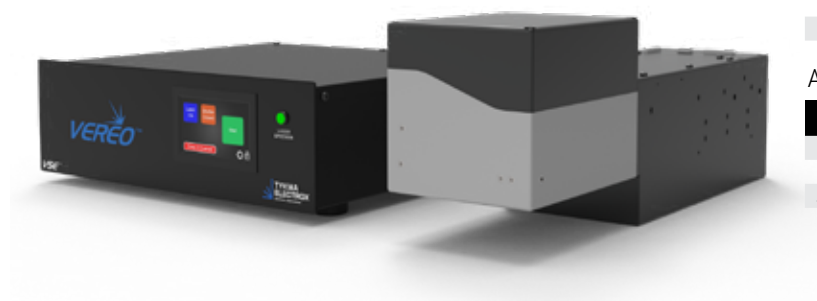
### Standard F-Theta Focal Lens

| Lens Size              | 254L M85                    |
|------------------------|-----------------------------|
| Marking Field          | 165mm x 165mm / 6.5" x 6.5" |
| Working Distance       | 297mm / 11.7"               |
| 3D Dynamic Focus Range | 40mm / 1.57"                |

### Optional F-Theta Focal Lens Upgrades

| Lens Size              | 330L M85                      |
|------------------------|-------------------------------|
| Marking Field          | 200mm x 200mm / 7.87" x 7.87" |
| Working Distance       | 389mm / 15.3"                 |
| 3D Dynamic Focus Range | 40mm / 1.57"                  |

# VEREO™ LFSS 3D



## VEREO LFSS 3D Models

| Model              | Part #          |
|--------------------|-----------------|
| VEREO LFSS 3D 20W  | VSE LFSS 3D 20  |
| VEREO LFSS 3D 50W  | VSE LFSS 3D 50  |
| VEREO LFSS 3D 100W | VSE LFSS 3D 100 |

## Accessories

| Item                 | Part #               |
|----------------------|----------------------|
| Rack Mount Accessory | VSE Rack Mount       |
| Laser Safety Glasses | Laser Safety Glasses |

See fume extraction and rotary products for complete options

## Technical Specifications

| Laser Specifications        | VEREO LFSS 3D                      |     |                         |
|-----------------------------|------------------------------------|-----|-------------------------|
| Laser Type                  | Ytterbium Fiber                    |     |                         |
| Wavelength                  | 1062nm +/- 3nm                     |     |                         |
| Wattage Ratings             | 20W                                | 50W | 100W                    |
| Frequency Range             | 1 - 500kHz                         |     | 1 - 2,000kHz            |
| Pulse Duration              | 2 Available, 40 or 260ns           |     | 49 Available, 6-2,020ns |
| Operative Ambient Air Temp. | 7° - 40° C / 45° - 104° F          |     |                         |
| Cooling Type                | Forced Air                         |     |                         |
| Red Alignment Laser (RAL)   | Class II Red Diode (635nm)         |     |                         |
| Red Focusing Laser (RFL)    | Class II Red Diode (635nm)         |     |                         |
| Power Requirement           | Power Sensing 110-240 VAC 50/60 Hz |     |                         |

## Marking Field & 3D Specifications

| Marking Field Specifications | Vereo LFSS 3D                                                            |
|------------------------------|--------------------------------------------------------------------------|
| Marking Field                | Up to 610mm x 610mm / 24" x 24"<br>Dependent on Application Requirements |
| 3D Dynamic Focus Range       | 100mm / 3.93"                                                            |

| System Specifications     | VEREO LFSS 3D                                                                                         |
|---------------------------|-------------------------------------------------------------------------------------------------------|
| Head Dimensions (LxWxH)   | Available Upon Request                                                                                |
| Rack Dimensions (LxWxH)   | 483mm x 432mm x 146mm / 19" x 17" x 5.76"<br>(100W Rack Drawing Available Upon Request)               |
| Weight (approx.)          | Head - Upon Request / Rack - 22.7kg / 50lbs                                                           |
| Standard Software Package | Minilase Pro 3 64-Bit                                                                                 |
| PC                        | Windows 10 / 11 PC Required for Operation                                                             |
| External Connectors       | USB / Diagnostic / Digital IO / Hardware Interlock / Stepper Motor Output (4)                         |
| Included Accessories      | Laser Enable Keys (2) / Power & USB Cable / USB Drive with Software                                   |
| Documentation             | Digital on USB - System, Software, & Safety Manual / Laser Parameter Guide / Software Video Tutorials |
| Warranty                  | 24 Months                                                                                             |

# VEREO™ UV



## VEREO UV Models

| Model        | Part #    |
|--------------|-----------|
| VEREO UV 10W | VSE UV 10 |

## Lens Options

| Item                  | Part #         |
|-----------------------|----------------|
| 254mm UV Lens Upgrade | 254 UV Upgrade |
| 254mm UV Lens Add-On  | 254 UV Add-On  |
| 330mm UV Lens Upgrade | 330 UV Upgrade |
| 330mm UV Lens Add-On  | 330 UV Add-On  |
| 420mm UV Lens Upgrade | 420 UV Upgrade |
| 420mm UV Lens Add-On  | 420 UV Add-On  |

## Accessories

| Item                 | Part #               |
|----------------------|----------------------|
| Laser Safety Glasses | Laser Safety Glasses |

See fume extraction and rotary products for complete options

## Technical Specifications

| Laser Specifications        | VEREO UV                                         |
|-----------------------------|--------------------------------------------------|
| Laser Type                  | Diode Pumped Solid State Ultraviolet             |
| Wavelength                  | 355nm                                            |
| Wattage Ratings             | 10W                                              |
| Frequency Range             | 40 - 300kHz                                      |
| Pulse Duration              | 18ns @ 60kHz                                     |
| Operative Ambient Air Temp. | 7° - 35° C / 45° - 95° F                         |
| Cooling Type                | Closed Loop Chiller (Water/Propylene Glycol Mix) |
| Red Alignment Laser (RAL)   | Class II Red Diode (635nm)                       |
| Red Focusing Laser (RFL)    | Class II Red Diode (635nm)                       |
| Power Requirement           | 220 VAC 50/60 Hz, 30A                            |

| System Specifications     | VEREO UV                                                                                              |
|---------------------------|-------------------------------------------------------------------------------------------------------|
| Head Dimensions (LxWxH)   | 719mm x 151mm x 246mm / 28.3" x 5.9" x 9.7"                                                           |
| Rack Dimensions (LxWxH)   | 912mm x 566mm x 627mm / 35.9" x 22.3" x 24.7"                                                         |
| Weight (approx.)          | Available Upon Request                                                                                |
| Standard Software Package | Minilase Pro 3 64-Bit                                                                                 |
| PC                        | Windows 10 / 11 PC Required for Operation                                                             |
| External Connectors       | USB / Diagnostic / Digital IO / Hardware Interlock / Stepper Motor Output (4)                         |
| Included Accessories      | Laser Enable Keys (2) / Power & USB Cable / USB Drive with Software                                   |
| Documentation             | Digital on USB - System, Software, & Safety Manual / Laser Parameter Guide / Software Video Tutorials |
| Warranty                  | Mechanical and Controls - 24 Months<br>UV Source - 12 Months<br>Chiller - 12 Months                   |

## Focal Lens Specifications

### Standard F-Theta Focal Lens

| Lens Size        | 163L UV M85                   |
|------------------|-------------------------------|
| Marking Field    | 100mm x 100mm / 3.93" x 3.93" |
| Working Distance | 189mm / 7.44"                 |

### Optional F-Theta Focal Lens Upgrades

| Lens Size        | 254L UV M85                 |
|------------------|-----------------------------|
| Marking Field    | 150mm x 150mm / 5.9" x 5.9" |
| Working Distance | 330mm / 13"                 |

| Lens Size        | 330L UV M85                   |
|------------------|-------------------------------|
| Marking Field    | 200mm x 200mm / 7.87" x 7.87" |
| Working Distance | 389mm / 15.3"                 |

| Lens Size                 | 420L UV M85                   |
|---------------------------|-------------------------------|
| Lens Size / Marking Field | 260mm x 260mm / 10.2" x 10.2" |
| Working Distance          | 494mm / 19.4"                 |

# VEREO™ 3D UV



## VEREO 3D UV Models

| Model           | Part #       |
|-----------------|--------------|
| VEREO 3D UV 10W | VSE 3D UV 10 |

## Lens Options

| Item                  | Part #         |
|-----------------------|----------------|
| 330mm UV Lens Upgrade | 330 UV Upgrade |
| 330mm UV Lens Add-On  | 330 UV Add-On  |

## Accessories

| Item                 | Part #               |
|----------------------|----------------------|
| Laser Safety Glasses | Laser Safety Glasses |

See fume extraction and rotary products for complete options

## Technical Specifications

| Laser Specifications        | VEREO 3D UV                                      |
|-----------------------------|--------------------------------------------------|
| Laser Type                  | Diode Pumped Solid State Ultraviolet             |
| Wavelength                  | 355nm                                            |
| Wattage Ratings             | 10W                                              |
| Frequency Range             | 40 - 300kHz                                      |
| Pulse Duration              | 18ns @ 60kHz                                     |
| Operative Ambient Air Temp. | 7° - 35° C / 45° - 95° F                         |
| Cooling Type                | Closed Loop Chiller (Water/Propylene Glycol Mix) |
| Red Alignment Laser (RAL)   | Class II Red Diode (635nm)                       |
| Red Focusing Laser (RFL)    | Class II Red Diode (635nm)                       |
| Power Requirement           | 220 VAC 50/60 Hz, 30A                            |

| System Specifications     | VEREO 3D UV                                                                                           |
|---------------------------|-------------------------------------------------------------------------------------------------------|
| Head Dimensions (LxWxH)   | 719mm x 151mm x 246mm / 28.3" x 5.9" x 9.7"                                                           |
| Rack Dimensions (LxWxH)   | 912mm x 566mm x 627mm / 35.9" x 22.3" x 24.7"                                                         |
| Weight (approx.)          | Available Upon Request                                                                                |
| Standard Software Package | Minilase Pro 3 64-Bit                                                                                 |
| PC                        | Windows 10 / 11 PC Required for Operation                                                             |
| External Connectors       | USB / Diagnostic / Digital IO / Hardware Interlock / Stepper Motor Output (4)                         |
| Included Accessories      | Laser Enable Keys (2) / Power & USB Cable / USB Drive with Software                                   |
| Documentation             | Digital on USB - System, Software, & Safety Manual / Laser Parameter Guide / Software Video Tutorials |
| Warranty                  | Mechanical and Controls - 24 Months<br>UV Source - 12 Months<br>Chiller - 12 Months                   |

## Focal Lens & 3D Specifications

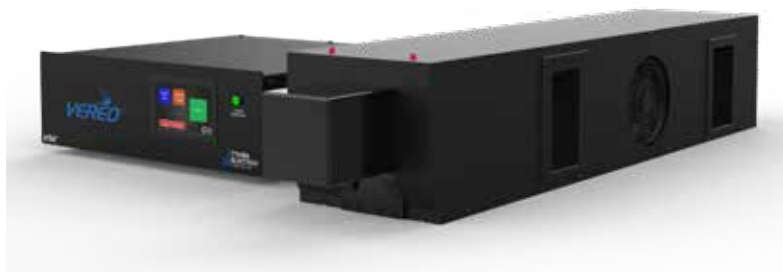
### Standard F-Theta Focal Lens

| Lens Size              | 254L M85                    |
|------------------------|-----------------------------|
| Marking Field          | 150mm x 150mm / 5.9" x 5.9" |
| Working Distance       | 297mm / 11.7"               |
| 3D Dynamic Focus Range | 40mm / 1.57"                |

### Optional F-Theta Focal Lens Upgrades

| Lens Size              | 330L M85                      |
|------------------------|-------------------------------|
| Marking Field          | 200mm x 200mm / 7.87" x 7.87" |
| Working Distance       | 389mm / 15.3"                 |
| 3D Dynamic Focus Range | 40mm / 1.57"                  |

# VEREO™ CO2



## VEREO CO2 Models

| Model          | Part #        |
|----------------|---------------|
| VEREO CO2 60W  | VEREO CO2 60  |
| VEREO CO2 100W | VEREO CO2 100 |

## Lens Options (No Standard Lens Included)

| Item          | Part #        |
|---------------|---------------|
| F150 CO2 Lens | F150 CO2 Lens |
| F200 CO2 Lens | F200 CO2 Lens |
| F250 CO2 Lens | F250 CO2 Lens |
| F300 CO2 Lens | F300 CO2 Lens |

## Accessories

| Item                 | Part #         |
|----------------------|----------------|
| Rack Mount Accessory | VSE Rack Mount |

See fume extraction and rotary products for complete options

## Technical Specifications

| Laser Specifications        | VEREO CO2                  |
|-----------------------------|----------------------------|
| Laser Type                  | CO2                        |
| Wavelength                  | 10,600nm                   |
| Wattage Ratings             | 60W 100W                   |
| Operative Ambient Air Temp. | 10° - 35° C / 50° - 95° F  |
| Cooling Type                | Forced Air                 |
| Red Alignment Laser (RAL)   | Class II Red Diode (635nm) |
| Red Focusing Laser (RFL)    | Class II Red Diode (635nm) |
| Power Requirement           | 220-240 VAC 50/60 Hz       |

| System Specifications     | VEREO CO2                                                                                             |
|---------------------------|-------------------------------------------------------------------------------------------------------|
| Head Dimensions (LxWxH)   | 1,013mm x 206mm x 180mm / 39.9" x 8.1" x 7.1"                                                         |
| Rack Dimensions (LxWxH)   | 483mm x 432mm x 146mm / 19" x 17" x 5.76"                                                             |
| Weight (approx.)          | Availabe Upon Request                                                                                 |
| Standard Software Package | Minilase Pro 3 64-Bit                                                                                 |
| PC                        | Windows 10 / 11 PC Required for Operation                                                             |
| External Connectors       | USB / Diagnostic / Digital IO / Hardware Interlock / Stepper Motor Output (4)                         |
| Included Accessories      | Laser Enable Keys (2) / Power & USB Cable / USB Drive with Software                                   |
| Documentation             | Digital on USB - System, Software, & Safety Manual / Laser Parameter Guide / Software Video Tutorials |
| Warranty                  | Mechanical and Controls - 24 Months<br>CO2 Source - 24 Months                                         |

## Focal Lens Specifications

### F-Theta Focal Lens Options

| Lens Size        | F150                        |
|------------------|-----------------------------|
| Marking Field    | 110mm x 110mm / 4.3" x 4.3" |
| Working Distance | 136mm / 5.35"               |

| Lens Size        | F200                        |
|------------------|-----------------------------|
| Marking Field    | 140mm x 140mm / 5.5" x 5.5" |
| Working Distance | Consult TE                  |

| Lens Size        | F250                          |
|------------------|-------------------------------|
| Marking Field    | 175mm x 175mm / 6.88" x 6.88" |
| Working Distance | 232mm / 9.1"                  |

| Lens Size                 | F300                        |
|---------------------------|-----------------------------|
| Lens Size / Marking Field | 210mm x 210mm / 8.2" x 8.2" |
| Working Distance          | 288mm / 11.3"               |

# Additional Product Configurations



## Scorpion and Raptor G2

Raptor is only available with the G2 control system and will be discontinued. Scorpion G2 currently has fluctuating cost and extended lead times. Scorpion LMRC should be quoted in place or clients should be moved to Pro SE based systems.



## Zetalase XLT

Zetalase XLT is available to quote per request. We are evaluating options for an equivalent product.



## ATLAS UV and CO2

ATLAS pricing models are under evaluation due to changes in the BOM and delivery delays. An updated price sheet will be released with additional ATLAS models soon. In the short term, these products are available to quote per request.



## Dial Index UV

This system requires a redesign of the base to properly house the UV controls. This product is available to quote per request.



## EMS300

EMS300 is utilized as a custom cabinet solution and is available to quote per request.

# Rotary Devices

Rotary devices are priced for the rotary device only in some workstations, while in other configurations they are priced with additional accessories as needed, including expansion boxes for class 4 laser use or breadboard tooling plates when used with certain workstations.

Note: ZD30 and ZD80 are available upon request but are not preferred rotary devices moving forward. R360 or SR380 are the equivalent replacements.

## D65 Rotary

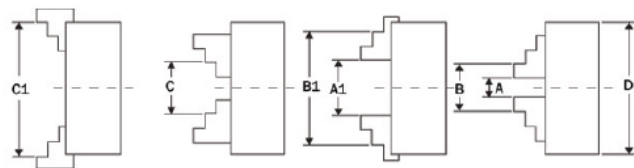


### Europe Pricing:

| Models                                                                                            |
|---------------------------------------------------------------------------------------------------|
| D65 MLM                                                                                           |
| D65 MXLM                                                                                          |
| D65 MXL                                                                                           |
| D65 VIRTUS                                                                                        |
| D65 VERO/SCORPION LMRC<br>(with power/prog. tool post quoted)                                     |
| D65 VERO /SCORPION LMRC<br>(toolpost not quoted or w/manual tool post, inc. expansion controller) |

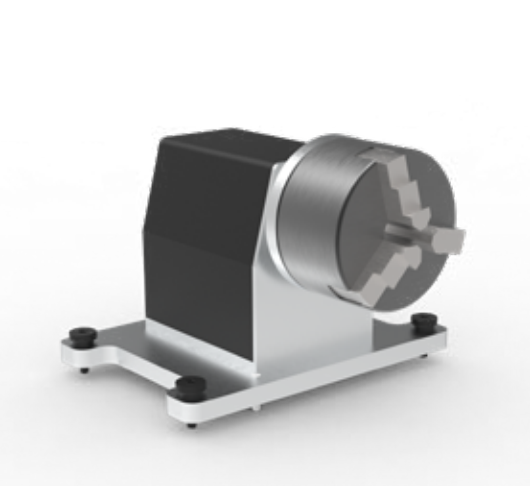
### Technical Specifications

| Rotary Specifications       | D65                                                                                                                                                        |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Application Set             | Compact, Light Duty                                                                                                                                        |
| Chuck Type                  | 65mm 3 Jaw Manual Chuck                                                                                                                                    |
| Clamping Range              | 2mm - 25mm                                                                                                                                                 |
| Jamming Range               | 22mm - 60mm                                                                                                                                                |
| External Jaw Clamping Range | 20mm - 58mm                                                                                                                                                |
| Max Load                    | 1lb / 0.45kg                                                                                                                                               |
| Special Feature             | Tilt                                                                                                                                                       |
| Mounting Hardware           | Included                                                                                                                                                   |
| Optional Accessories        | Ring Chuck (for Marking Jewelry Rings)                                                                                                                     |
| Mounting Orientation        | MLM - Left Side with Chuck Facing Right<br>MXLM, MXL - Chuck Facing Operator<br>VIRTUS/VEREO - Mounted with Chuck Facing Operator if Tool Post is Included |



65mm Chuck  
Clamping range A1 2mm-25mm  
Jamming Range B-B1 22mm-60mm  
External Jaw  
Clamping Range 20mm-58mm

# R360 Rotary



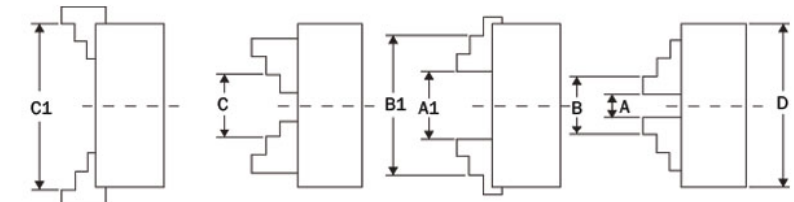
| Models                                                                                                           |
|------------------------------------------------------------------------------------------------------------------|
| R360 65mm or 100mm MXLM                                                                                          |
| R360 65mm or 100mm MXL                                                                                           |
| R360 65mm or 100mm EMS400                                                                                        |
| RR360 65mm or 100mm ATLAS                                                                                        |
| R360 65mm or 100mm VIRTUS/VEREO/SCORPION LMRC<br>(with power/prog. tool post quoted)                             |
| R360 65mm or 100mm VEREO/SCORPION LMRC<br>(toolpost not quoted or w/manual tool post, inc. expansion controller) |
| R360 65mm or 100mm with LaserGear ToolPost<br>(includes breadboard tool plate add-on)                            |
| R360 65mm or 100mm ZXL (includes breadboard tool plate add-on)                                                   |
| Please note size for quote, example: R360 100mm MXL or R360 65mm MXL                                             |

## Technical Specifications

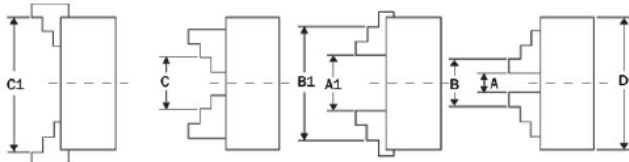
| Rotary Specifications                                                           | R360                                                                                                                                                                                                                                                                                    |
|---------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Application Set                                                                 | Midsize, Light to General Duty                                                                                                                                                                                                                                                          |
| Chuck Type                                                                      | 65mm or 100mm 3 Jaw Manual Chuck                                                                                                                                                                                                                                                        |
| Clamping Ranges 65/100mm                                                        | See Drawing Below                                                                                                                                                                                                                                                                       |
| Max Load                                                                        | 5lb / 2.2kg                                                                                                                                                                                                                                                                             |
| Through Hole                                                                    | 14mm / .562"                                                                                                                                                                                                                                                                            |
| Mounting Orientation<br>(included in description for each system configuration) | MXLM/MXL - Chuck Facing Operator<br>ZXL - Chuck Facing Operator<br>EMS400/ATLAS - Left Side with Chuck Facing Right<br>VIRTUS/VEREO - Chuck Facing Operator w/Manual/Power/Programmable Tool Post<br>LaserGear ToolPost - Left Side w/Chuck Facing Right Using Breadboard Adapter Plate |

### 4 Inch Chuck

CLAMPING RANGE:

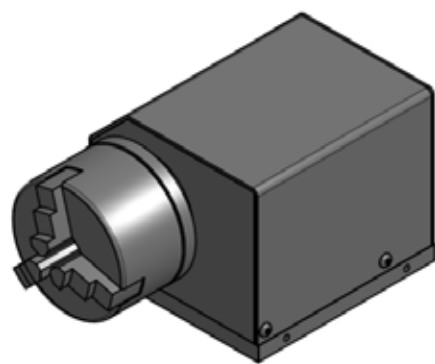


- Internal Jaw:
- Clamping Range A-A1: 0.078-1.181"
- Jamming Range B-B1: 1.181-3.543"
- External Jaw
- Clamping Range C-C1: 1.181-3.150"



65mm Chuck  
Clamping range A1 2mm-25mm  
Jamming Range B-B1 22mm-60mm  
External Jaw  
Clamping Range 20mm-58mm

# SR380 Rotary



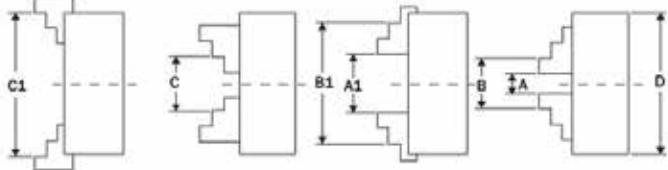
|                                                                         | Models                                                                                                            |
|-------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
|                                                                         | SR380 100mm or 125mm MXLM                                                                                         |
|                                                                         | SR380 100mm or 125mm MXL                                                                                          |
|                                                                         | SR380 100mm or 125mm EMS400                                                                                       |
|                                                                         | SR380 100mm or 125mm ATLAS                                                                                        |
|                                                                         | SR380 100mm or 125mm VIRTUS/VEREO/SCORPION LMRC<br>(with power/prog. tool post quoted)                            |
|                                                                         | SR380 100mm or 125mm VERO/SCORPION LMRC<br>(toolpost not quoted or w/manual tool post, inc. expansion controller) |
|                                                                         | SR380 100mm or 125mm with LaserGear ToolPost<br>(includes breadboard tool plate add-on)                           |
|                                                                         | SR380 100mm or 125mm ZXL<br>(includes breadboard tool plate add-on)                                               |
| Please note size for quote, example: SR380 100mm MXL or SR380 125mm MXL |                                                                                                                   |

## Technical Specifications

| Rotary Specifications                                                           | SR380                                                                                                                                                                                                                                                                                   |
|---------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Application Set                                                                 | Midsize, Heavy Duty                                                                                                                                                                                                                                                                     |
| Chuck Type                                                                      | 100mm or 125mm 3 Jaw Manual Chuck                                                                                                                                                                                                                                                       |
| Clamping Ranges 100/125mm                                                       | See Drawing Below                                                                                                                                                                                                                                                                       |
| Max Load                                                                        | 20lb / 9kg                                                                                                                                                                                                                                                                              |
| Optional Accessory                                                              | Pneumatic 5C Collet Closer Upgrade                                                                                                                                                                                                                                                      |
| Mounting Orientation<br>(included in description for each system configuration) | MXLM/MXL - Chuck Facing Operator<br>ZXL - Chuck Facing Operator<br>EMS400/ATLAS - Left Side with Chuck Facing Right<br>VIRTUS/VEREO - Chuck Facing Operator w/Manual/Power/Programmable Tool Post<br>LaserGear ToolPost - Left Side w/Chuck Facing Right Using Breadboard Adapter Plate |

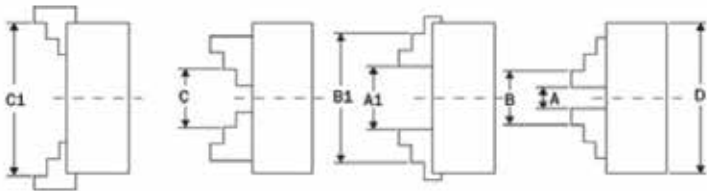
### 4 Inch Chuck

CLAMPING RANGE:



- Internal jaw:
- Clamping Range A-A1: 0.078-1.181"
- Jamming Range B-B1: 1.181-3.543"
- External jaw
- Clamping Range C-C1: 1.181-3.150"

### CLAMPING RANGE: 5 Inch 3 jaw Chuck



- Internal Jaw:
- Clamping Range A-A1: 0.098-1.574"
- Jamming Range B-B1: 1.496-4.921"
- External Jaw
- Clamping Range C-C1: 1.496-4.331"

# Tool Posts for CLASS 4 Laser Use

Please make sure to review the compatibility listing prior to requesting or quoting a tool post. In example, a CO2, UV, or 3D laser should never be mounted to a low cost LaserGear tool post. In addition, some lasers require programmable for focusing purposes.



| Tool Post                                                | Compatible Products                                |
|----------------------------------------------------------|----------------------------------------------------|
| Manual Tool Post 500mm (Low Cost)                        | VIRTUS, VEREO, SCORPION LMRC                       |
| Manual Tool Post 800mm (Low Cost)                        | VIRTUS, VEREO, SCORPION LMRC                       |
| Manual Tool Post w/Breadboard Plate (High Quality)       | VEREO, SCORPION LMRC                               |
| Power Tool Post w/Breadboard Plate (High Quality)        | VEREO, UV, CO2, SCORPION LMRC                      |
| Programmable Tool Post w/Breadboard Plate (High Quality) | VEREO, 3D, LFSS 3D, UV, CO2, SCORPION LMRC         |
| LaserGear Product Tool Posts                             | See LaserGear QUBE Page for Pricing                |
| VIRTUS Tool Post                                         | See VIRTUS Page for Pricing, Only Sold with Virtus |

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