

# XRF-M

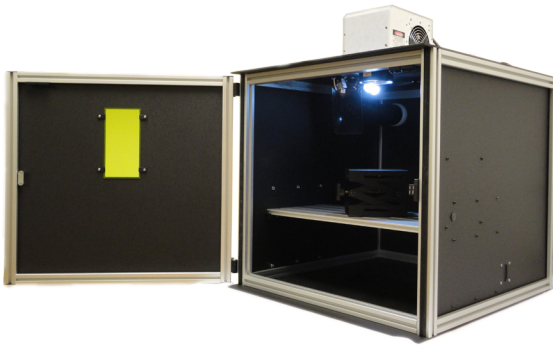
## Fiber Series



Laser Marker Head



Controller



Class I Workstation

## Description

With power levels at 20 or 30 watts, the XRF-M series fiber laser is a versatile laser marking machine. The MOPA fiber module allows for marking on a wider range of materials that previous fiber lasers were not capable of. The selectable pulse durations allow the XRF-M laser to mark like a Diode Pumped Solid State laser and a traditional fixed pulsed fiber laser giving it the best of both worlds. Marking speeds have also been improved by 30% compared to previous generations while being more efficient and more reliable. The XRF-M is virtually maintenance free and is backed by RMI Laser's industry leading warranty, and world class service and support.

## Benefits

- High beam quality, small spot size and large lens are ideal for small components
- Ideal for all metals & most plastics
- Digital galvos with XY2-100 protocol
- 2.5D deep engraving
- High speed rotary marking
- Engineered for maximum uptime, virtually maintenance free
- Backed by world-class support and a convenient laser system loaner program to enable you to remain productive if your system needs repair



## Improves Efficiency

RMI Fiber Lasers are designed for maximum efficiency. With no internal optical assemblies and a fanless marker head, the XRF-M Series requires no maintenance for maximum uptime in the harshest of conditions.



## Plug and Play

With our Class I Enclosures and professional installation, setting up your RMI Laser is simple and easy. Experience out-of-the-box and marking in less than an hour!

## Marking Samples

\*Actual product may vary as prototype image is shown.



# XRF-M Laser Marking System

## Marker Head

|  | XRF-20M                                       | XRF-30M                                       |
|--|---|---|
| <b>Laser Source Built-in</b>                         | Yb-doped Fiber Laser                          | Yb-doped Fiber Laser                          |
| <b>Wavelength</b>                                    | 1064 nm                                       | 1064 nm                                       |
| <b>Laser Source Output</b>                           | 20 W<br>equivalent CW Power                   | 30 W<br>equivalent CW Power                   |
| <b>Peak Power</b>                                    | 0.8 mJ  | 0.8 mJ  |
| <b>Pulse Width</b>                                   | 2~350 ns                                      | 2~350 ns                                      |
| <b>Beam Quality</b>                                  | M <sup>2</sup> <1.3                           | M <sup>2</sup> <1.3                           |
| <b>Warranty</b>                                      | 2 year fiber module<br>1 year all other parts | 2 year fiber module<br>1 year all other parts |
| <b>100mm F-Theta Lens:<br/>Max Marking Area</b>      | 60 x 60 mm<br>2.4x 2.4 in.                    | 65 x 65 mm<br>2.56 x 2.56 in.                 |
| <b>163mm F-Theta Lens:<br/>Max Marking Area</b>      | 100 x 100 mm<br>3.9 x 3.9 in.                 | 105 x 105 mm<br>4.13 x 4.13 in.               |
| <b>254mm F-Theta Lens:<br/>Max Marking Area</b>      | 150 x 150 mm<br>5.9 x 5.9 in.                 | 160 x 160 mm<br>6.3 x 6.3 in.                 |
| <b>330 mm F-Theta<br/>Lens:<br/>Max Marking Area</b> | 200 x 200 mm<br>7.7 x 7.7 in.                 | 200 x 200 mm<br>7.7 x 7.7 in.                 |
| <b>420 mm F-Theta<br/>Lens:<br/>Max Marking Area</b> | 250 x 250 mm<br>10 x 10 in.                   | 254 x 254 mm<br>10 x 10 in.                   |
| <b>Lenses available<br/>(focal length)</b>           | 100, 163, 254, 330, 420<br>mm                 | 100, 163, 254, 330, 420<br>mm                 |
| <b>Cooling System</b>                                | Air-cooled                                    |   |
| <b>Operational Temp<br/>Range*</b>                   | ~10 - 40 °C (~50 - 104 °F)                    |   |
| <b>Operational Humidity<br/>Range*</b>               | 80% non-condensing                            |   |
| <b>Weight</b>  | 5.0 kg (11 lbs)                               |   |
| <b>Dimensions LxWxH**</b>                            | 245 x 200 x 65 mm                             |   |

## Controller

|                                    |  |
|------------------------------------|--|
| <b>Storage Temp Range</b>          | -10 ~ 60 °C (14 ~ 140 °F)                  |
| <b>Storage Humidity Range</b>      | Up to 80% non-condensing                   |
| <b>Power Source</b>                | AC 100 - 240 V, 5 A, 50/60 Hz              |
| <b>Consumption Power</b>           | 400 W nominal,<br>500 W max.               |
| <b>Weight (with set of cables)</b> | 13 kg (29 lbs)                             |
| <b>Dimensions LxWxH</b>            | 430 x 440 x 132 mm (16.9 x 17.4 x 5.2 in.) |

## XRF Laser Configuration Options

- Available with 100 mm, 163 mm, 254 mm, 330 mm, or 420 mm F-Theta Lenses
- 20 & 30 Watt Models
- Class I or Class IV Configurations
- Plug and Play Rotary Chuck Adaptation

