Linear Samurai UV Laser Marking System

## **FEATURES**

- ~ Up to 3 W Average Power
- ~ Up to 4 KW Peak Power
- ~ High Precision
- ~ Powerful, Easy-to-use Software
- ~ Compact OEM design
- ~ Automation-Ready Industrial Design
- ~ Marking On The Fly (MOTF) Ready
- Customizable Work Areas and Spot Sizes



The Samurai Laser Marker is a fully integrated, compact, UV laser marking system designed for factory use. Taking advantage of the photon energy of the 355 nm wavelength, the system is capable of achieving 7 um spot sizes and work spaces in excess of 500 x 500 mm. The compact design and low-maintenance DPSS UV laser make this the perfect choice for high volume applications.

Intuitive control software allows you to build jobs quickly, while powerful algorithms enable Marking On The Fly (MOTF) and serialization operations. The system is highly versatile and can be configured to several output orientations in order to accommodate any installation. Software APIs make it easy to customize communications with other devices in the production facility including PLCs, databases, networks, and host computers. Motion and automation can be easily integrated through industrial level I/O to achieve a fully automated production line. With zero toxic consumables and no messy clean-ups, the Samurai Linear (OEM) Marking system is the perfect choice for most marking applications.



Permanent HDPE bottle marking

#### **APPLICATIONS**

- \* Package Marking
- \* Bottle Marking
- \* Thick/Thin Film Laser Trimming
- \* ITO Removal
- \* Sapphire Scribing
- \* Micromachining
- \* Direct Write/Repair
- \* Micro-via Hole Drilling
- \* Wafer processing
- Polyimide Cutting & Drilling
- \* Photo Bleaching

### **SPECIFICATIONS**

LASER PERFORMANCE

Wavelength 354.7 nm

**Average Power** 1 - 3 W (up to 55 W available)

Energy per Pulse  $< 100 \, \mu J$ 

Mode (M<sup>2</sup>) TEMoo  $(M^2 < 1.3)$ 

Beam Diameter (1/e2) See Chart Pulse to Pulse Stability (30 - 100 kHz) < 15% Power Stability (8 hrs. at const. temp.) < 5% < 10% Ellipticity **Astigmatism** < 0.3

MARKING PERFORMANCE

Marking Accuracy < 1.5 mrad Marking Repeatability < 22 µrad

FI FCTRICAL

90 - 240 VAC Input Voltage Power Consumption (max.) 900 W Ambient Temp. (non-condensing) 10 - 35° C

**PHYSICAL** 

System Dim (LWH) 914 x 269 x 210 mm

System Weight 32.2 kg

Cooling System Dim. (LWH) 287 x 224 x 389 mm

Cooling System Weight (dry) 9 kg

Power Supply Dim. (LWH) 343 x 280 x 145 mm

**Power Supply Weight** 5.7 kg

Full system consists of laser head, laser controller, routing optics, galvo, cooling system, computer, marking software and all necessary cables.

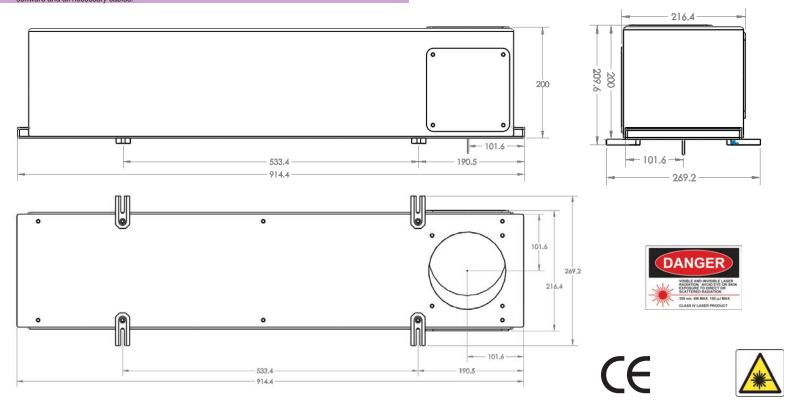
Spot Size	Field Size	<u>f-Theta Lens</u>
7 um	16 x 16 mm	f-56 mm
20 um	160 x 160 mm	f-250 mm
25 um	205 x 205 mm	f-330 mm
30 um	80 x 80 mm	NA
50 um	170 x 170 mm	NA

\*Other Models Available Upon Request. Specifications subject to change without notice.

#### "If a picture is worth a thousand words, a sample is worth a thousand pictures!"

~ Randy Kimball, VP of Sales ~

Qualify your application in the best way possible, with a free sample! DPSS offers a free Apps Lab to run proof-of concept samples that can demonstrate to you and your colleagues the advantages of our Samurai Cold UV laser marking solutions. Use these to quickly compare and qualify your new application. And since we use your material, you can see exactly what the final product will look like. Best of all, most samples are processed and returned to you within 24 - 48 hours.





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# Rayture Systems



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