# **Stellar Mark I-Series Specifications**

Model		I-Series				
Model No.		I-10A	IF 20LRM	IF 20SHS	IF 40HHS	
	Wavelength	1064 nm	1064 nm			
Laser Type	Type	Nd:YVO4, Q-Switched	Yb-doped, MOPA			
	Output Power	10W	20W 40W		40W	
	Beam Mode	TEM00	TEM00			
	Frequency	1~100 KHz	1~200 kHz	1~1000 kHz	1~1000 kHz	
	Cooling	Air-cooled (No water chiller required)				
Electrical Requirement		220V, 50/60 Hz Max 12 Amp	110~220V, 50/60 Hz Max 10 Amp			
Dimensions	Laser head	L600 x W 200 x H 200 mm	L 525 x W 168 x H 155 mm			
	Control unit	L660 x W 250 x H 475 mm	L 470 x W 360 x H 241 mm			
Operating System		Win 2000/XP/Vista; Win 7(32bit / 64bit)				
Environment	Temperature	16° C ~ 36° C				
	Humidity	10 ~ 80%, Non condensing				
Safety		Class 4 (Class 3R available with safety shield)				
Max Linear Marking Speed		3,000 mm/s	3,000 mm/s			
Max Marking Speed		10,000 mm/s	10,000 mm/s			

# **Scan lens Specifications**

Model No.	I-10 070A	I-10 110A I-10 180A	
Working Area	70 x 70 mm	110 x 110 mm	180 x 180 mm
Spot Size**	20 µm	30 µm	40 µm
Working Distance	128.3±1 mm	206.8±2 mm	350.3±2 mm
Repeatability**	0.004 mm	0.006 mm	0.010 mm
Model No.	IF 20LRM 070	IF 20LRM 110	IF 20LRM 180
Working Area	70 x 70 mm	110 x 110 mm	180 x 180 mm
Spot Size**	33 µm	54 µm	86 µm
Working Distance	128.3±1 mm	206.8±2 mm	350.3±2 mm
Repeatability**	0.004 mm	0.006 mm	0.010 mm
Model No.	IF 20SHS 070	IF 20SHS 110 IF 20SHS 180	
Working Area	70 x 70 mm	110 x 110 mm	180 x 180 mm
Spot Size**	22 µm	35µm	55 µm
Working Distance	128.3±1 mm	206.8±2 mm	350.3±2 mm
Repeatability**	0.004 mm	0.006 mm	0.010 mm
Model No.	IF 40HHS 070	IF 40HHS 110	IF 40HHS 180
Working Area	70 x 70 mm	110 x 110 mm	180 x 180 mm
Spot Size**	62 µm	100 µm	159 µm
Working Distance	128.3±1 mm	206.8±2 mm	350.3±2 mm
Reneatability**	0.004 mm	0.006 mm	0.010 mm

Above specifications are subject to change without further notices. All above spot size will be material dependent.

△ Specifications are subject to change without prior notice

#### **Optional Items**













**Authorized Deale** 



Rotary Attachment























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- ▶ 10W, 20W and 40W models available
- ▶ Achieve 0.1 mm character height with perfect TEM00 beam mode
- ▶ Multiple waveforms are available for sophisitcated marking and micro-machining applications (IF20SHS/ IF 40HHS models only)
- ► G-Mark Library software features password protection, auto text 1D and 2D barcode types
- ▶ Ideal solution for ABS, PC, rubber and metal marking



#### StellarMark I-Series

StellarMark I-Series Laser Marker is a comprehensive solution that satisfies customers with diverse requirements. StellarMark I-Series is easy to install, easy to operate, designed with simple maintenance and safety considerations while providing superior output quality.

## 

Benefiting from the state-of-the-art design, StellarMark I-Series stands out from the competition by increasing productivity and providing superior output quality. The TEM00 beam mode brings in high precision marking results and stable laser output maintain consistent marking quality. Different M2 values are available with the different models under the IF-series catering to the different requirements for different applications.

# Beam Mode IF 40HHS 1.6 SM2 S 2.0 $M^2 \le 1.3$ 2.6 \( M^2 \le 3.7



# Superior Text-editing Function

- Automatic Serial Marking
- Barcode Marking
- Wobble Marking
- Jump Cross Marking
- Font Variation
- Logo and Image Marking
- Arc Marking
  - ▲ Arc Marking



▲ Barcode Marking



#### Key Switch



This safety feature enables operators to keep the laser locked to avoid unauthorized

#### Mark On Fly (Optional)

An optional software function that features marking of moving objects on a conveyor.





- ▲ Jump Cross Marking



# Emergency Stop



The machine can be entirely shut down by pressing the "Emergency Stop" button from controller when any emergency occurs.

#### ■ SmartPOSITION<sup>TM</sup>

Variable speed, red dot pointer "preview" mode allows for accurate and easy marking positioning on the marked part





▲ Full Path ▲ Outline

# Application









### G-Mark Library (Optional)

This programmable software can be used to customize functions by using VB scripts. All commands are received real time from a master PC and position offsets, rotating angle, and sequential marking can be set up. With G-Mark Library, the workflow of marking process can be optimized and simplified at the production line.



#### Waveform

While the IF 20LRM model has a single waveform suitable for basic marking applications, multiple waveforms are available for the IF 20SHS and IF 40HHS models further enabling you to make use of 25 optimized pulse waveforms ranging in duration from 10-240ns optimized for sophisticated marking and micro-machining applications. The availability of the waveforms open up more combinations that enables users to fine-tune their laser settings for optimal results.









PET Card



Laser Marking System