

StellarMark I-Series Specifications

Model		I-Series			
Model No.		IFII 20RMZ	IFII 50RMZ	IFII 20SHS	IFII 40HHS
Laser Type	Wavelength	1064 nm			
	Type	Yb-doped, MOPA			
	Output Power	20W	50W	20W	40W
	Beam Mode	TEM00			
	Beam Quality (M ²)	<1.6		≤ 1.3	2.5-3.5
	Frequency	1-500 kHz		1~1000 kHz	
	Waveform	2		25	
	Cooling	Air-cooled			
Max. Linear Marking Speed		3,000 mm/s			
Max. Marking Speed		10,000 mm/s			
Electrical Requirement	Power Supply	110~220V, 50/60 Hz Max 15 Amp			
	Power Consumption	Max. 1650W			
Dimensions	Laser head	L 508 x W 168 x H 185 mm			
	Control unit	L 470 x W 360 x H 241 mm			
Laser Head Weight		9 Kg			
Control Unit Weight		25 Kg			
Operating System		Microsoft Windows 2000 / XP / Vista(32/64 Bit) / 7(32/64 Bit) / 8(32/64 Bit) (Desktop or Laptop PCs)			
Environment	Temperature	15° C ~ 35° C			
	Humidity	10 ~ 80%, Non condensing			
Safety		Class 4 (EN60825-1 Class 1 available with safety shield and LFC) 2006/42/EC Machinery Directive 2014/35/EU Low Voltage Directive 2014/30/EU Electromagnetic Compatibility Directive			

Scan Lens Specifications

Specifications	IFII 20 / 50RMZ Scan Lens			
Model No.	70	110	180	300
Working Area	70 x 70 mm	110 x 110 mm	180 x 180 mm	300 x 300 mm
Spot Size*	27 μm	44 μm	71 μm	114 μm
Working Distance	142.0±1 mm	220.0±2 mm	350.3±2 mm	553.3±3 mm
Repeatability**	0.03 mm	0.03 mm	0.04 mm	0.06 mm

*300 lens only for IFII 50RMZ

Specifications	IFII 20SHS Scan Lens		
Model No.	70	110	180
Working Area	70 x 70 mm	110 x 110 mm	180 x 180 mm
Spot Size*	22 μm	35 μm	55 μm
Working Distance	142.0±1 mm	220.0±2 mm	350.3±2 mm
Repeatability**	0.03 mm	0.03 mm	0.04 mm

Specifications	IFII 40HHS Scan Lens		
Model No.	70	110	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	142.0±1 mm	220.0±2 mm	350.3±2 mm
Repeatability**	0.03 mm	0.03 mm	0.06 mm

Above specifications are subject to change without further notices. See dealer or visit <http://www.GCCworld.com> for more details.

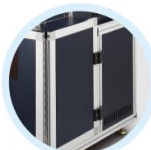
All above spot size will be material dependent.

*According to theoretical calculation

**The test is 8-hour continuous firing with power level at 30% using a 50RMZ

Δ Specifications are subject to change without prior notice

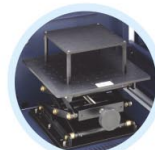
Optional Items



Mounting Platform



LFC Workstation



Adjustable Z-axis Table



Rotary Attachment



EZ Stand



Authorized Dealer

www.GCCworld.com



StellarMark i series



- ▶ Field proven U.S. scan head and UK fiber laser components
- ▶ Achieve 0.1mm character height with perfect TEM00 beam mode
- ▶ Multiple waveform are available for sophisticated marking and micro-machining applications
- ▶ G-Mark Library (optional) software features customized programming, mark on fly and tiling marking
- ▶ Ideal solution for ABS, PC, PET, wafer, rubber and metal marking



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StellarMark I-Series

Design in top-notch U.S. scan head and U.K. fiber laser source, StellarMark I series provides industrial users superior and reliable output quality under long-term operation. From automotive parts and tools to electronic switch and wafer, StellarMark I series provides comprehensive solution for diverse requirements.

Superior Output Performance >>>>>

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.



Application



Depth Marking



Color Marking



Glass Marking



Keypad Marking



Wafer Marking



IC Marking

● Key Switch

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

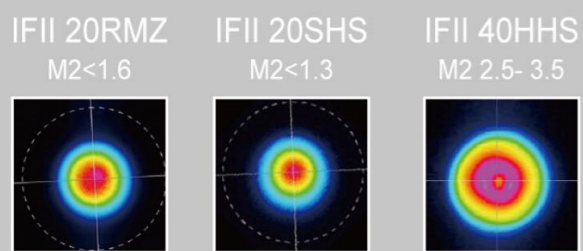


● Emergency Stop

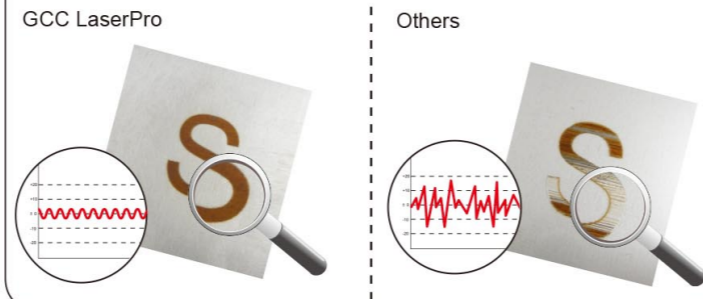
The machine can be entirely shut down by pressing the "Emergency Stop" button from controller when any emergency occurs.



Beam Mode

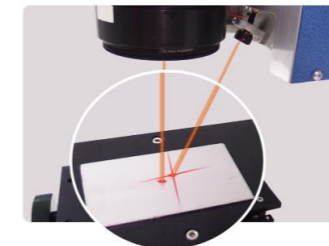


Consistent Power Stability



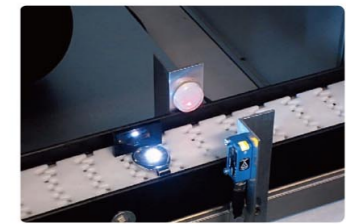
● Two-Point Focus Finder

Two-Point Focus Finder is standard feature for StellarMark IFII series. It helps you to quickly find the correct focus distance with ease.



● Mark On Fly (Optional)

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



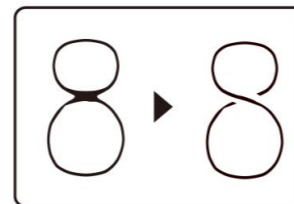
● Waveform

Multiple waveforms are available for the all IFII series further enabling you to make use of 2 (RMZ) or 25 (SHS/HHS) 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.



● Superior Text Function

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



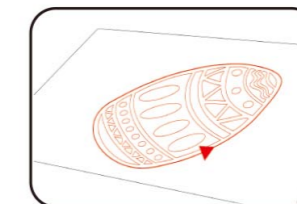
▲ Jump Cross Marking



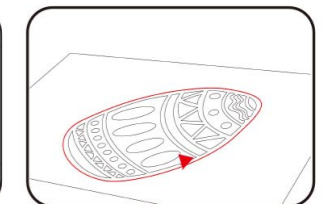
▲ Wobble Marking

● Preview Mode

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



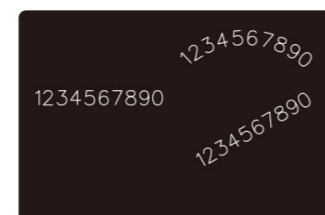
▲ Full Path



▲ Outline

● G-Mark Library (Optional)

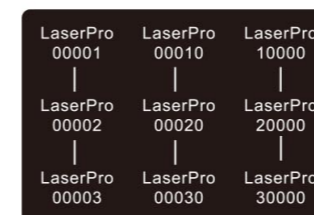
This programmable software can be used to customize functions by using VB scripts. All commands are received real time from a master PC and position offsets, rotating angle, and sequential marking can be set up. With G-Mark Library, the workflow of marking process can be optimized and simplified at the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



▲ Arc Marking



▲ Barcode Marking



▲ Automatic Serial Marking