

GMF SERIES (FIBER LASER MARKER)

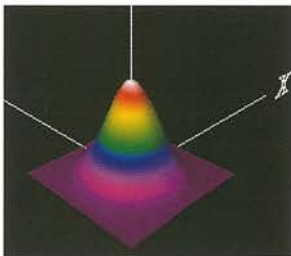


" High Speed Marking & High Quality Multi Head Countermeasure, On the fly marking makes the best performance "

Laser marking system, which is designed as compact & simple with solid H/W and latest technology S/W.

Optimized marking order of the inside of data is caused by high-speed marking and Arrangement of the Strip and tray reduced the Tact Time.

It contains a Pointer with checking and adjusting the Marking position function, therefore it is easy to maintain and due to the easy-to-use S/W, user can directly edit marking image. Multi-head system is also possible and with innovative encoded on the fly marking, it exhibits the best performance in productivity.



Single mode delivery fiber at poering wavelength
Diffraction limited beam quality M2~1.1

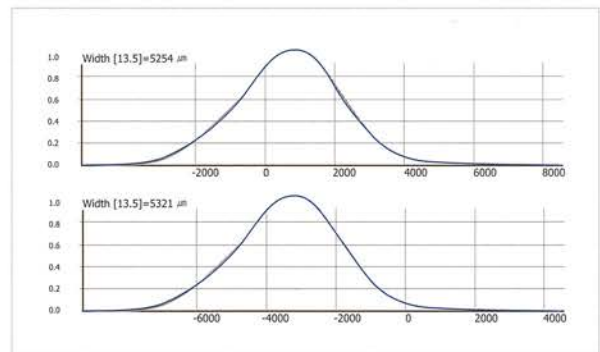
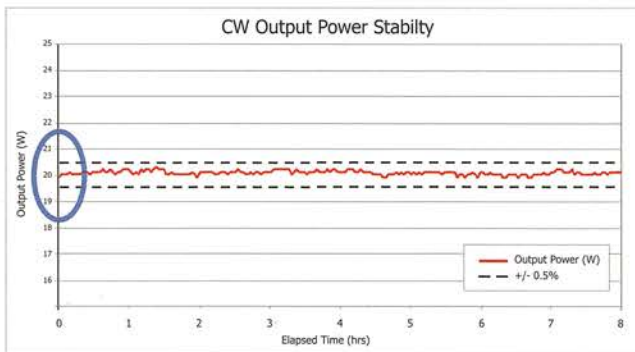
KEY FEATURES

- 30,000 hours without Maintenance
- Economic System without expendables
- Solid Scan Head
- Single computer & DSP controller
- Data compatibility with other systems
- Multi-Language
- Can use 1D/2D Barcode
- High Marking Quality
- Maintenance Free Design

SPOT SIZE (Spot size according to Scan Mirror Size by Field Size)

Field Size (mm)	F - Theta	Scan Mirror Size (mm) (Real Aperture Size)		
		8 (5,6)	10 (7)	15 (10,5)
61 * 61	100,1	19,0	15,2	12,0
101 * 101	162,4	30,9	24,7	19,0
156 * 156	254,4	48,3	38,7	29,0
180 * 180	254	92,0	73,6	49,0
213 * 213	346,3	65,8	52,6	39,0
246 * 246	409,9	77,9	62,3	46,0

- Aperture Ratio (%) is 70%
- Spot Size Unit = μm
- Real Aperture Size (mm) = Scan Mirror Size * Aperture Ratio
- ※ Spot size is a calculation value as above, it should be changed by quality.



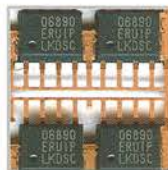
MARKING SAMPLES



Scissors



Keyboard



Package



Pincettes



BGA



PCB

Special feature of HARDROM SYSTEM

1. Satisfies the various requests from consumers with self-designed H/W & S/W.
2. High resolution via original calibration technology.
3. Reduced marking time and high quality marking via marking data optimization feature.
4. Increased productivity via encoded on the fly marking.

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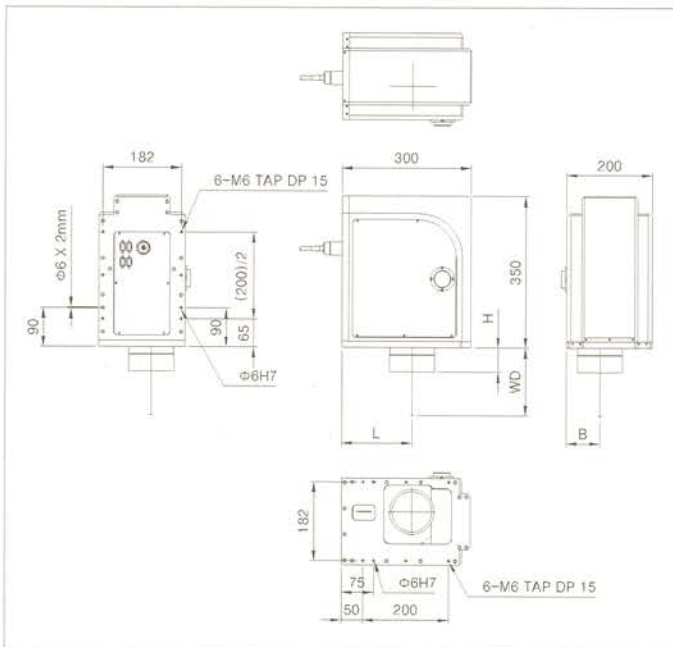
LASER SPECIFICATIONS

GMF Series							
MODEL	GMF - I121	GMF -I201 /I202		GMF -I301	GMF - S201		
Wavelength	1062nm					1095 ±5nm	
Beam Mode	TEM ₀₀						
Marking Scope	61 x 61mm	101 x 101mm	156 x 156mm	180 x 180mm	213 x 213mm	240 x 240mm	
Working Distance	112,0mm	243,8mm	297,9mm	344,8mm	412,2mm	472,8mm	
Marking Method	Galvanometer Scan						
Marking LASER (Maximum Output Power)	12W	20W		30W	20W		
Guide LASER · Pointer	exist						
Spot Size	50um ~ 120um						
Scan speed	1500mm/sec, 500char/sec						
Cooling Method	Air Cooling						
Supply Voltage	AC 100V, AC220V 50/60Hz, 6A						
On The Fly	support						
Operating Temperature	0℃ ~ 40℃						
Operating Humidity	Below 80%						

Controller

CPU	Intel / Dual core
RAM	512MB
HDD	80GB
OS	Windows XP

GMF DRAWING



SOFTWARE FUNCTIONS

- Marking order optimization
- Marking data simplification
- Encoded on the fly marking
- I/O Check Monitor
- I/O Simulation Function
- Counter Marking
- Serial Data Function
- LOT Marking
- Date Marking
- Logo Marking
- Support various files (e.g. PLT, DXF)
- Image (e.g. BMP, TIF) Marking
- Various Text Alignment (e.g. equal space, fan-shaped)
- Korean or Windows Fonts Marking
- Marking Preview
- Support Network or Remote Function
- Barcode (e.g. VERICODE, Data Matrix, CODE39, CODE128)

hardram
LASER SOLUTION FOR FPD & SEMICONDUCTOR

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