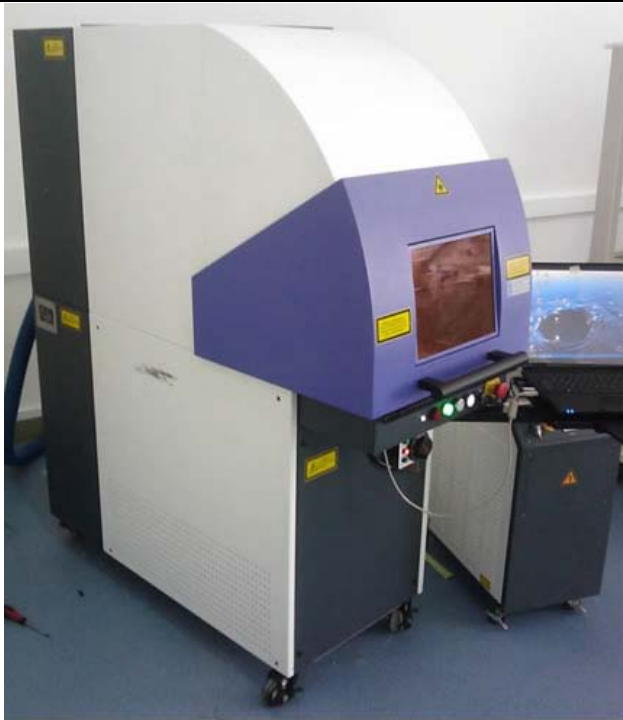


# Keepon Industrial Group

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## Laser Marking Machine =>> Model: DEP-GR11 (DIODE END-PUMP LASER THEORY)



Old Model



New Model

**Description:** This Diode end-pump laser marker adopts the latest and most advanced laser pumping technology in the world. It pumps the semiconductor-pumped laser (808nm) directly through the end of the laser crystal and generates 1064nm. Then the laser changes into 532nm green laser through double frequency crystal. It largely improves the light-to-laser converting efficiency, achieving 45% or above, therefore reducing the power consumption of the pump source and the workload of the water cooling system, and finally achieving the low consumption of the entire system. Besides, the end-pump exciting has better laser quality and can achieve higher peak power than pump exciting.

### Features:

1. Integrative structure, small size, simple maintenance.
2. Closed beam path. Beam path can be moved up and down. Control panel can be easily removed.
3. Small output facular, suitable for marking of fine and small graphic or characters.
4. Good beam quality, high stability of output laser, easy adjusting of the marking effects.
5. High laser frequency and marking speed, more suitable for marking of some non-metals such as keypad and plastic.
6. Stable function of the whole system; small size and low consumption.
7. Control by computer, easy to operating, input any graphic and characters. The marking depth and thickness of line can adjust by different requirement.
8. Good protection for green laser. It adopts full-sealing and interlocking design and high quality protective glass.
9. Adopts the latest water cooling system HC500B. Lower noise, high temperature control precision.

**Application:** Plastic keypad, electric component, gift, communication equipment, electric appliance, construction materials, package of food and medicine, PVC materials, etc...

**Technical Specification:**

SYSTEM SPECIFICATION

Model	DEP-GR11		
Marking diameter	Lens	F100	F160
	Marking area	50mm×50mm	100mm×100mm
	Repetition frequency	10kHz-80kHz	
	Marking speed	7000mm/s	
	Single marking depth	≤0.3mm	
	Repetition precision	±0.003mm	
	Min. character	0.1mm	
	Min. linear width	0.02mm	
	Marking function	GUI, graph processing function, multi file modes support, character editing function, auto serial num. marking, filling marking, optimization of scanning speed and parameter, continuous marking, layers marking, testing marking, memory card storage, undo/redo function, intelligent control interface deployed with the outer equipment.	
Marking laser	wavelength	532nm	
	Output power	≤11W	
	Peak power	≤100W	
Indication laser	Laser type /wavelength	LD red beam, wavelength 650nm	
	Output power	<5mW	
Character type	User font	Chinese and English fonts	
	True type font	Font designed by Microsoft and Apple has been installed in the computer	
	Correction character	Auto schedule, auto time limit counting, shift code setting, auto calculator, layer marking.	

	Bar code	CODE39、EAN standard、EAN shorten code、CODE128、EAN-128、39 code、extending 39 code、Data Matrix、cross25code、upc-A bar code、PDF417
	2D code	QR code、micro QR code、data model (ECC200)
	Marking graph	User-defined character、CAD data
		BMP、JPG、PNG、TIF、PCX、TAG、IOO、PNG、GIF、PLT
	Marking moving mode	Fixed point, beeline, spot line, circle, ellipse, etc
Marking condition	Marking type	Static/dynamic marking
Operation system	Operation system	Windows XP/2000/98SE
Others	System protection level	IP54
	Laser safety level	ClassIV
	Cooling mode	High-accuracy constant temperature/close-loop water cooling
	Running temperature	15℃-35℃
	Electricity supply	220V±22V / 50Hz/60Hz / 8A
	Overall consumption	<1.8KW
Dimension(W×L×H)	Host system	1150mm×1120mm×1450mm
	Cooling system	750mm×435mm×750mm

## SYSTEM CONFIGURATION

System	Component	Size and standard	Manufacturer
Optical system	Laser pump	DRACO-51D30	Han's Laser
	Laser transmitting set of lens	High-power laser set of reflectors	US
	Scanner	SCAN cube 7	Germany
	Extending lens	2-8 times adjustable	Han's Laser
Micro PC control system	IPC	IPC	EVOC (China)
	Displayer	15" LCD	Great Wall ,China
	Marking control card	PCI3000	Han's Laser
	Software	Hans Mark V 5.1 FOR XP	Han's Laser
Cooling system	Cooling system	High-accuracy constant temperature/close-loop water cooling	Han's Laser

Worktable	Worktable	Electromotor lifting girder	Han's Laser
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**OPERATION ENVIROMENT REQUIREMENT:**

Ambient temperature 15-35°C, air-conditioner needed.

Humidity 40%-80%; No dew; dehumidifier installation needed.

Power supply : 220V; 50Hz-

Electric Power net undulation: ±5%; Power net suited to the international standard. Area with voltage amplitude above 5% should have automatic digital voltage stabilization and steady flow system installed.

No strong [electromagnetism](#) signal interference around the equipment installed. No wireless injection station (or relay station) around.

Groundsill swill: less than 50um; Vibration acceleration: less than 0.05g. Avoid too many punches and other machine tool equipments setting around.

No smoke and dust in the equipment space, avoid operational environment with much dust such as metal polishing and rubbing.

Air pressure: 86-106kpa.

In certain environment, anti-static floor, strengthen shield and the other equipments should be installed.

**Reference Samples:**

