

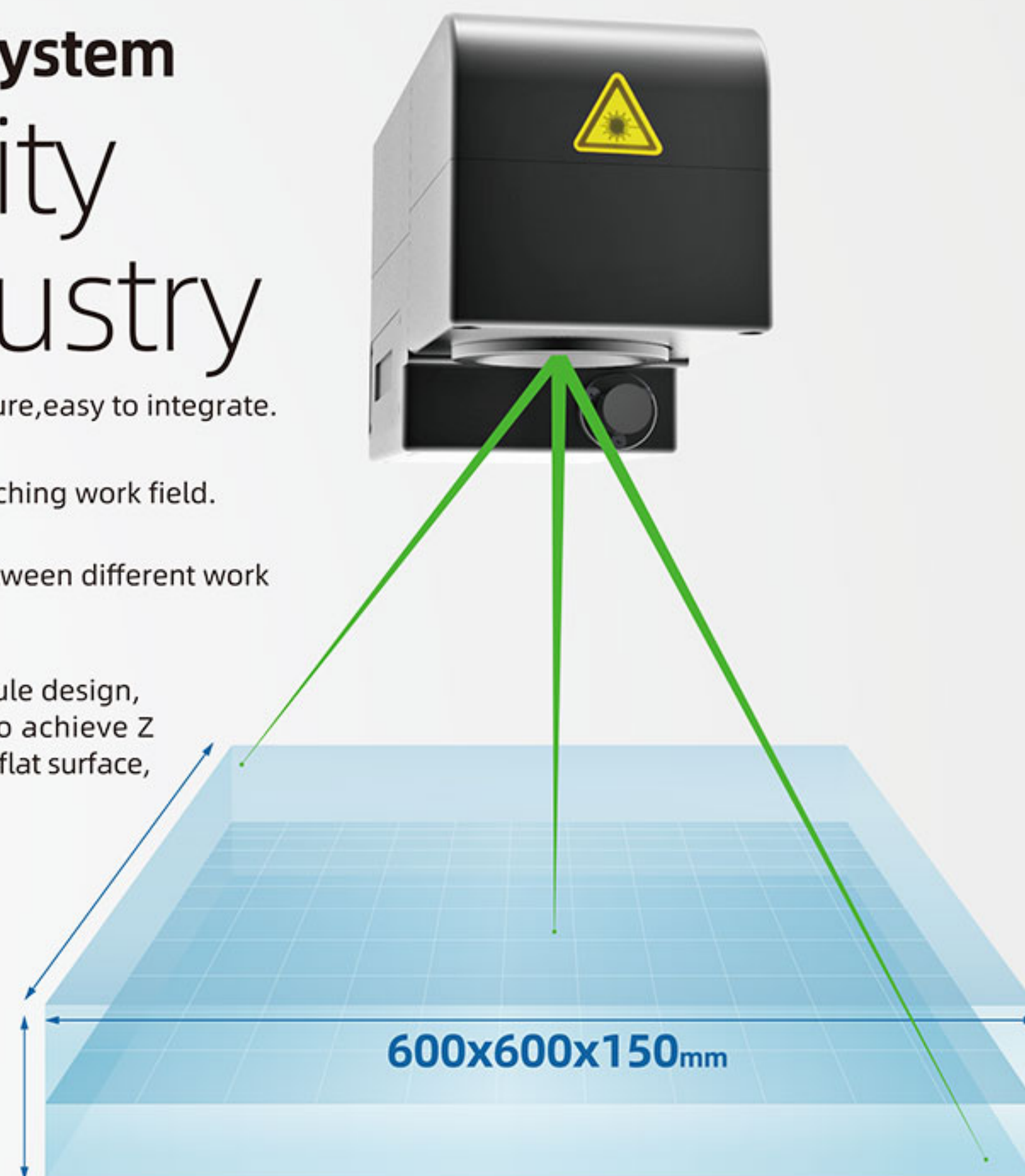
3D

FR10-G

Support wavelength: 532nm

3D Dynamic Focus System Entry priority for the industry

- CNC shell,dust prevention,compact structure,easy to integrate.
- Focal length data preservation when switching work field.
- The adjustment knob is used to switch between different work fields without replacing any parts.
- Double driving Z axis dynamic focus module design, response frequency $\geq 100\text{HZ}$ @ $\pm 10^\circ$,easy to achieve Z depth150mm@300mmx300mm,applied to flat surface, 3D surface high speed processing.



3D Surface Processing

The FR10-G applies dynamic focus control technology, breaks the limitation of traditional marking, and can do no distortion marking in the large-scale surface, 3D surface, steps, cone surface, slope surface and other objects.

	Regular Scanhead	VS	FR10-G
Cylinder surface	 Can not cover focal points at two edges, distorted edge marking effect		 +++++
Different steps	 Can not cover focal points on two different heights, no average marking		 +++++
Cone surface	 Can not cover focal points on the cone, distorted marking effect		 +++++
Slope surface	 Can not cover focal points on the slope, distorted marking effect		 +++++

Achieve 600x600x150mm curved surface application

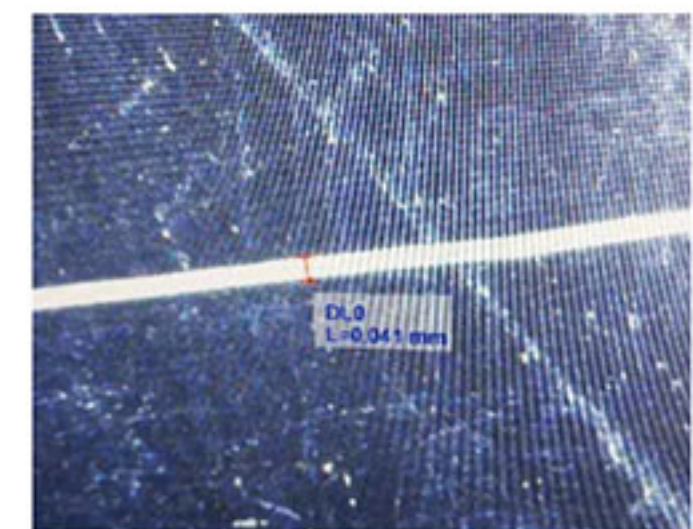
Through the 3rd axis control to reach larger work field, smaller spot size.

Regular Scanhead	FR10-G
 The closer to the edge, the bigger the spot it, the marking range is limited.	 Achieve 0.039mm spot size under 600*600*150mm
 Deformation due to its characteristics.	 Marking with uniform effect under super large work field

Application Highlight

APPLICATIONS

- Large field marking
- Glass coating removing
- 3D marking
- PCB marking



Laser Scribing (Glass)

Product Technical Information

Technical Info.		Specifications					
Items	Output Voltage(VDC)	±15					
	Current(A)	10A					
	Protocol	XY2-100 Protocol					
	Weight (KG)	7					
	Size(mm)	292*115*152.8					
Optical Specifications	Aperture Size(mm)	10					
	Input beam diameter(mm)	6.5					
Galvanometer Specifications	Product line	Pro			P2		
	Scan Angle(°)	±10			±10		
	Repeatability(μrad)	8			5		
	Max.Gain Drift(ppm/k)	100			50		
	Max.Offset Drift(μrad/k)	30			15		
	Long-term drift over 8h(mrad)	≤0.3			≤0.1		
	Tracking Error(ms)	≤0.13			≤0.13		
	Max.processing speed(characters/s)	600@100x100			600@100x100		
Working Field & Spot Diameter	Working Field(mm)	125×125×40	200×200×120	300×300×150	400×400×150	500×500×150	600×600×150
	The Min.Spot Diameter@1/e² (mm)	0.015	0.023	0.031	0.040	0.0496	0.059
	Focal length(mm)	144	234	354	474	594	714

