

Atlantis



Laser Sources

Model	LP	MP	HP
Technology	CO2 Sealed-off RF discharge excited laser sources		
Wavelength (μm)	10.57-10.63	10.4-11.2 μm	10.4-11.2
Typical emitted optical power (W)	70	120	260
Power Stability	±5%	±5%	±7%
Peak Power (W)	>100	>230	>480
Frequency pulse Repetition	0-25KHz	0.1-50KHz	0.1-50KHz
Mode quality M ²	<1.2	<1.25	<1.25
Ellipticity	<1.2	<1.2	<1.2
Polarization	Linear		
Cooling	H ₂ O closed loop		
Estimated lifetime	10000 h		

Marking Heads

Model	Standard area	Big area
Technology	3-axis scanning galvo-motors based dynamic focusing head	
Marking areas (selectable by software)	180x180 mm ² → 500x500 mm ²	500x500 mm ² → 1400x1400 mm ²
Spot diameter (μm)	≈150 (f=190) → ≈500 (f=650)	≈500 (f=650mm) → ≈1500 (f=2000 mm)
Writing Speed (vector)	up to 3 m/s	up to 6 m/s
Writing Speed (raster)	up to 5 m/s	up to 10 m/s
Positioning Speed	up to 5 m/s	up to 10 m/s
Non Linearity (*)	0.05% max	
Zero drift(*)	4μm/°C (f=190) → 15μm/°C (f=650mm)	15μm/°C (f=550) → 50μm/°C (f=2000mm)
Resolution	16 bits	16 bits
Protection	IP54, ZnSe protective window	
Aiming beam	630-650 nm, 3 mW laser beam	
Safety shutter	Motor driven alluminum plate	

(*): referred to one axis

System

Control	DSP integrated board, 64/128 MB RAM, LAN Ethernet link.
Software control	AM Drive Interface under Windows 98 SW packet for laser marking, laser control, automation driving and control.
Files	PLT, DXF, BMP, PCX, Tiff, JPEG, GIF, mcl, etc.
Interface	LAN 10 Mbits/s network, RS 232/485 linking, digital I/O for synchronized automations and diagnostic
Dynamic z axis	Automatic system for focusing distance shifting / marking area selecting
Cooling	Water closed loop chiller
Laser safety standards	Class 4 laser system, CEI EN 60825-1