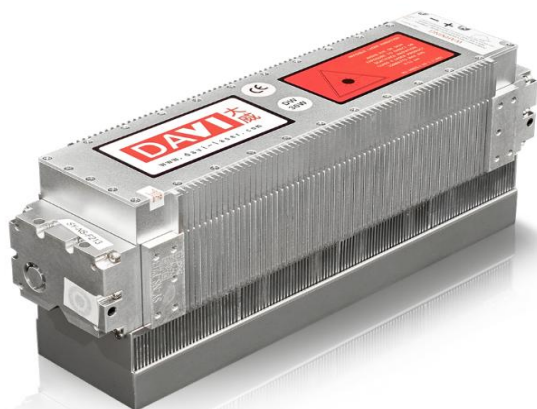


## D30 Series RF CO<sub>2</sub> Lasers

The D30 series RF CO<sub>2</sub> lasers are well-known for their high reliability, featuring a compact design that integrates the RF power supply with the laser cavity. This configuration ensures excellent beam quality and power stability. With a wavelength range of 9.3 to 10.6μm, the lasers can be configured for both air and water cooling, making it the preferred choice for high-performance laser marking and engraving systems. In addition, it incurs minimal operating and maintenance costs.

The D30 series RF CO<sub>2</sub> lasers are an ideal solution for laser processing of a wide array of materials, including paper, plastic, wood, rubber, leather, and fabric etc.



### Advantages:

- Excellent beam quality
- Stable power output
- Integrated design of RF power supply and laser cavity
- High reliability
- Both air and water cooling available
- Capable of high-quality laser processing on a variety of materials

### Applications:

- Marking
- Engraving
- Cutting

### Application Scenarios:



PE film Cutting



Beverage Bottle Marking



Cardboard Marking



PCB boards Marking

## D30 Series Product Specifications

SPECIFICATIONS	MODEL			
	D30i	D30		GMIT35
Wavelength (μm)	9.3	10.2	10.6	10.6
Optical Output Power(W) <sup>①</sup>	≥ 25W	≥35W	≥ 40W	≥ 38W
Power Stability(%) <sup>②③</sup>		< ±5%		< ±4.5%
Mode Quality (M <sup>2</sup> )		M <sup>2</sup> < 1.3		M <sup>2</sup> < 1.15
Beam Ellipticity		< 1.2:1		< 1.15:1
Beam Size (mm)		1.8±0.2		
Beam Divergence (mrad, full angle)		7.5±0.5		
Polarization		> 100:1		
Pulse Frequency (kHz)		0 ~ 25kHz		
Duty Cycle		0 ~ 100%		
Weight		6.3kg(Fan) / 5.6kg(Water)		
Dimensions(mm)		359.2 × 92 × 140.1(Fan) / 359.2 × 92 × 94.8(Water)		
Cooling		Fan / Water		
Heat Dissipation (W)		< 600W		
<b>Input Power</b>				
DC Input Voltage (VDC)		48VDC		
DC Input Current(A) <sup>④</sup>		12.5A		
<b>Environment Condition</b>				
Maximum Case Temperature		< 55°C		
Temperature		5°C ~ 35°C		
Altitude		< 2000m		
Humidity		Non-Condensing		
Shipping/Storage Environment		-10°C ~ 60°C, Non-Condensing		
<b>Coolant</b>				
Dynamic Coolant Flow Rate (l/min)		4L/min		
Coolant Maximum Static Pressure (kPa)		500kPa		
Coolant Setpoint Temperature Range		20°C - 30°C		
Hardness of water (CaCO <sub>3</sub> )		< 250mg/L		

The above specifications are subject to change without prior notice

Notes:

- ① Measured at 25°C and derated by 1%/°C for higher laser head temperatures
- ② Power Stability definition:  $\pm (P_{max}-P_{min})/(2P_{max})$
- ③ Measured at constant duty cycle after 10 minutes laser out at operating condition
- ④ Measured at 10 kHz PRF and 100% duty cycle operation, maximum average input current