

# S9-355 系列 | 3W-10W 紫外雷射器 3W-10W UV Laser

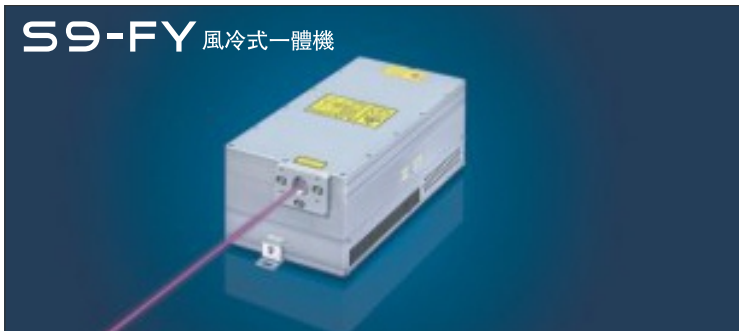
S9 系列 水冷式分體機



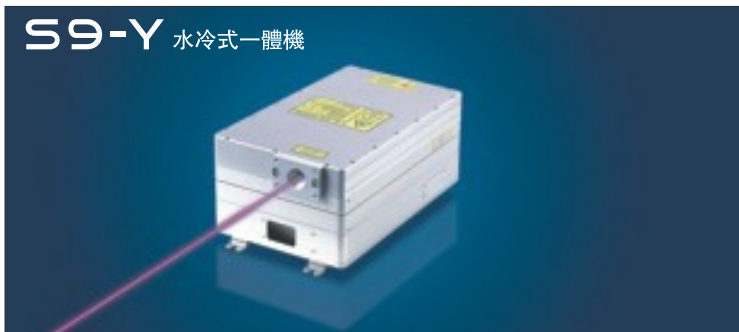
S9-F 風冷式分體機



S9-FY 風冷式一體機



S9-Y 水冷式一體機



S9-355 系列雷射器包括水冷式和風冷式。S9-355系列與同類型產品相比，體積更小巧，設計更精緻，出光更穩定。小而巧的設計，意味著用戶無需做大光路，可極大地降低成本，節省空間，輕便安裝於飛行打標設備。S9-355紫外雷射器不僅體積小巧，而且腔體結構比同類產品更穩定，擴展性更強。同一種腔體，可以產生多種功率的雷射，而不同功率段的穩定性均有大幅提升。

S9-355 series solid state pulsed UV laser in 2020. Comparing with its kinds, S9-355 series solid state pulsed UV laser features more compact and delicate design with more stable laser output. Its compact design suggests no necessity in building big light path, which reduces space and cost to a great extent and makes it easy to be installed into marking on the fly laser systems. In addition, S9 series UV laser has more stable laser cavity of better extensibility, which means the same laser cavity can be made into lasers of different powers with stability greatly improved.

## 產品特點

- 雷射波長354.7nm，重複頻率覆蓋範圍寬；功率範圍在3.0w~10.0w；
- 優越的光束質量 ( $M^2 < 1.2$ )，在所有頻率範圍內都嚴格保證；脈衝寬度 $< 12\text{ns}@30\text{k}$ ，加工時熱影響區域很小；
- 獨特的調Q控制技術，適合各種雷射應用控制需求；
- 全數字智能電源控制技術，操作簡單、方便監控；
- 支持與計算機通信，可通過RS232外部控制雷射器；
- 一體化設計，方便設備集成。

## FEATURES

- Laser wavelength at 354.7nm, repetition rates cover a wide range(single pulse to 200kHz) ; laser power ranging from 3.0w-10.0w;
- Exceptional beam quality ( $M^2 < 1.2$ ) , absolutely assured in all repetition rates; relatively short pulse width  $< 12\text{ns}@30\text{k}$  with little heat transfer to surrounding material; perfect beam spot quality(Beam Circularity $> 90\%$ ) ;
- Unique Q-switching technology, adapts a variety of control requirements of laser applications;
- Online refreshment for harmonic coupling technology; Excellent long term power stability ;
- Digital control technology for the driver, enables user to command through RS232 ;
- This laser adopts one - style design with compact and reasonable structure, easy installation.

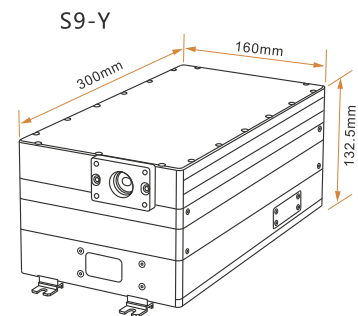
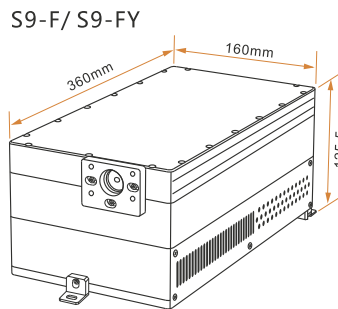
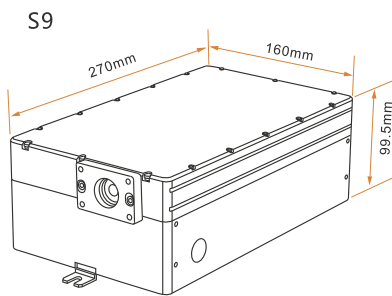


## 性能指標PARAMETER

參數項目 PARAMETER	數值 INDEX	說明 DESCRIPTION
雷射波長 (Laser wavelength)	354.7nm	
平均輸出功率(Average Output Power)	3.0-10.0W	@30kHz
脈衝寬度(Pulse Width)	<12ns	@30kHz
脈衝重複頻率 (Pulse Repetition Rate)	20kHz-100kHz	可客製
雷射輸出模式 (Spatial Mode)	TEM00	
光束質量 (M <sup>2</sup> )	<1.2	
光斑直徑 (Beam Diameter)	0.8±0.2mm	Measured at window
光束發散角 (Beam Full Divergence Angle)	<2mrad	
光斑橢圓度 (Beam Circularity)	>90%	
脈衝穩定性 (Pulse-to-Pulse Stability)	<2%	RMS/@30kHz
功率穩定性 (Average Power Stability)	<5%	RMS/8hr
光束指向穩定性 (Beam-Pointing Drift)	<30μrad/°C	
偏振度 (Polarization Ratio)	>100:1	
偏振方向 (Polarization Orientation)	Horizontal	
工作溫濕度 (Operating Temp. & RH)	10°C to 35°C	
	<80%	
儲存溫濕度 (Storage Temp. & RH)	-20°C to 65°C	
	<90%	
配電需求 (Electricity Requirement)	100-240VAC	單相Single phase
	50/60Hz	
功耗 (Power Consumption)	<500W	

雷射功率和其它特性可優化在不同的重複頻率範圍；所指溫度為環境溫度。

Laser power and other characteristics can be optimized in different repetition frequency ranges ; The temperature referred to is the ambient temperature.



### 主要應用領域

該系列雷射器專門為雷射打標機，精密切割機，精密鑽孔機，雷射剝線機，玻璃內雕機，鍵盤剝漆設備而設計。

### Application

Products of this series are specifically designed for laser marking machine, high precision cutting machine, high precision drilling machine, laser wire stripping machine, glass inner engraving machine, paint peeling equipment and so on.

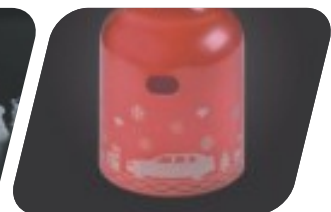
### 應用案例 Applications:



電子產品 Electronic products



快速成型 Rapid prototyping



塑料包裝 Plastic bottle

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