

## 3W UV Laser Parameters

激光器类型 Laser Type	3W UV	3W UV laser, All-in-one	3W UV laser, All-in-one
型号 Model	Seal-355-3(C)	Seal-355-3E	Seal-355-3SE
波长 Wavelength	355nm		
标称平均输出功率Nominal Average Output Power	>3W@30kHz		
脉冲重复率范围 Pulse Repetition Rate Range	20kHz-150kHz	—	—
脉冲宽度 Pulse Duration	<15ns@30kHz	<18ns@30 kHz	
推荐频率范围 Frequency Range <sup>[1]</sup>	—	20 kHz - 150 kHz	
空间模式 Spatial Mode	TEM <sub>00</sub>		
光束质量 Beam Quality(m <sup>2</sup> )	m <sup>2</sup> <1.2	M <sup>2</sup> ≤1.2	
光斑圆度 Beam Roundness	>90%		
光束发散角 Beam Full Divergence Angle	≤2mrad <sup>[2]</sup>		
输出光束直径 Output Beam Diameter(1/e <sup>2</sup> )	0.7±0.1mm/7±1 mm (with 10x expander)	Non-expand: 0.55±0.15 mm <sup>[3]</sup>	
内置扩束 Internal beam expander	—	6X <sup>[4]</sup>	
偏振度 Polarization Ratio	>100:1		
偏振方向 Polarization Orientation	Horizontal		
平均功率稳定性 Average Power Stability	<3% over 24hr	RMS≤3%@24hr	
脉冲稳定性 Pulse-to-Pulse Stability	<3%rms@30kHz	RMS≤3%@30 kHz	
冷却方式 Cooling Method	Water Cooling		
工作电压 Operating Voltage	DC 12V		

平均功耗 Average Power Consumption	300w	<250W	<180W
工作温湿度 Operating Temp.&RH	15 to 35°C;<80%	0°C~40°C; <80%	
储存温湿度 Storage Temp.&RH	-15°C to 50°C;<90%	15°C~50°C; <90%	
冷却能力Cooling Capacity	—	500 W	
环境供给电流 Supply Current	—	>7A	>15A
三维尺寸 Three-Dimensional Size	302mm*180mm*114mm(L* W* H)	263mm*120mm*107mm (L* W* H) [5]	263mm*120mm*106.5mm (L* W* H)
包装尺寸 Package Size	—	500mm*200mm*250mm (L* W* H)	550mm*205mm*255mm (L* W* H)
重量 Weight	8.3kg	Net weight≈6.0KG	Net weight≈4.8KG

[1] Refers to the better pulse stability during this frequency range.

[2] Refers to the direct output beam from the window, without beam expand.

[3] The measured position is at the laser output window.

[4] Standard is 10 x expander(output beam diameter will be around 3.5±0.5mm), 6x expander could be customized(output beam diameter will be around 2.0±0.5mm).

[5] Refers to the dimension without expander.

## 5W UV laser parameter

激光器类型 Laser Type	5W UV laser, All-in-one	5W UV laser, All-in-one	5W UV
型号 Model	Seal-355-5E	Seal-355-5SE	Seal-355-5(C)
波长 Wavelength	355nm		
平均输出功率 Average Output Power	>5W@40 kHz		
脉冲宽度 Pulse Duration	<18ns@40 kHz		<15ns@40kHz
脉冲重复率范围 Pulse Repetition Rate Range	—	—	20kHz-150kHz
频率范围 Frequency Range [1]	20 kHz - 150 kHz		—
空间模式 Spatial Mode	TEM00		
光束质量 Beam Quality(m2)	M2≤1.2		m2<1.2

光斑圆度 Beam Roundness	>90%		
光束发散角 Beam Full Divergence Angle	≤2 mrad [2]		
光斑直径 Beam Diameter (1/e 2)	Non-expand: 0.55±0.15 mm[3]	0.7±0.1mm/7±1mm (with 10x expander)	
内置扩束 Internal beam expander	6X [4]	—	
偏振度 Polarization Ratio	>100:1		
偏振方向 Polarization Orientation	Horizontal		
平均功率稳定性 Average Power Stability	RMS≤3%@24hr	<3% over 24hr	
脉冲稳定性 Pulse-to-Pulse Stability	RMS≤3%@40 kHz	<3%rms@40kHz	
工作温湿度 Operating Temp.&RH	0°C~40°C; <80%	15 to 35°C;<80%	
储存温湿度 Storage Temp.&RH	15°C~50°C; <90%	-15°C to 50°C;<90%	
冷却方式 Cooling Mode	Water-cool		
冷却能力 Cooling Capacity	500 W	—	
电力需求 Electricity Requirement	DC 12V		
环境供给电流 Supply Current	>7A	>15A	—
平均功耗 Average Power Consumption	<250W	<180W	350w
三维尺寸 Three-Dimensional Size	263mm*120mm*107mm (L* W* H) [5]	263mm*120mm*106.5mm (L* W* H)	302mm*180mm*114mm(L* W* H)
包装尺寸 Package Size	500mm*200mm*250mm (L* W* H)	550mm*205mm*255mm (L* W* H)	—
重量 Weight	With package≈7.6KG	With package≈6.5KG	8.3kg

[1] Refers to the better pulse stability during this frequency range.

[2] Refers to the direct output beam from the window, without beam expand.

[3] The measured position is at the laser output window.

[4]Standard is 10 x expander(output beam diameter will be around 3.5±0.5mm), 6x expander could be customized(output beam diameter will be around 2.0±0.5mm).

[6] Refers to the dimension without expander.

## 10W UV laser parameter

激光器类型 Laser Type	10EL UV integrated laser	10WS UV integrated laser	10W UV laser, All-in-one
型号 Model	Seal-355-10EL	Seal-355-10S	Seal-355-10S
波长 Wavelength	355nm		
平均功率 Mean Power	> 11.5W@60kHz	> 10W@60kHz	
脉冲宽度 Pulse Duration	<20ns@60kHz	<15ns@60kHz	
推荐频率范围 Frequency Range[1]	40kHz-150kHz	40kHz-300kHz	
空间模式 Spatial Mode	TEM00		
光束质量 Beam Quality(M2 )	M2 ≤ 1.2		
光斑圆度 Beam Circularity	≥ 90%	> 90%	
光束发散角 Beam Full Divergence Angle	≤ 2mrad[2]		
光斑直径 Beam Diameter (1/e <sup>2</sup> )	0.45±0.15mm		0.8±0.1 mm
内置扩束 Beam Expander Inside	15X [3]	10X	
偏振度 Polarization Ratio	> 100:1		
偏振方向 Polarization Orientation	Horizontal		
平均功率稳定性 Average Power Stability	RMS<5%@24hr	RMS≤3%@24hr	RMS≤3%@24hr

脉冲稳定性 Pulse-to-Pulse Stability	RMS<5%@60kHz	RMS≤3%@80kHz	
工作温湿度 Operating Temp.&RH	0°C~40°C; <80%	0°C~40°C; <80%	
存储温湿度 Storage Temp.&RH	0°C~50°C; <90%	-15°C~50°C; <90%	
冷却方式Cooling Mode	Water-cooling		
制冷量需求 Cooling Capacity Requirement	500W		
配电需求 Electricity Requirement	DC36V		
环境供给电流 Supply Current	>7A		—
平均功耗 Average Power Consumption	<300W	<250W	
三维尺寸 Three-Dimensional Size	405.5mm*180mm*119mm (L* W* H) [4]	302mm*180mm*114mm (L* W* H)	
包装尺寸 Package Size	520mm*320mm*220mm (L* W* H)	520mm*320mm*220mm (L* W* H)	—
重量 Weight	Net weight of the machine ≈7.3kg including packaging≈ 10.0KG	Net weight of the machine ≈8.8KG Including packaging ≈11.6KG	≈ 9.26 kg

[1] Indicates that the pulse stability of the laser is the best within this frequency range.

[2] Indicates that the laser is directly output from the window without passing through the beam expansion and shaping tube.

[3] The indicator is configured for 15x beam expansion, and 10x beam expansion can be customized.

[4] This refers to the three-dimensional dimensions of the non-expanded shape.