



XWS-30 紧凑型等离子体宽带光源



产品介绍:

XWS-30 是 XWS-65 标准款的紧凑型一体化版本，将泵浦激光放置在发光单位的灯室中，因此无需额外的驱动器来供电就可独立运行。与 XWS-65 相比，其体积小、发热量低，造型紧凑，使其非常适合集成到设备中。

Spectral brightness of XWS-30 light source in UV and VIS spectral region



XWS-30 光源的紫外-可见光波段的辐亮度曲线

产品特点:

- 连续激光等离子体放电
- 宽带波长范围: 190-2500nm
- 高光谱辐亮度: $\sim 42\text{mW}/(\text{mm}^2\cdot\text{sr}\cdot\text{nm})$
- 紧凑型、一体化封装设计
- 非常紧凑: $110\times 110\times 120\text{mm}$, 无额外散热
- 支持自由空间和光纤输出
- 可通过 USB-RS485 接口计算机控制

产品应用:

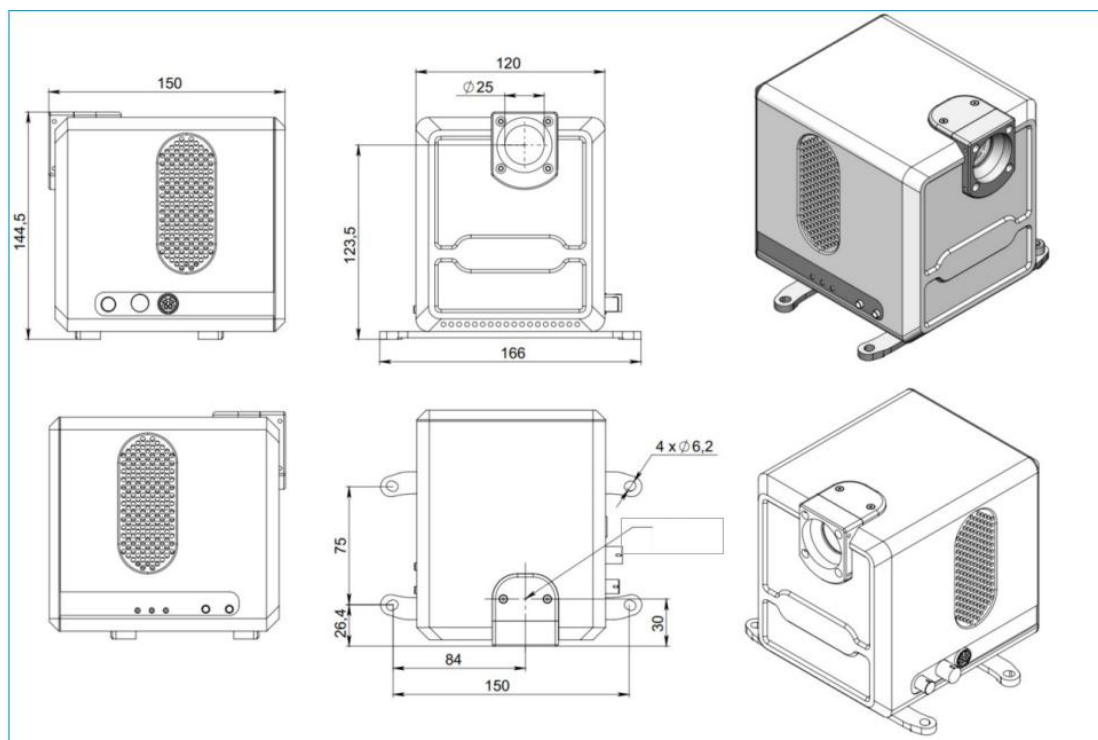
- 涂层镀膜分析
- 半导体制造设备中的深紫外光源
- 紫外线光源的无损检测
- 薄膜测量中厚膜仪的光源
- 太阳能模拟器的光源
- 光动力疗法 (PDT) 中的光源
- 微流控和芯片实验室领域的光源
- 荧光显微镜光源
- 分光镜光源



产品参数:

XWS-30 光学表征	
光谱范围	190-2500nm (XWS-30 UV); 250-2500nm (XWS-30 OFR)
光谱辐射亮度(350-550nm, 最小值/平均值/最大值)	34/ 42/ 48 mW/(mm ² ·sr·nm)
空间光输出功率(NA 0.5)	1.6W
灯泡介质材料	氙
发光体尺寸	160×320μm
使用寿命	10,000 小时
稳定性	STD<0.15%
数值孔径	0.4-0.5 范围内根据需求可调
空间光输出方式	C-mount, Thorlabs SM1, 30mm cage 等接口
光纤输出方式	SMA 或 FC 光纤 (仅支持 FCU 版本)
可选项配置	
光谱选择	UV 或 OFR
输出方式	自由空间输出或光纤耦合输出
灯室冷却方式	风冷
规格及工作条件	
灯室规格	166×149×145mm, 2kg
供电	100-240V, 50/60Hz
充气保护	6 级以上洁净度的氮气或氙气充气保护, 流量 1L/min

产品规格:





	XWS-30	XWS-65	XWS-65 DP	XWS-R	XWS-X	XWS-X DP	XWS-XR
Spectral range	190 - 2500 nm						
UV							
Performance							
Maximum spectral brightness for UV conf. (190-500 nm), mW/(mm ² ·mm·sr)	34 / 42 / 48	47 / 58 / 67	84 / 100 / 112	105 / 125 / 140	155 / 179 / 185		
Output power free space (NA 0.4)	N/A	Up to 3.1 W	Up to 3.2 W	Up to 3.2 W	Up to 3.2 W		
Output power free space (NA 0.5)	Up to 1.8 W	Up to 2.4 W	Up to 2.5 W	Up to 2.5 W	Up to 2.5 W		
Emitting body size (FWHM) for UV conf. (ring at 425 nm)	160 x 320 μm	165 x 360 μm	175 x 415 μm	160 x 290 μm	170 x 330 μm		
Life-time	10,000 hours						
Temporal and spatial stability	STD < 0.5%						
Lamp medium	Krypton						
Optical design							
Output NA	0.5 (standard) or 0.6				0.4 (standard) or 0.5		
External optic interface	C-mount, 30 mm optical cage (for standard NA only)						
Distance from plasma to output window	14.4 mm						22 mm
Optional configurations							
Water cooled optical head	N/A	-	-	-	-	-	-
Light output	Free space or fiber coupled (FC)						Free space
Additional features							
External control	USB - RS485 adapter	RJ45 (Ethernet, Web interface), COM port (RS 232)					
Interlock / Remote plasma control	Logic FSG	DB-15 connector					
Dimensions							
Optical head dimensions	161 x 161 x 161 mm	130 x 122 x 106 mm	130 x 113 x 106 mm	142 x 130 x 106 mm	130 x 122 x 106 mm	110 x 113 x 106 mm	142 x 130 x 106 mm
Water cooled optical head dimensions	N/A	130 x 113 x 106 mm	130 x 113 x 106 mm	130 x 113 x 106 mm	130 x 113 x 106 mm	130 x 113 x 106 mm	132 x 138 x 106 mm
Power supply dimensions	210 x 85 x 46 mm	85 x 175 x 122 mm					
Liquid cooling unit dimensions	N/A	350 x 160 x 184 mm					
FCU version							
Output power via fiber (600 μm), mW / ang / max	320 / 360 / 430 mW	530 / 565 / 625 mW	N/A				
Fiber interface	SM6						
Optical head dimensions	176 x 166 x 190 mm	130 x 122 x 155 mm	N/A				
Facility requirements							
Electrical	100-240 V, 50/60 Hz						
Gas purging	Nitrogen 99.999%						

*Data from the table above are applicable only for a new device

UV - Ultraviolet
DPR - Ozone Free Range
FCU - Fiber Coupler Unit
FS - Free Space
DP - Dual Port
R - Retroreflector
SP - Single Port

	XWS-30	XWS-65	XWS-65 DP	XWS-R
Spectral range	290 - 2500 nm			
OFR				
Performance				
Maximum spectral brightness for OFR conf. (190-500 nm), mW/(mm ² ·mm·sr)	34 / 36 / 36	37 / 51 / 60	75 / 88 / 102	75 / 88 / 102
Output power free space (NA 0.4)	N/A	Up to 3.2 W	Up to 3.2 W	Up to 3.2 W
Output power free space (NA 0.5)	Up to 1.5 W	Up to 2.1 W	Up to 2.1 W	Up to 2.1 W
Emitting body size (FWHM) for OFR conf. (ring at 425 nm)	160 x 320 μm	170 x 360 μm	170 x 360 μm	170 x 360 μm
Life-time	10,000 hours			
Temporal and spatial stability	STD < 0.5%			
Lamp medium	Krypton			
Optical design				
Output NA	0.5 (standard) or 0.6	0.4 (standard) or 0.5		
External optic interface	C-mount, 30 mm optical cage (for standard NA only)			
Distance from plasma to output window	14.4 mm	22 mm		
Optional configurations				
Water cooled optical head	N/A	-	-	-
Light output	Free space	Free space or fiber coupled (FC)	Free space	
Additional features				
External control	USB - RS485 adapter	RJ45 (Ethernet, Web interface), COM port (RS 232)		
Interlock / Remote plasma control	Logic FSG	DB-15 connector		
Dimensions				
Optical head dimensions	161 x 161 x 161 mm	130 x 122 x 106 mm	130 x 113 x 106 mm	142 x 130 x 106 mm
Water cooled optical head dimensions	N/A	130 x 113 x 106 mm	130 x 113 x 106 mm	132 x 138 x 106 mm
Power supply dimensions	210 x 85 x 46 mm	85 x 175 x 122 mm		
Liquid cooling unit dimensions	N/A	350 x 160 x 184 mm		
FCU version				
Output power via fiber (600 μm), mW / ang / max	N/A	390 / 450 / 510 mW	390 / 450 / 510 mW	N/A
Fiber interface	SM6			
Optical head dimensions	N/A	130 x 122 x 114 mm	130 x 113 x 121 mm	N/A
Facility requirements				
Electrical	100-240 V, 50/60 Hz			
Gas purging (recommended for OFR configuration)	Nitrogen 99.999%			