



LUV series

Deep UV laser source
Compact laser head
280nm and 266nm

UV Raman spectroscopy
Fluorescence Imaging
Protein autofluorescence
DNA detection
Cathodoluminescence

- * Up to 20 mW of CW optical power
- * Single Longitudinal Mode
- * Adjustable power 0% - 100%
- * Beam diameter 0.3 mm or 0.8 mm
- * TEM₀₀ collimated beam
- * Compact laser: 200 x 138 x 70 mm
- * Multimode fiber coupling option
- * AOM modulator option

266 nm

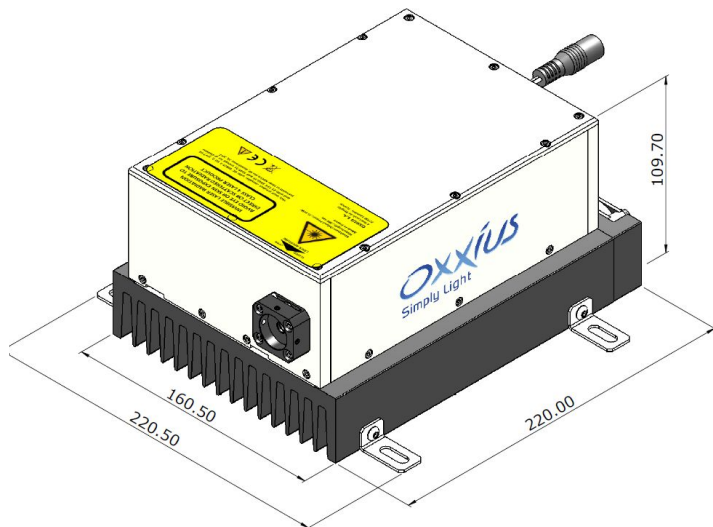
280 nm

Optical specifications

MODEL	LUV-266-10	LUV-266-20	LUV-280-10
Optical characteristics			
Central emission wavelength	266.2 nm	266.2 nm	280.7 nm
Spectral width	≤ 1 MHz (SLM)		
Polarization state	Linear, horizontal		
Polarization extinction ratio	≥ 100:1		
Continuous wave output power	10 mW	20 mW	10 mW
Power stability over 8 hours, temperature variation of ± 3°K	± 2 % p-to-p		
Beam characteristics	TEM ₀₀ collimated beam		
Beam waist diameter (1/e ²), at 50mm from output aperture	0.3 mm		
Beam divergence at 1/e ² , full angle, in far field	1.5 mrad		
Beam quality factor (M ²)	≤ 1.4		
Beam diameter options	x2 / x2.7 enlargement		
Beam waist diameter (1/e ²), at 50mm from output aperture	0.6 mm / 0.8 mm		
Fiber Coupling option			
Multimode Fiber Coupling	50µm / 100µm / 200µm core diameter		

Mechanical drawings

Laser head (with heat sink)



General specifications

Technology	External monolithic resonant cavity
Communication interface	USB / RS232
Laser Controller	External
Start-up time	10 minutes typ., 15 minutes max.
Supply voltage, AC	110V - 240V
Power consumption	20 W typ., 25 W max.
Cooling method, laser head laser driver	Conduction Forced air flow
[OPTION] Heat sink for the laser head	
Operating temperature, measured on the base plate	20 °C to 40°C
Dimensions (L x W x H), laser head laser head with optional heat sink laser driver	200 x 138 x 70 mm 220 x 161 x 110 mm 100 x 180 x 140 mm

