

# FQCW 266-500

Diode Pumped Continuous Wave Solid State Laser

- 266 nm
- Continuous Wave
- Single Frequency
- Low Intensity Noise
- $M^2 < 1.3$ , TEM<sub>00</sub>
- Up to 500 mW
- Air Cooled
- Patented Design (\*)



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<b>Optical Data</b>	Wavelength	266 ± 1 nm
	Nominal Output Power	500 ± 5 mW
	Output Power Adjustability	50 – 550 mW
	Linewidth	< 300 kHz
	Coherence Length	> 1000 m
	Beam Propagation Factor M <sup>2</sup>	< 1.3, TEM <sub>00</sub>
	Polarisation orientation and purity	vertical, > 500:1
	Beam Diameter	1.0 ± 0.2 mm
	Beam Divergence	< 0.45 mrad
	Beam Pointing Stability <sup>(2)</sup>	< 3 µrad/K, < 3 µrad/h
	Static Alignment Tolerance <sup>(2)</sup>	lateral ± 0.25 mm, angular ± 2.5 mrad
	Power Stability <sup>(1)</sup>	< 0.5 %rms
	Intensity Noise (1 Hz – 100 kHz)	< 1 %rms
	Intensity Noise (100 kHz – 250 MHz)	< 0.2 %rms
<b>Electrical Data</b>	Power Consumption Mean (Max)	< 200 W (450 W)
	Line Voltage	90 - 250 V AC (50-60 Hz)
	Communication Interfaces	USB / RS232 / Ethernet
	Safety Features	key switch, interlock, electrical shutter
<b>Miscellaneous</b>	Warm-up Time	< 45 min
	Operating Temperature (laser head)	20 - 35 °C non-condensing
	Laser Head Dimensions	143 x 325 x 739 mm <sup>3</sup> (H x W x L)
	Control Unit Dimensions	184 x 483 x 411 mm <sup>3</sup> (H x W x L)
	Laser Head Weight	27 kg
	Control Unit Weight	8 kg
<b>Required Options</b>	Purge Interface for Laser Head	CDA 1.5 LPM, 50 PSI, SH<10 PPM

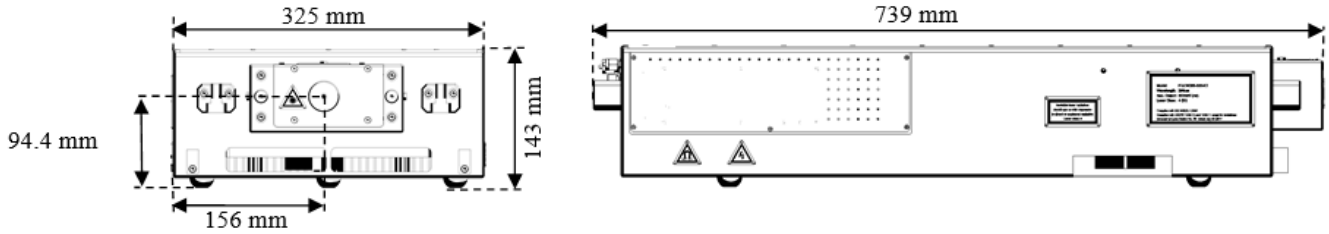
### Notes

1. After 30 minutes warm-up in the temperature range 20 - 35 °C, temperature change < 1 K/h.
2. Position and angle of static alignment tolerances are specified with regard to laser beam exit.
3. The exit window is equipped with the Manual Window Shifter (MWS) in case of external photo contamination. This laser system is equipped with the Automatic Crystal Shifter (ACS).

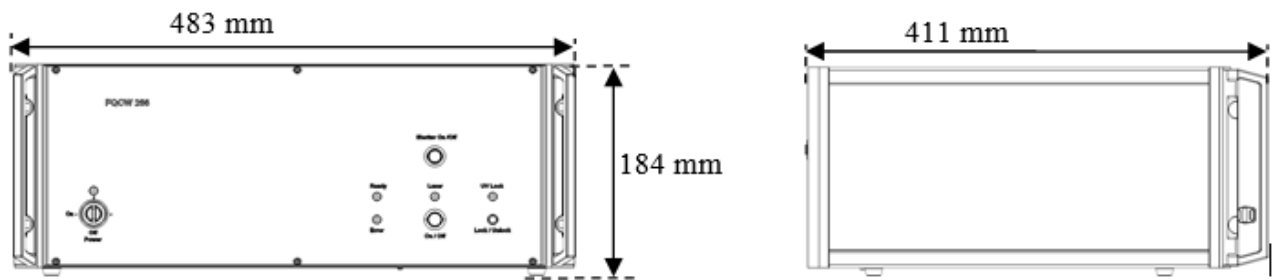
(\*) Protected by patents: DE10339210B4, EP1344105B1, US7027209B2, DE102010064382B4, US9429814B2, DE102012212428B4, US9024247

## Dimensions

Laser Head:



Control Unit:



All dimensions in mm

## Laser Safety Labels

**FQCW266 laser sources are class 4 / IV lasers according to IEC 60825-1**

