

PSPW 355-30

Diode Pumped Pulsed Wave Solid State Laser

1064nm/532nm/355nm

Pulsed Wave

Single Frequency

Low Intensity Noise

- **$M^2 < 1.3$, TEM₀₀**

Up to 30 W

Water Cooled

Patented Design



lithography · inspection · spectroscopy · analytics

Optical Data	Wavelength	1064nm/532nm/355nm
	Output Power (Adjustability)	100W@1064nm 、 60W@532nm 、 30W@355nm
	Frequency	Up to 2MHz
	Beam Propagation Factor M^2 (average)	< 1.3, TEM ₀₀
	Beam Propagation Factor M^2_x (horizontal)	< 1.2, TEM ₀₀
	Beam Propagation Factor M^2_y (vertical)	< 1.35, TEM ₀₀
	Polarisation orientation and purity	vertical, > 100:1
	Pulsed Width	< 10ps
	Fractional Frequency	1000
	PST Function	Included
	Beam Diameter	< 4mm
	Power Stability (over 8 h)	< 1 % rms
	Pulse Stability (over 8 h)	< 2 % rms
	Intensity Noise (100 kHz – 250 MHz)	< 0.2 % rms
Life Time	Crystal Spot Life Time	1,000 hours
	Total Life Time (before first service)	16,000 hours
Electrical Data	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
Miscellaneous	Warm-up Time	< 45 min
	Operating Temperature (laser head)	20 - 25 °C non-condensing
	Laser Head Dimensions	143 x 325 x 739 mm ³ (H x W x L)
	Control Unit Dimensions	184 x 483 x 411 mm ³ (H x W x L)
	Laser Head Weight	36 kg
	Control Unit Weight	12 kg
Required Options	Purge Interface for Laser Head	CDA 1.5 LPM, 50 PSI, SH<10 PPM

Notes

General requirement: 30 minutes warm-up in the temperature range 20 - 25 °C, temperature change < 1 K/h.

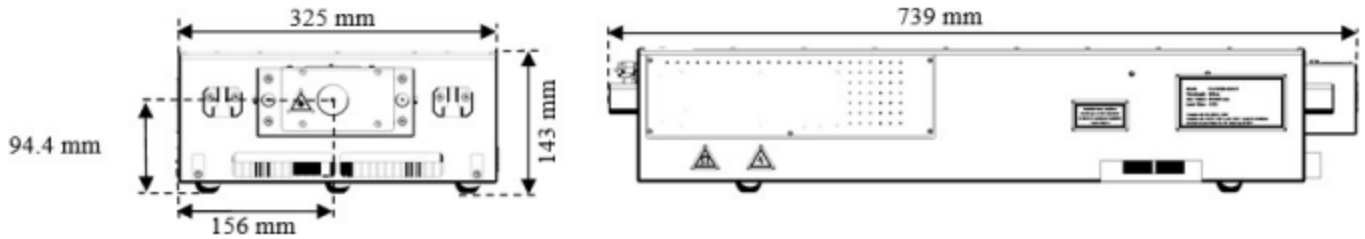
1. Referenced to kinematic mounting base

2. Position and angle of static alignment tolerances are specified with regard to laser beam exit.

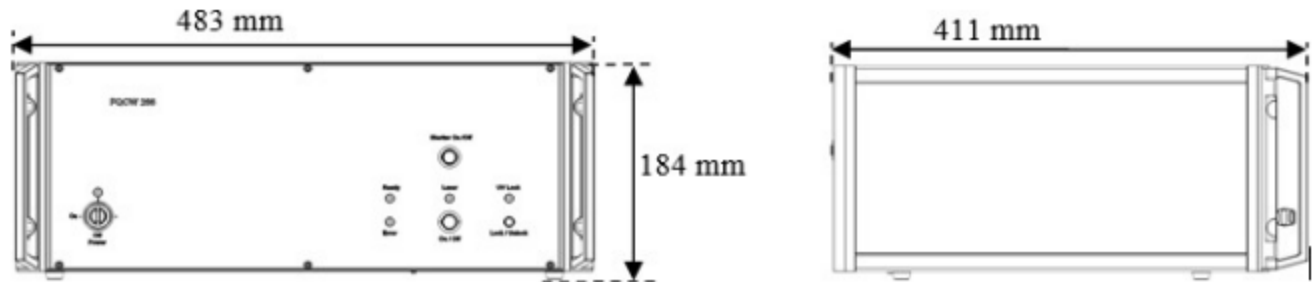
(*) Protected by patents: DE10339210B4, EP1344105B1, US7027209B2, DE102010064382B4, US9429814B2, DE102012212428B4, US9024247

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

