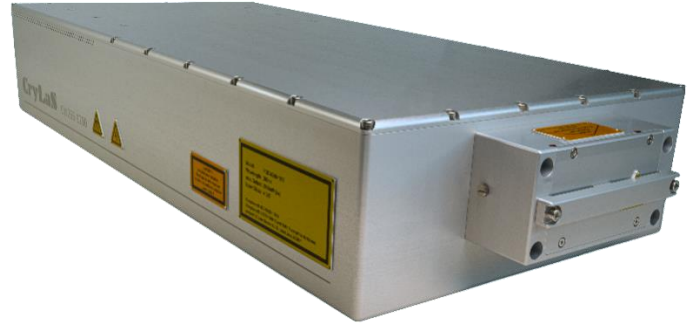


FQCW266-600

Diode Pumped Continuous Wave Solid State Laser

- 266 nm
- Continuous Wave
- Single Frequency
- Low Power Noise
- $M^2 < 1.35$, TEM₀₀
- Up to 600 mW
- Patented Design ⁽⁵⁾



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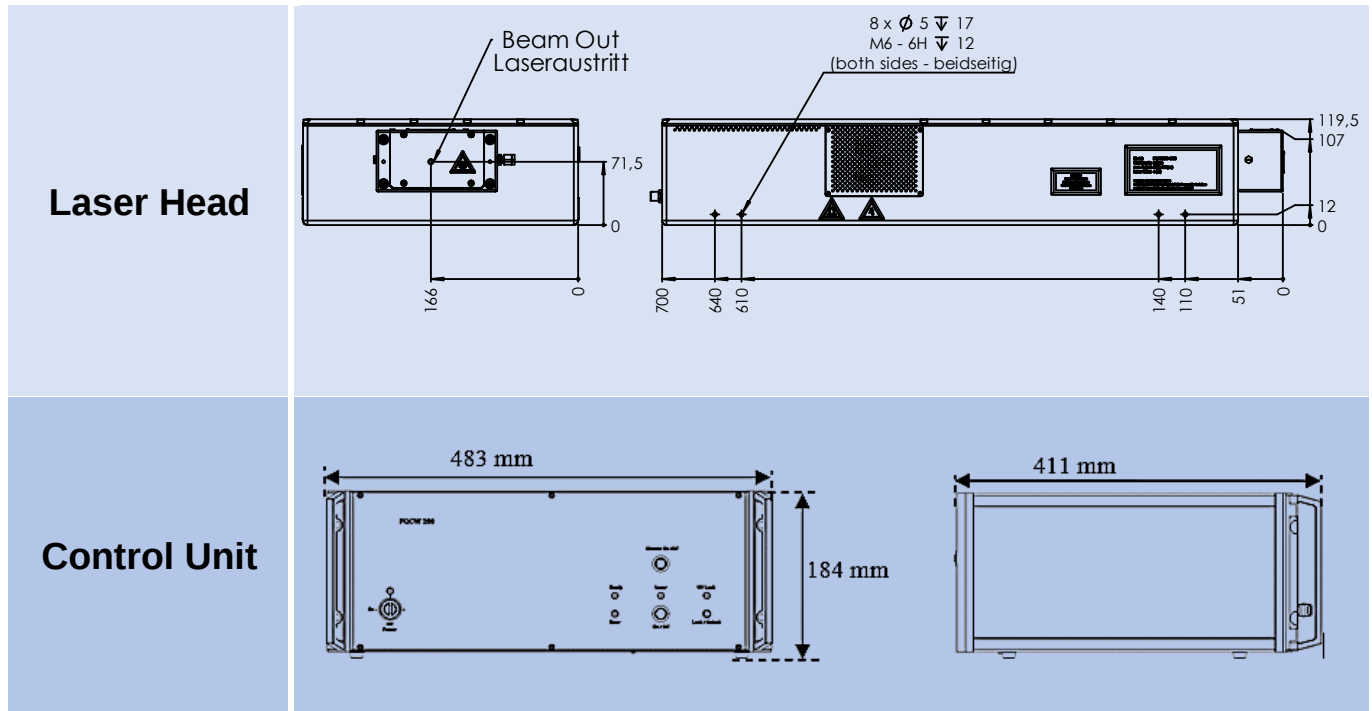
Optical Data	Wavelength	266 ± 0.05 nm
	Nominal Output Power	600 mW ± 5 %
	Output Power Adjustability	60 mW to 600 mW
	Line Width	< 300 kHz
	Beam Propagation Factor M^2 (average)	< 1.3, TEM ₀₀
	Beam Propagation Factor M^2_x (horizontal)	< 1.2, TEM ₀₀
	Beam Propagation Factor M^2_y (vertical)	< 1.35, TEM ₀₀
	Polarisation Orientation and Purity	Vertical, > 500:1
	Beam Diameter	1.1 ± 0.2 mm
	Beam Divergence	< 0.45 mrad
	Static Alignment Tolerance ⁽¹⁾	Lateral ± 0.25 mm Angular ± 2.5 mrad
	Spot-to-Spot Beam Pointing Variation ⁽²⁾	± 225 µrad
	Power Stability (0.5 Hz over 8 h)	< 0.2 % rms
	Power Noise (1 Hz – 100 kHz)	< 1 % rms
	Power Noise (100 kHz – 250 MHz)	< 0.2 % rms
Life Time	Typical UV Crystal Spot Life Time	2,000 hours
	Typical 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 Typical (Max) ⁽³⁾	30 min (45 min)
	Operating Temperature (Laser Head)	20 - 25 °C non-condensing
	Cooling via Bearing Surface, Required Thermal Resistance ⁽⁴⁾	1/40 KW @ 25 °C 1/20 KW @ 20 °C Cooling Surface
	Laser Head Dimensions	< 120 x 310 x 715 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
Further Requirement	Purge Supply for Laser Exit Window	Flow 0.2 l/min CDA, SH < 10 PPM or N2 (Purity Grade 5.0 "Scientific" or Better)

Notes:

- (1) Position and angle of static alignment tolerances are specified with regard to laser beam exit.
- (2) Refers to adjacent spots on non-linear UV crystal.
- (3) Warm-up in the temperature range 20 - 25 °C, temperature change < 1 K/h.
- (4) Different cooling options (e.g. air flow, water cooling) available upon request.
- (5) Protected by patents:

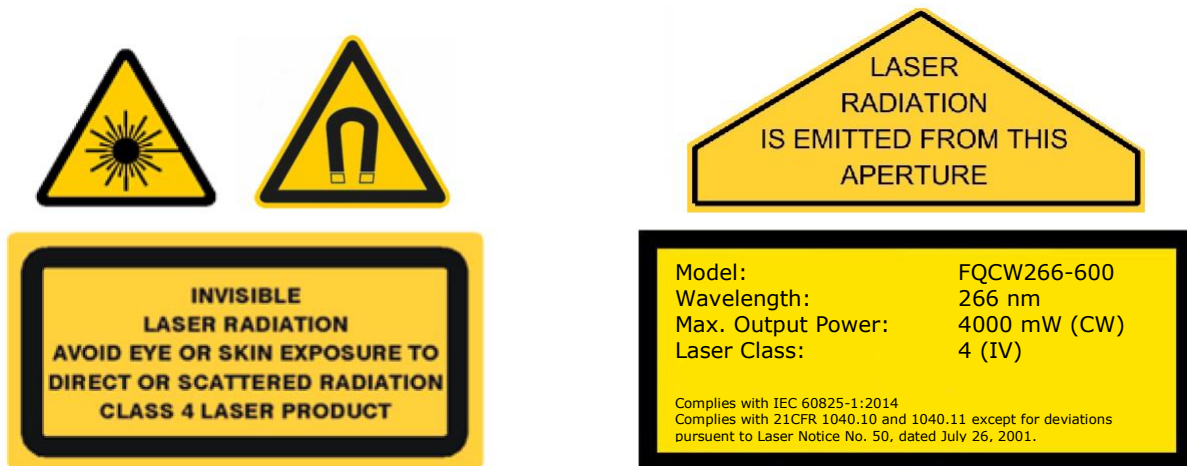
DE10339210B4, EP1344105B1, US7027209B2, DE102010064382B4, US9429814B2, DE102012212428B4, US9024247.

Dimensions



Laser Safety Labels

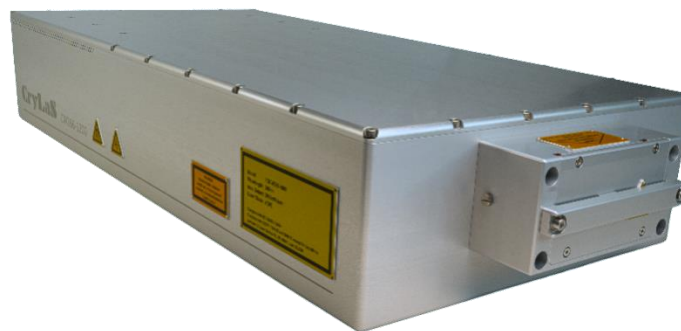
FQCW266 laser sources are class 4 / IV lasers according to IEC 60825-1



FQCW266-1200

Diode Pumped Continuous Wave Solid State Laser

- 266 nm
- Continuous Wave
- Single Frequency
- Low Power Noise
- $M^2 < 1.3$, TEM₀₀
- Up to 1200 mW
- Patented Design ⁽⁵⁾



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Optical Data	Wavelength	266 ± 0.05 nm
	Nominal Output Power	1200 mW ± 5 %
	Output Power Adjustability	120 mW to 1200 mW
	Line Width	< 300 kHz
	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, > 500:1
	Beam Diameter	1.1 ± 0.2 mm
	Beam Divergence	< 0.45 mrad
	Static Alignment Tolerance ⁽¹⁾	Lateral ± 0.25 mm Angular ± 2.5 mrad
	Spot-to-Spot Beam Pointing Variation ⁽²⁾	± 225 µrad
	Power Stability (0.5 Hz over 8 h)	< 0.2 % rms
	Power Noise (1 Hz – 100 kHz)	< 1 % rms
	Power Noise (100 kHz – 250 MHz)	< 0.2 % rms
Life Time	Typical UV Crystal Spot Life Time	2000 hours
	Typical Life Time (before First Service)	16000 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 Typical (Max) ⁽³⁾	30 min (45 min)
	Operating Temperature (Laser Head)	20 - 25 °C non-condensing
	Cooling via Bearing Surface, Required Thermal Resistance ⁽⁴⁾	1/40 K/W @ 25 °C 1/20 K/W @ 20 °C Cooling Surface
	Laser Head Dimensions	< 120 x 310 x 715 mm ³ (H x W x L)
	Control Unit Dimensions	< 134 x 483 x 411 mm ³ (H x W x L)
	Laser Head Weight	< 36 kg
	Control Unit Weight	< 12 kg
Required Options	Purge Supply Laser Exit Window	Flow 0.2 l/min CDA, SH < 10 PPM or N2 (Purity Grade 5.0 "Scientific" or Better)

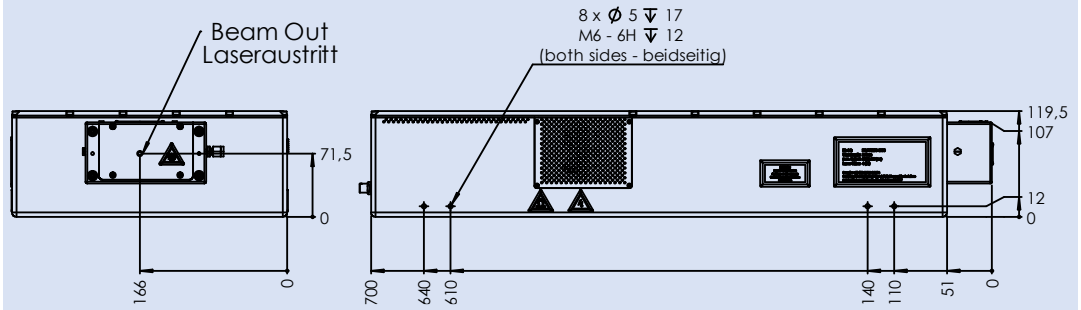
Notes:

- (1) Position and angle of static alignment tolerances are specified with regard to laser beam exit.
- (2) Refers to adjacent spots on non-linear UV crystal.
- (3) Warm-up in the temperature range 20 - 25 °C, temperature change < 1 K/h.
- (4) Different cooling options (e.g. air flow, water cooling) available upon request.
- (5) Protected by patents:

DE10339210B4, EP1344105B1, US7027209B2, DE102010064382B4, US9429814B2, DE102012212428B4, US9024247.

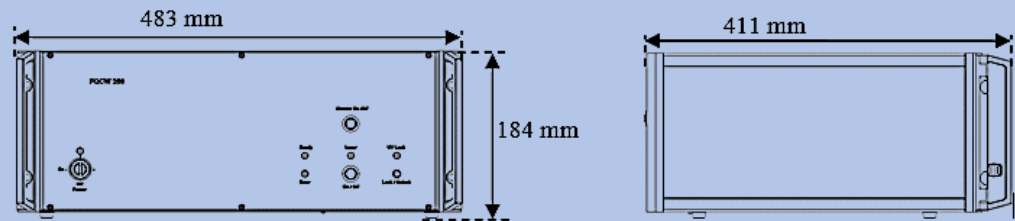
Dimensions

Laser Head



All dimensions in mm.

Control Unit



Laser Safety Labels

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

