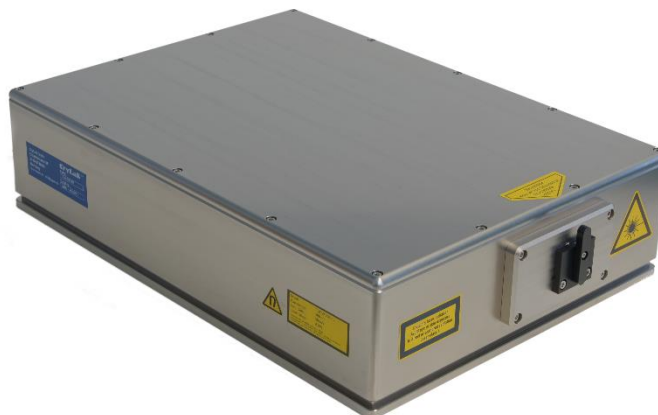


FQCW 266-10

Diode Pumped Continuous Wave Solid State Laser

- 266 nm
- Continuous Wave
- Single Frequency
- Low Intensity Noise
- $M^2 < 1.3$, TEM₀₀
- Up to 10 mW
- Conduction Cooled
- Patented Design (*)



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Optical Data	Wavelength	266 ± 1 nm
	Nominal Output Power	10 ± 1 mW
	Output Power Adjustability	2 – 12 mW
	Linewidth	< 300 kHz
	Coherence Length	> 1000 m
	Beam Propagation Factor M ²	< 1.3, TEM ₀₀
	Polarisation orientation and purity	vertical, > 100:1
	Beam Diameter	0.6 ± 0.1 mm
	Beam Divergence	< 0.8 mrad
	Beam Pointing Stability ⁽²⁾	< 3 µrad/K, < 3 µrad/h
	Static Alignment Tolerance ⁽²⁾	lateral ± 0.25 mm, angular ± 2.5 mrad
	Power Stability ⁽¹⁾	< 2 %rms
	Noise (100 kHz – 10 MHz)	< 1 %rms
Electrical Data	Power Consumption Mean (Max)	< 100 W (200 W)
	Line Voltage	90 - 250 V AC (50-60 Hz)
	Communication Interfaces	USB / RS232
	Safety Features	key switch, interlock
Miscellaneous	Warm-up Time (cold starting)	< 15 min
	Operating Temperature (laser head)	20 - 35 °C non-condensing
	Laser Head Dimensions	91 x 270 x 379 mm ³ (H x W x L)
	Control Unit Dimensions	115 x 363 x 325 mm ³ (H x W x L)
	Laser Head Weight	14.7 kg
	Control Unit Weight	5.5 kg

Notes

1. After 30 minutes warm-up in the temperature range 20 - 35 °C, temperature change < 1 K/h.

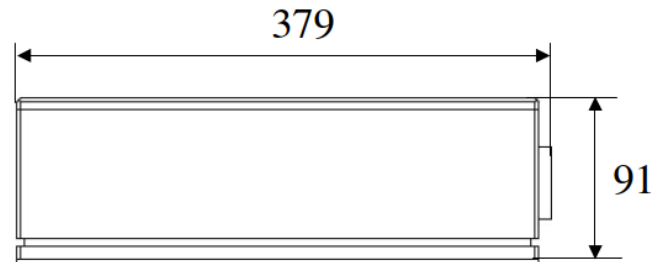
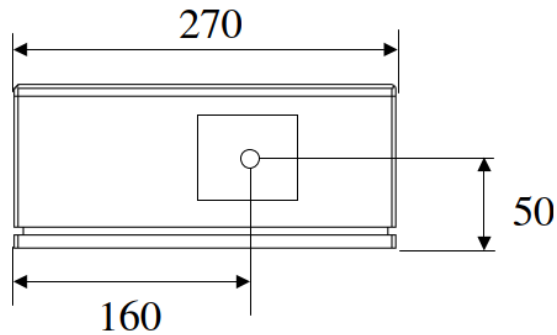
2. Position and angle of static alignment tolerances are specified with regard to laser beam exit.

3. The exit window is equipped with the Manual Window Shifter (MWS) in case of external photo contamination. This laser system is not equipped with the Automatic Crystal Shifter (ACS) due to the lower power densities on all internal optical elements.

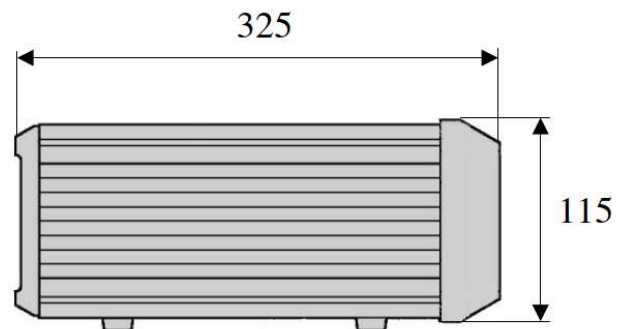
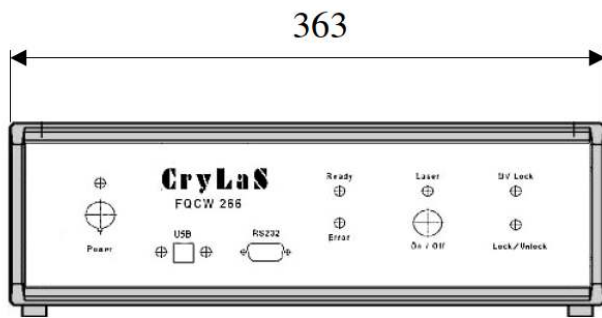
(*) Protected by patents: DE10339210B4, EP1344105B1, US7027209B2, DE102010064382B4, US9429814B2

Dimensions

Laser Head:



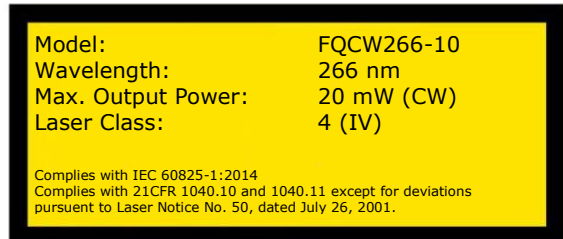
Control Unit:



All dimensions in mm

Laser Safety Labels

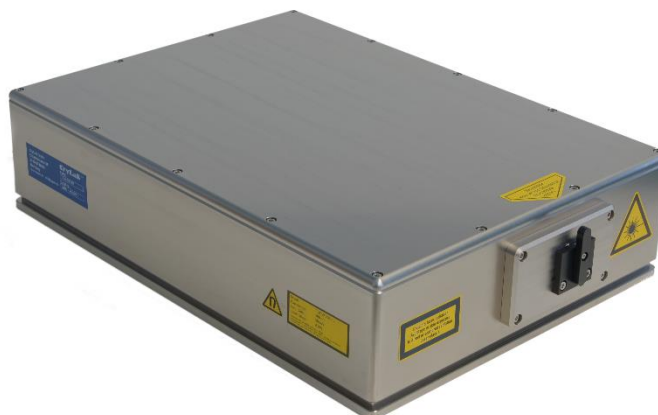
FQCW266 laser sources are class 4 / IV lasers according to IEC 60825-1



FQCW 266-25

Diode Pumped Continuous Wave Solid State Laser

- 266 nm
- Continuous Wave
- Single Frequency
- Low Intensity Noise
- $M^2 < 1.3$, TEM₀₀
- Up to 25 mW
- Conduction Cooled
- Patented Design (*)



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Optical Data	Wavelength	266 ± 1 nm
	Nominal Output Power	25 ± 2 mW
	Output Power Adjustability	3 – 30 mW
	Linewidth	< 300 kHz
	Coherence Length	> 1000 m
	Beam Propagation Factor M ²	< 1.3, TEM ₀₀
	Polarisation orientation and purity	vertical, > 100:1
	Beam Diameter	0.6 ± 0.1 mm
	Beam Divergence	< 0.8 mrad
	Beam Pointing Stability ⁽²⁾	< 3 µrad/K, < 3 µrad/h
	Static Alignment Tolerance ⁽²⁾	lateral ± 0.25 mm, angular ± 2.5 mrad
	Power Stability ⁽¹⁾	< 2 %rms
	Noise (100 kHz – 10 MHz)	< 1 %rms
Electrical Data	Power Consumption Mean (Max)	< 100 W (200 W)
	Line Voltage	90 - 250 V AC (50-60 Hz)
	Communication Interfaces	USB / RS232
	Safety Features	key switch, interlock
Miscellaneous	Warm-up Time (cold starting)	< 15 min
	Operating Temperature (laser head)	20 - 35 °C non-condensing
	Laser Head Dimensions	91 x 270 x 379 mm ³ (H x W x L)
	Control Unit Dimensions	115 x 363 x 325 mm ³ (H x W x L)
	Laser Head Weight	14.7 kg
	Control Unit Weight	5.5 kg

Notes

1. After 30 minutes warm-up in the temperature range 20 - 35 °C, temperature change < 1 K/h.

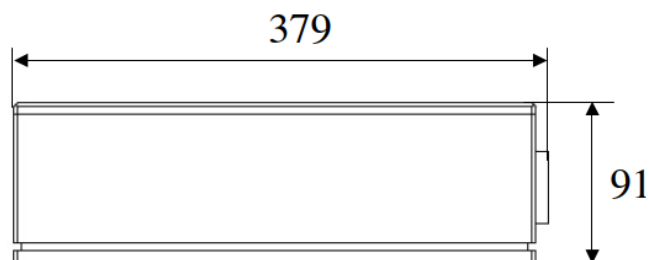
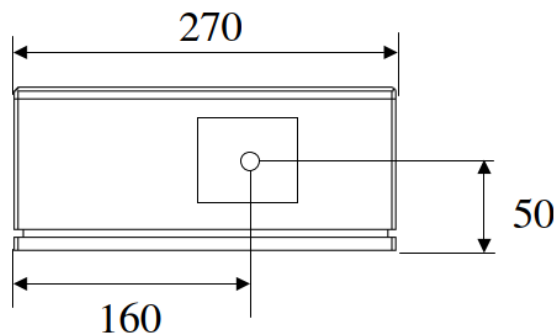
2. Position and angle of static alignment tolerances are specified with regard to laser beam exit.

3. The exit window is equipped with the Manual Window Shifter (MWS) in case of external photo contamination. This laser system is not equipped with the Automatic Crystal Shifter (ACS) due to the lower power densities on all internal optical elements.

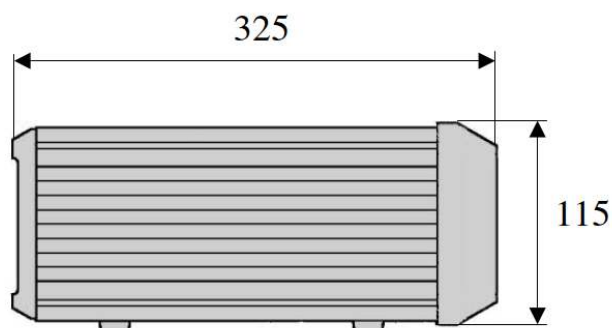
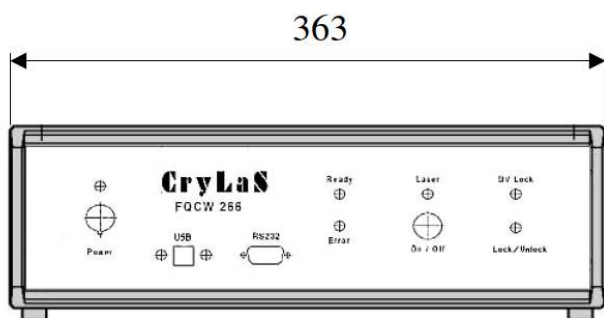
(*) Protected by patents: DE10339210B4, EP1344105B1, US7027209B2, DE102010064382B4, US9429814B2

Dimensions

Laser Head:



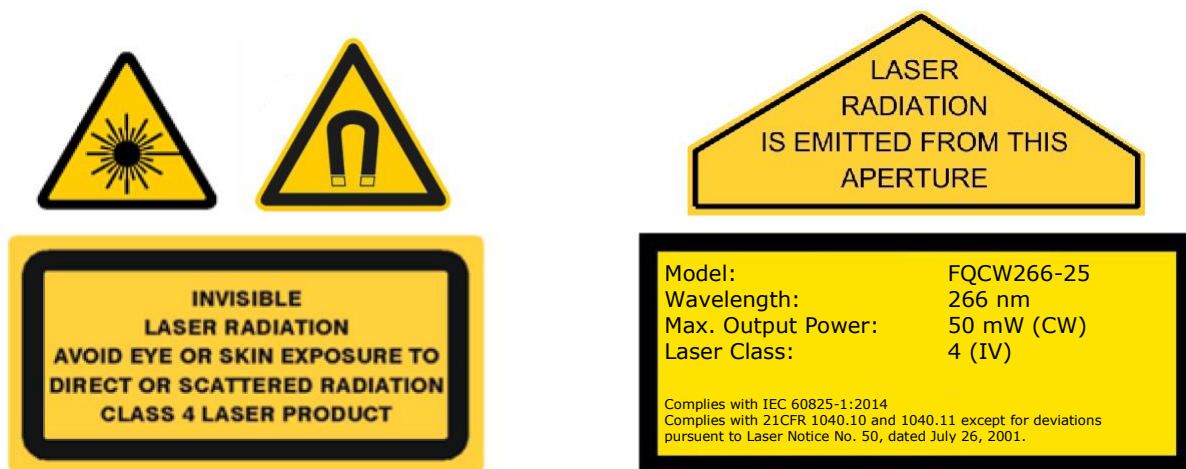
Control Unit:



All dimensions in mm

Laser Safety Labels

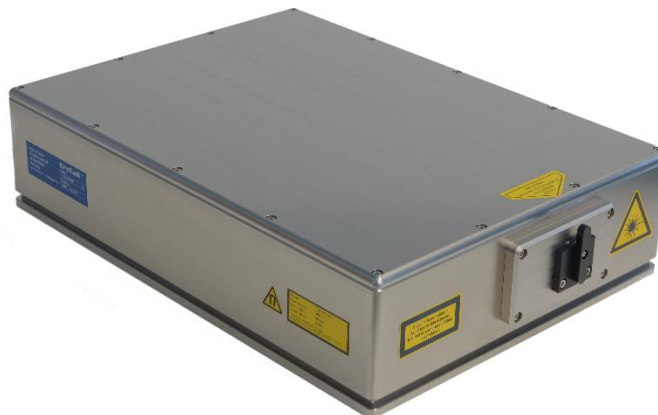
FQCW266 laser sources are class 4 / IV lasers according to IEC 60825-1



FQCW 266-50

Diode Pumped Continuous Wave Solid State Laser

- 266 nm
- Continuous Wave
- Single Frequency
- Low Intensity Noise
- $M^2 < 1.3$, TEM₀₀
- Up to 50 mW
- Conduction Cooled
- Patented Design (*)



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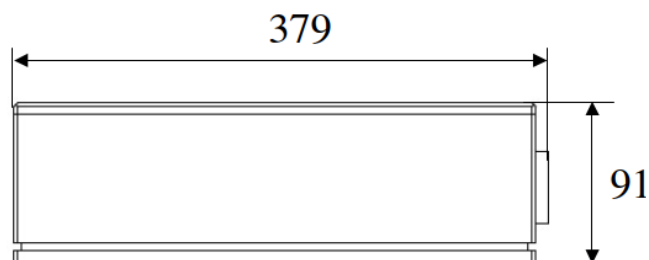
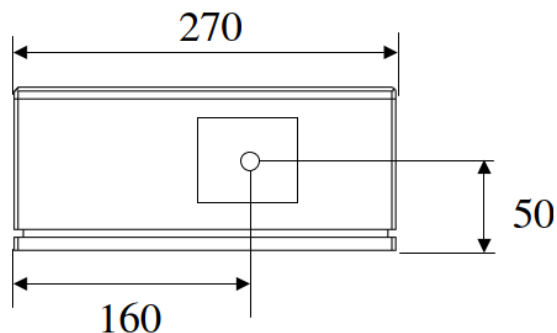
Optical Data	Wavelength	266 ± 1 nm
	Nominal Output Power	50 ± 2 mW
	Output Power Adjustability	5 – 55 mW
	Linewidth	< 300 kHz
	Coherence Length	> 1000 m
	Beam Propagation Factor M ²	< 1.3, TEM ₀₀
	Polarisation orientation and purity	vertical, > 100:1
	Beam Diameter	0.6 ± 0.1 mm
	Beam Divergence	< 0.8 mrad
	Beam Pointing Stability ⁽²⁾	< 3 µrad/K, < 3 µrad/h
	Static Alignment Tolerance ⁽²⁾	lateral ± 0.25 mm, angular ± 2.5 mrad
	Power Stability ⁽¹⁾	< 1 %rms
	Noise (100 kHz – 10 MHz)	< 1 %rms
Electrical Data	Power Consumption Mean (Max)	< 100 W (200 W)
	Line Voltage	90 - 250 V AC (50-60 Hz)
	Communication Interfaces	USB / RS232
	Safety Features	key switch, interlock
Miscellaneous	Warm-up Time (cold starting)	< 15 min
	Operating Temperature (laser head)	20 - 35 °C non-condensing
	Laser Head Dimensions	91 x 270 x 379 mm ³ (H x W x L)
	Control Unit Dimensions	115 x 363 x 325 mm ³ (H x W x L)
	Laser Head Weight	14.7 kg
	Control Unit Weight	5.5 kg

Notes

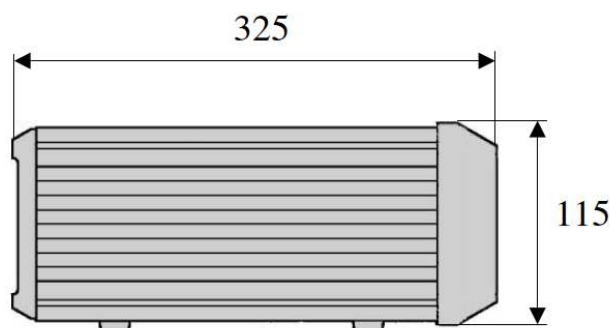
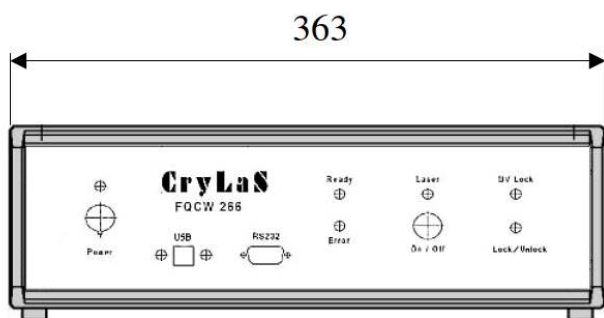
1. After 30 minutes warm-up in the temperature range 20 - 35 °C, temperature change < 1 K/h.
 2. Position and angle of static alignment tolerances are specified with regard to laser beam exit.
 3. The exit window is equipped with the Manual Window Shifter (MWS) in case of external photo contamination. This laser system is equipped with the Automatic Crystal Shifter (ACS).
- (*) Protected by patents: DE10339210B4, EP1344105B1, US7027209B2, DE102010064382B4, US9429814B2

Dimensions

Laser Head:



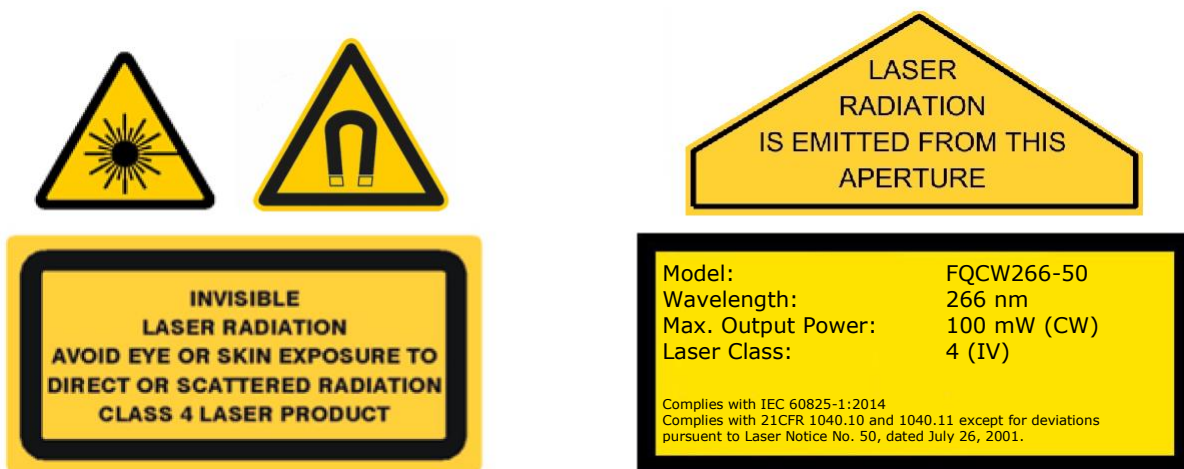
Control Unit:



All dimensions in mm

Laser Safety Labels

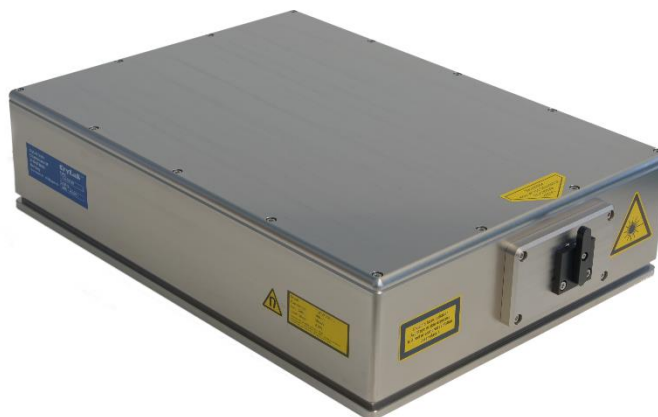
FQCW266 laser sources are class 4 / IV lasers according to IEC 60825-1



FQCW 266-100

Diode Pumped Continuous Wave Solid State Laser

- 266 nm
- Continuous Wave
- Single Frequency
- Low Intensity Noise
- $M^2 < 1.3$, TEM₀₀
- Up to 100 mW
- Conduction Cooled
- Patented Design (*)



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Optical Data	Wavelength	266 ± 1 nm
	Nominal Output Power	100 ± 3 mW
	Output Power Adjustability	10 – 110 mW
	Linewidth	< 300 kHz
	Coherence Length	> 1000 m
	Beam Propagation Factor M ²	< 1.3, TEM ₀₀
	Polarisation orientation and purity	vertical, > 100:1
	Beam Diameter	0.6 ± 0.1 mm
	Beam Divergence	< 0.8 mrad
	Beam Pointing Stability ⁽²⁾	< 3 µrad/K, < 3 µrad/h
	Static Alignment Tolerance ⁽²⁾	lateral ± 0.25 mm, angular ± 2.5 mrad
	Power Stability ⁽¹⁾	< 1 %rms
	Noise (100 kHz – 10 MHz)	< 1 %rms
Electrical Data	Power Consumption Mean (Max)	< 100 W (200 W)
	Line Voltage	90 - 250 V AC (50-60 Hz)
	Communication Interfaces	USB / RS232
	Safety Features	key switch, interlock
Miscellaneous	Warm-up Time (cold starting)	< 15 min
	Operating Temperature (laser head)	20 - 35 °C non-condensing
	Laser Head Dimensions	91 x 270 x 379 mm ³ (H x W x L)
	Control Unit Dimensions	115 x 363 x 325 mm ³ (H x W x L)
	Laser Head Weight	14.7 kg
	Control Unit Weight	5.5 kg

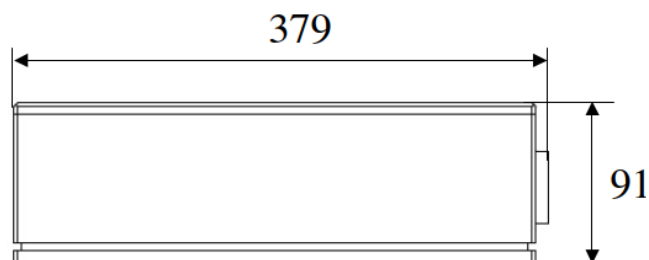
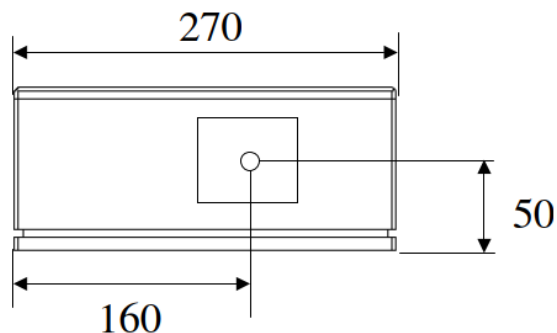
Notes

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).

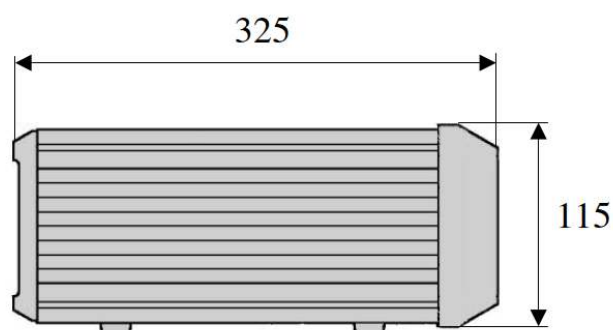
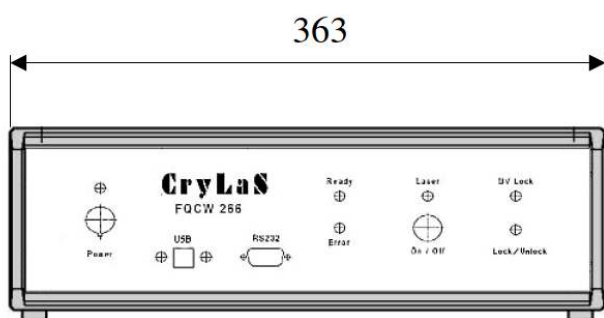
(*) Protected by patents: DE10339210B4, EP1344105B1, US7027209B2, DE102010064382B4, US9429814B2

Dimensions

Laser Head:



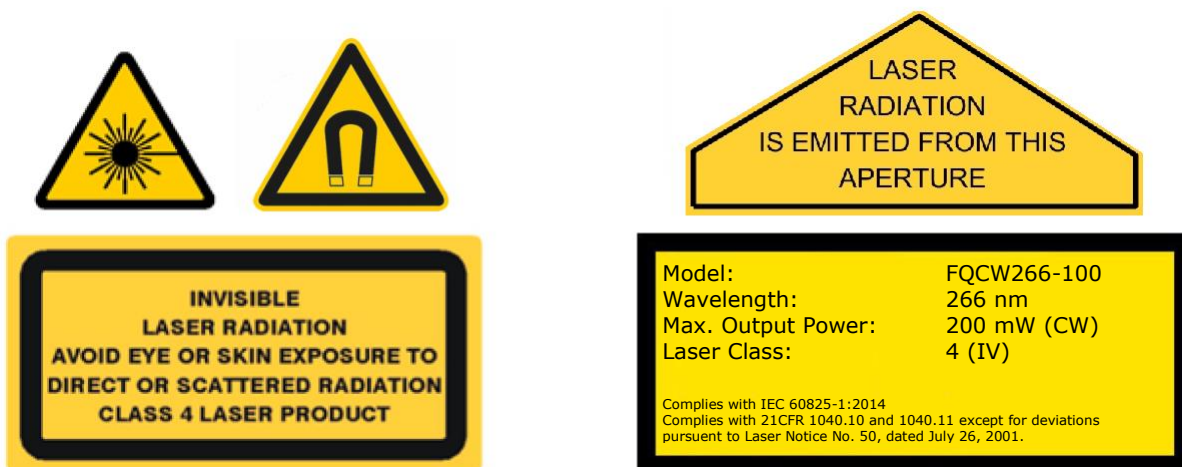
Control Unit:



All dimensions in mm

Laser Safety Labels

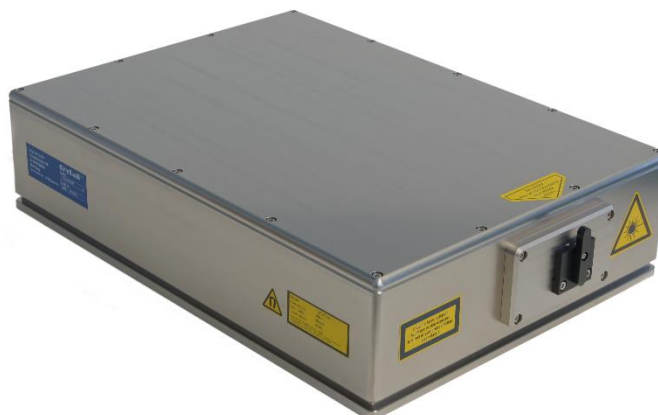
FQCW266 laser sources are class 4 / IV lasers according to IEC 60825-1



FQCW 266-200

Diode Pumped Continuous Wave Solid State Laser

- 266 nm
- Continuous Wave
- Single Frequency
- Low Intensity Noise
- $M^2 < 1.3$, TEM₀₀
- Up to 200 mW
- Conduction Cooled
- Patented Design (*)



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Optical Data	Wavelength	266 ± 1 nm
	Nominal Output Power	200 ± 5 mW
	Output Power Adjustability	20 – 220 mW
	Linewidth	< 300 kHz
	Coherence Length	> 1000 m
	Beam Propagation Factor M ²	< 1.3, TEM ₀₀
	Polarisation orientation and purity	vertical, > 100:1
	Beam Diameter	0.6 ± 0.1 mm
	Beam Divergence	< 0.8 mrad
	Beam Pointing Stability ⁽²⁾	< 3 µrad/K, < 3 µrad/h
	Static Alignment Tolerance ⁽²⁾	lateral ± 0.25 mm, angular ± 2.5 mrad
	Power Stability ⁽¹⁾	< 1 %rms
	Noise (100 kHz – 10 MHz)	< 1 %rms
Electrical Data	Power Consumption Mean (Max)	< 100 W (200 W)
	Line Voltage	90 - 250 V AC (50-60 Hz)
	Communication Interfaces	USB / RS232
	Safety Features	key switch, interlock
Miscellaneous	Warm-up Time (cold starting)	< 15 min
	Operating Temperature (laser head)	20 - 35 °C non-condensing
	Laser Head Dimensions	91 x 270 x 379 mm ³ (H x W x L)
	Control Unit Dimensions	115 x 363 x 325 mm ³ (H x W x L)
	Laser Head Weight	14.7 kg
	Control Unit Weight	5.5 kg

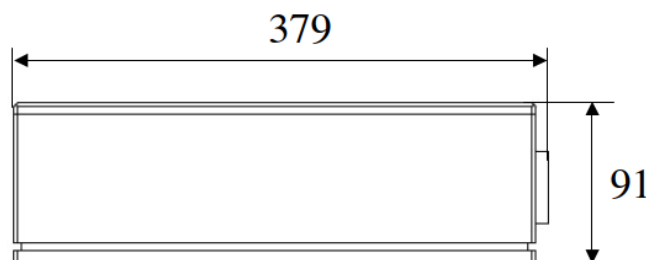
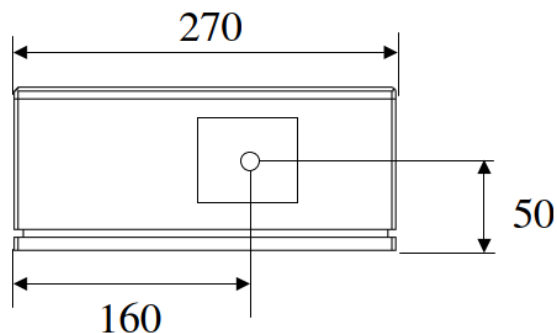
Notes

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).

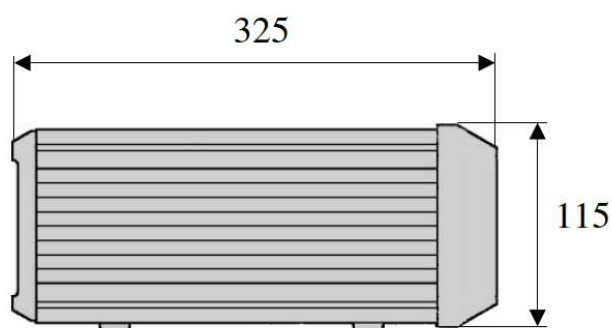
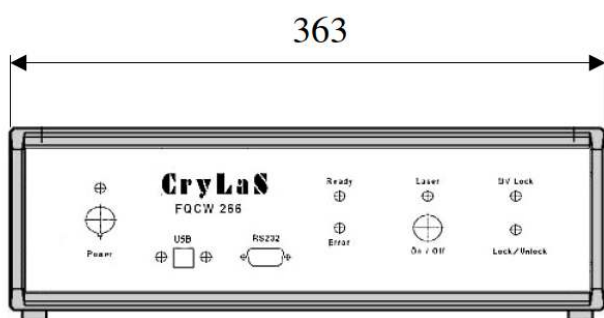
(*) Protected by patents: DE10339210B4, EP1344105B1, US7027209B2, DE102010064382B4, US9429814B2

Dimensions

Laser Head:



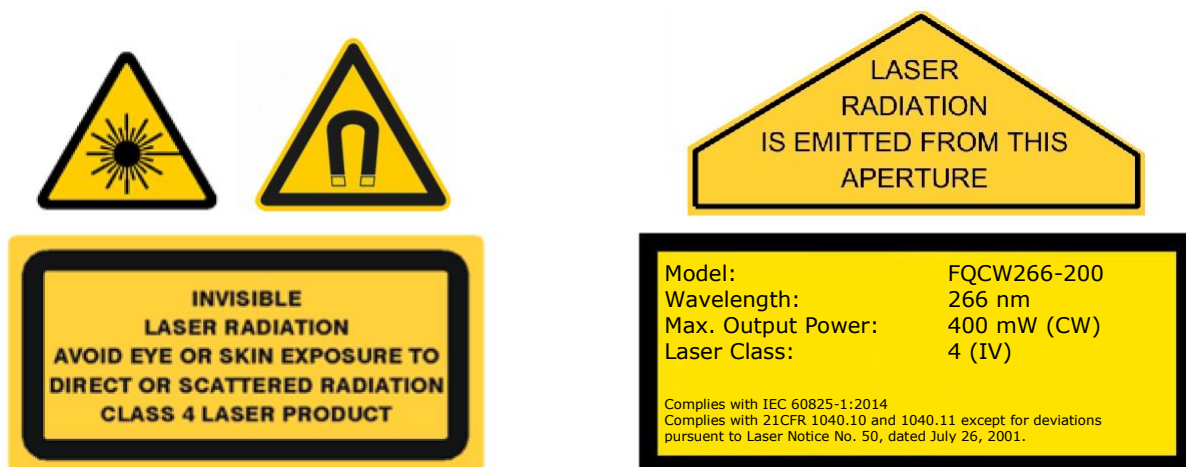
Control Unit:



All dimensions in mm

Laser Safety Labels

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



FQCW 266-300

Diode Pumped Continuous Wave Solid State Laser

- 266 nm
- Continuous Wave
- Single Frequency
- Low Intensity Noise
- $M^2 < 1.3$, TEM₀₀
- Up to 300 mW
- Air Cooled
- Patented Design (*)



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Optical Data	Wavelength	266 ± 1 nm
	Output Power (Adjustability)	300 mW ± 5 % (30-300 mW)
	Linewidth	< 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	1.0 ± 0.2 mm
	Beam Divergence	< 0.45 mrad
	Static Alignment Tolerance ⁽²⁾	lateral ± 0.25 mm, angular ± 2.5 mrad
	Spot-to-Spot Beam Pointing Variation	± 200 µrad
	Power Stability (0.5 Hz over 8 h)	< 0.2 % rms
	Intensity Noise (1 Hz – 100 kHz)	< 1 % 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.

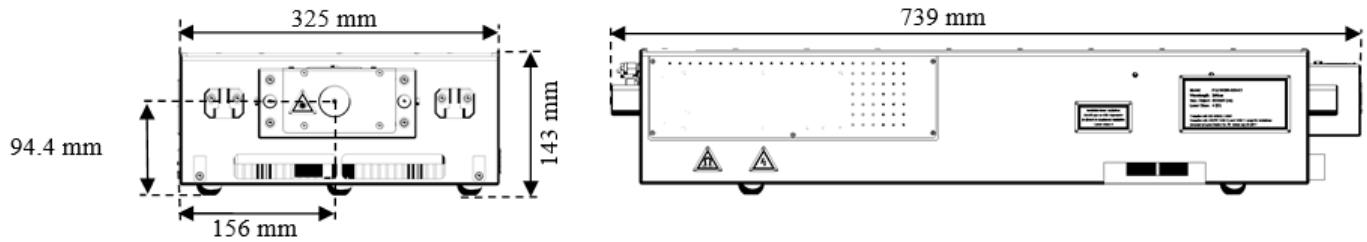
1. Referenced to kinematic mounting base

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

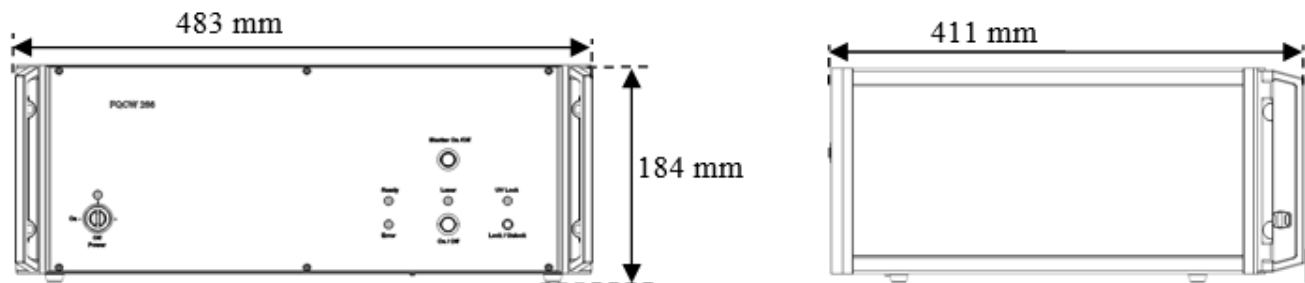
(*) Protected by patents: DE10339210B4, EP1344105B1, US7027209B2, DE102010064382B4, US9429814B2, DE102012212428B4, US90242427

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



FQCW 266-500

Diode Pumped Continuous Wave Solid State Laser

- 266 nm
- Continuous Wave
- Single Frequency
- Low Intensity Noise
- $M^2 < 1.3$, TEM₀₀
- Up to 500 mW
- Air Cooled
- Patented Design (*)



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Optical Data	Wavelength	266 ± 1 nm
	Output Power (Adjustability)	500 mW ± 5 % (50-500 mW)
	Linewidth	< 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	1.0 ± 0.2 mm
	Beam Divergence	< 0.45 mrad
	Static Alignment Tolerance ⁽²⁾	lateral ± 0.25 mm, angular ± 2.5 mrad
	Spot-to-Spot Beam Pointing Variation	± 200 µrad
	Power Stability (0.5 Hz over 8 h)	< 0.2 % rms
	Intensity Noise (1 Hz – 100 kHz)	< 1 % 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.

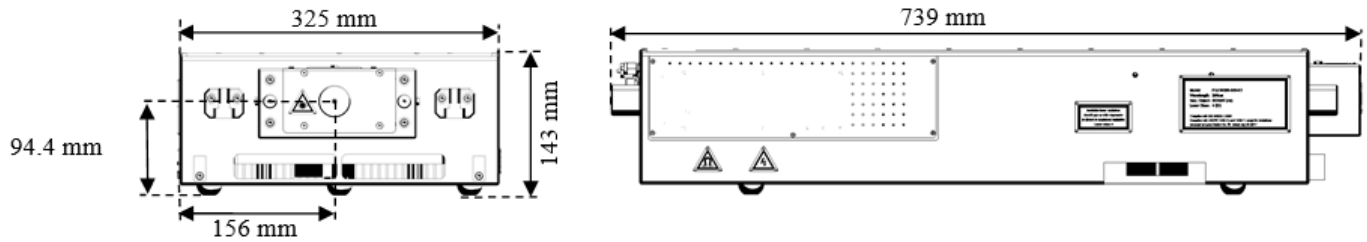
1. Referenced to kinematic mounting base

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

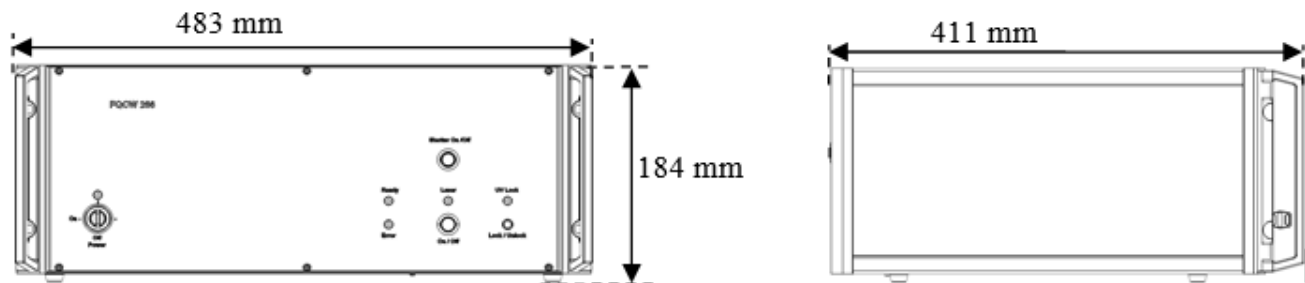
(*) Protected by patents: DE10339210B4, EP1344105B1, US7027209B2, DE102010064382B4, US9429814B2, DE102012212428B4, US90242427

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



FQCW 266-1000

Diode Pumped Continuous Wave Solid State Laser

- 266 nm
- Continuous Wave
- Single Frequency
- Low Intensity Noise
- $M^2 < 1.3$, TEM₀₀
- Up to 1000 mW
- Air Cooled
- Patented Design (*)



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Optical Data	Wavelength	266 ± 1 nm
	Output Power (Adjustability)	1000 mW ± 5 % (100-1000 mW)
	Linewidth	< 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	1.0 ± 0.2 mm
	Beam Divergence	< 0.45 mrad
	Static Alignment Tolerance (2)	lateral ± 0.25 mm, angular ± 2.5 mrad
	Spot-to-Spot Beam Pointing Variation	± 200 µrad
	Power Stability (0.5 Hz over 8 h)	< 0.2 % rms
	Intensity Noise (1 Hz – 100 kHz)	< 1 % 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.

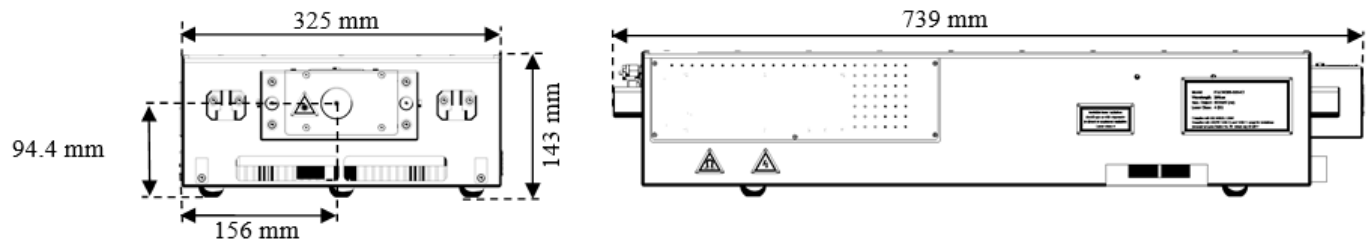
1. Referenced to kinematic mounting base

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

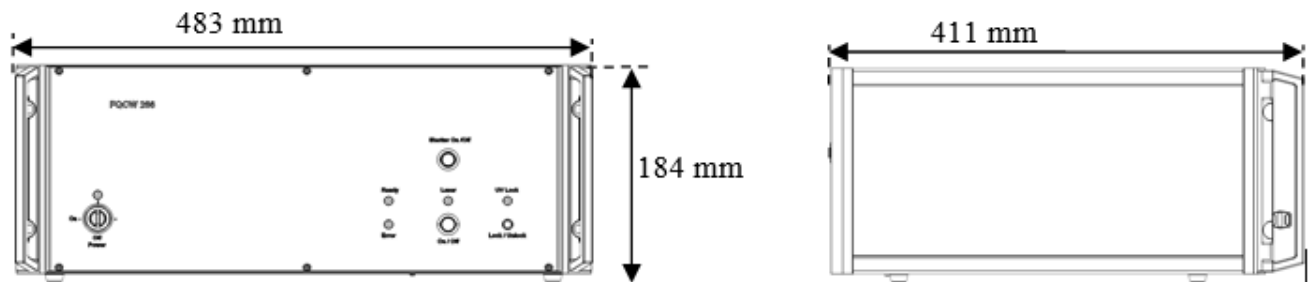
(*) Protected by patents: DE10339210B4, EP1344105B1, US7027209B2, DE102010064382B4, US9429814B2, DE102012212428B4, US9024247

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





海纳光学

电话: 0755-84870203

网址: www.highlightoptics.com

Model:

FQCW266-1000

Wavelength:

266 nm

Max. Output Power:

2000 mW (CW)

Laser Class:

4 (IV)

Complies with IEC 60825-1:2014

Complies with 21CFR 1040.10 and 1040.11 except for deviations
pursuant to Laser Notice No. 50, dated July 26, 2001.



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