

SLM 213

Single longitudinal mode
TEM₀₀ beam profile
Q-switched solid-state laser
Wavelengths 213 nm

General description

The SLM 213 is a single-frequency all-solid-state laser system for applications in the deep UV such as optical metrology, calibration of spectrometers or highest quality fiber Bragg grating fabrication. The spectral bandwidth of less than 100 MHz is near its theoretical Fourier limit.

The laser provides short output pulses with a duration of 6 - 8 ns in a diffraction-limited beam with $M^2 < 1.6$ at repetition rates between 1 and 15 kHz. The average output power is up to 100 mW at 213 nm with ultra-stable pulse traces and a high coherence length of more than 1.5 m not presentable with conventional lasers.

Product specifications

Model	SLM 213
Wavelength	213 nm
Average power	100 mW
Pulse duration (typ)	6-8 ns
Energy per pulse	10 μ J
Repetition rate	1-15 kHz
M^2	< 1.6
Spectral bandwidth	< 100 MHz
Coherence length	> 1.5 m

* Data at 10 kHz pulse repetition rate.
Specifications are subject to change
without notice due to product improvement.

Applications

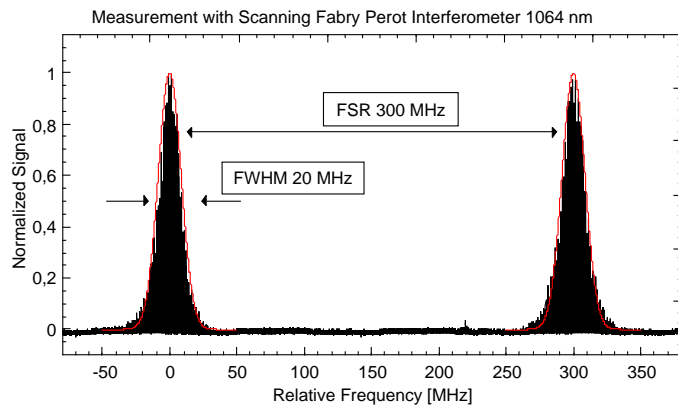
FBG writing
Spectrometer calibration
Lithography
Interferometry
Raman spectroscopy
Metrology

Optional

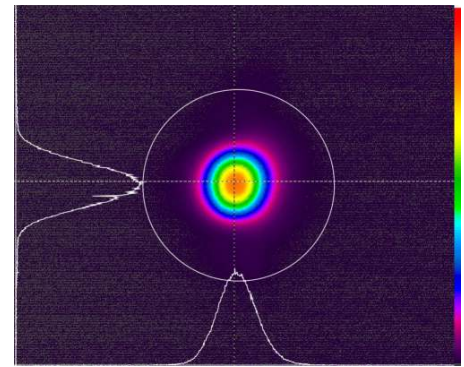
Graphical user interface
LabVIEW libraries
CDRH compliance shutter

Typical performance

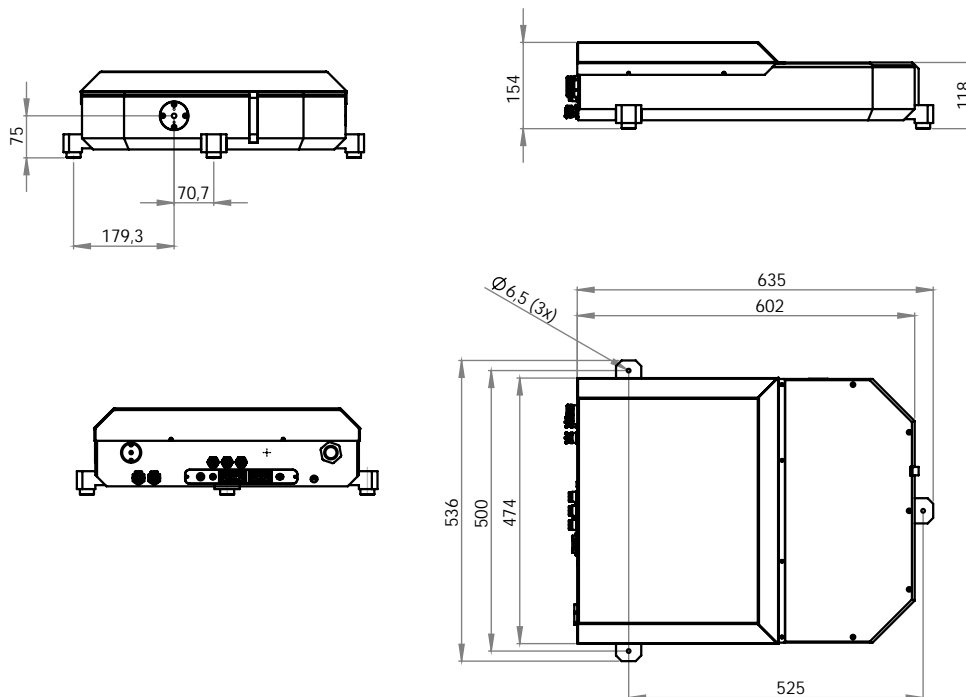
Spectral Bandwidth



Beam Profile



Dimensions laser head



System dimensions (L x W x H), weight

Laser head	635 x 536 x 154 mm ³	54 kg
Power supply (including chiller)	600 x 600 x 600 mm ³	78 kg

Electrical characteristics

Operating voltage	85-264 VAC
Frequency	47-63 Hz
Power consumption	650 W typ

Visible and/or invisible laser radiation. Avoid eye or skin exposure to direct or scattered radiation.
Class 4 laser (IEC 60825-1)



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