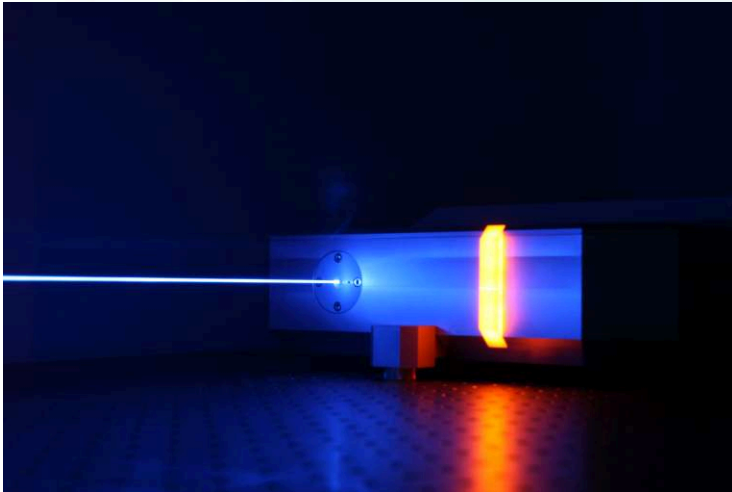


**Single Longitudinal Mode, TEM₀₀ beam profile, Q-switched solid-state laser
Wavelength 213 nm**



Applications

- Interferometry
- Raman Spectroscopy
- Fiber Bragg Grating Fabrication
- Spectrometer Calibration
- Metrology

Features

- Single frequency emission
- Diode laser pumped
- Sealed housing
- Slot mounted laser diode
- Excellent beam profile
- High pulse power
- Low pulse-to-pulse fluctuation
- Maintenance-free thermo-electrical heat management
- 19"-rack power supply and chiller

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 80 MHz is near its theoretical Fourier limit.

The laser provides short output pulses with a duration of $\Delta t < 8$ ns in a diffraction-limited beam with $M^2 < 1.6$ at repetition rates between 1 and 20 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 m not presentable with conventional lasers.

Product Specifications

wavelength	213 nm
spectral bandwidth	< 80 MHz
coherence length	> 1 m
average power	> 100 mW
pulse duration	< 8 ns
energy per pulse	> 10 μ J
repetition rate	1 – 20 kHz
M²	< 1.6
pulse-to-pulse stab.	$\sigma < 2.5$ %

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

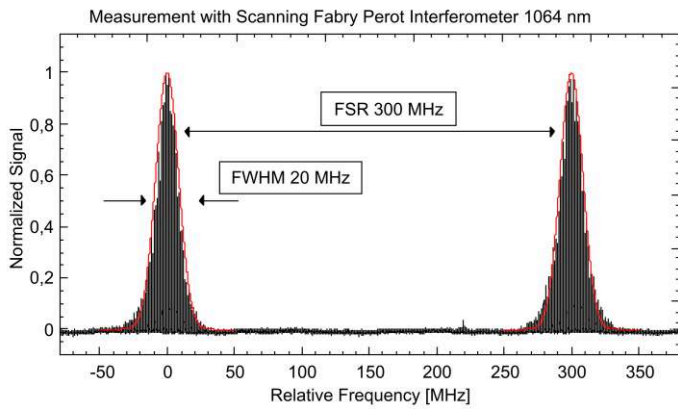
System Dimensions (L x W x H), weight

Laser head	635 x 536 x 154 mm ³	43 kg
Power supply (2x)	447 x 440 x 134 mm ³	16.8 kg
Controller	447 x 440 x 134 mm ³	8.8 kg
Chiller	447 x 381 x 134 mm ³	18.7 kg

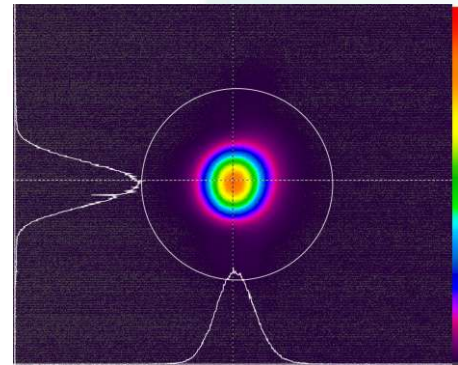
Electrical Characteristics

Operating Voltage	85 - 264 V AC
Frequency	47 - 63 Hz
Power Consumption	typ. 800 W

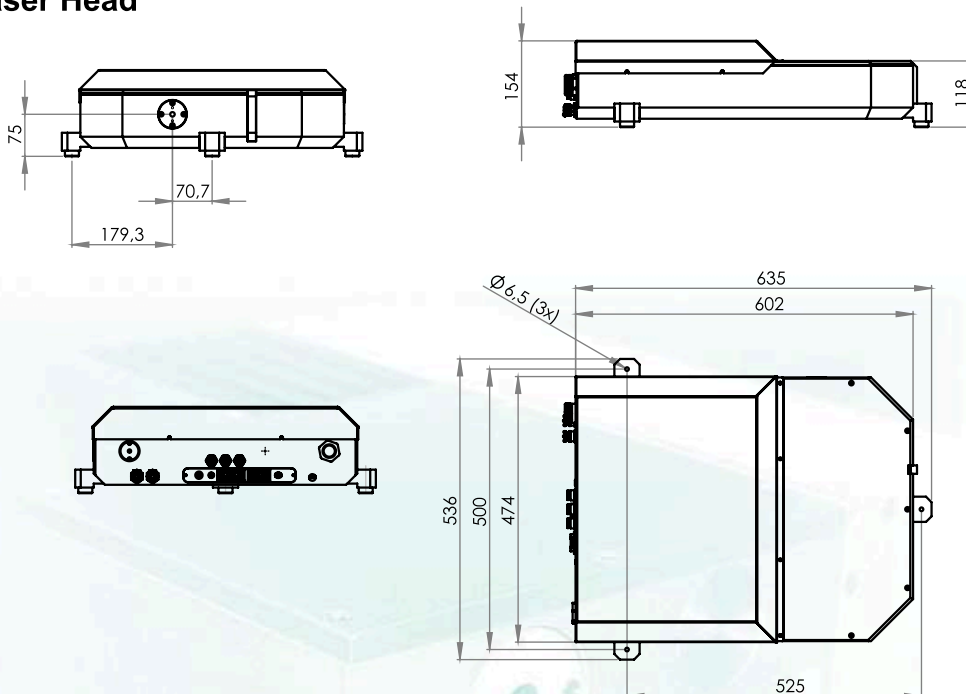
Spectral Bandwith



Beam Profile



Dimensions Laser Head



Visible and/or invisible laser radiation. Avoid eye or skin exposure to direct or scattered radiation.
Class 4 laser (IEC-825)



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