

VALO Series

Ultrashort femtosecond fiber lasers



- <50 fs pulse duration
- Power level up to 200 mW & 2 W
- Very low noise performance
- Integrated precompensation dispersion module

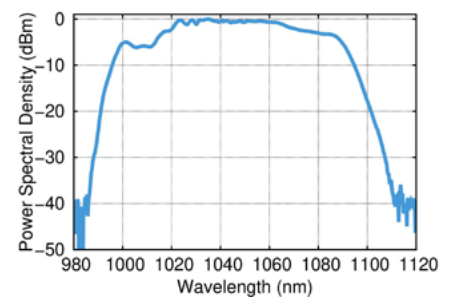
The VALO Series of ultrafast fiber lasers are unique in their design offering amongst the shortest femtosecond pulses and highest peak powers which can be obtained from a compact turn-key solution. Pulse durations of <50 fs are achieved using novel fiber laser based technology.

The ultrashort pulse durations combined with computer controlled group velocity dispersion pre-compensation, allow users of the VALO fs fiber lasers to achieve the highest peak power exactly where its needed, which makes the lasers ideal for use in multiphoton imaging, advanced spectroscopy and many other applications.

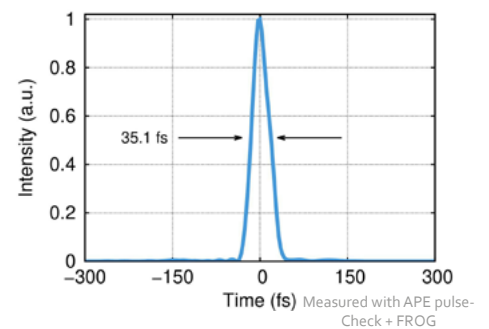
Applications

Multiphoton microscopy
Optogenetics
Two-photon polymerization
Terahertz generation
...

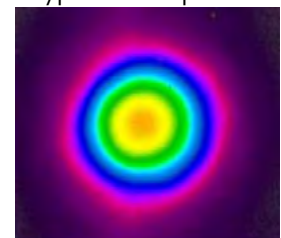
Optical spectrum



Temporal profile



Typical beam profile



VALO Aalto

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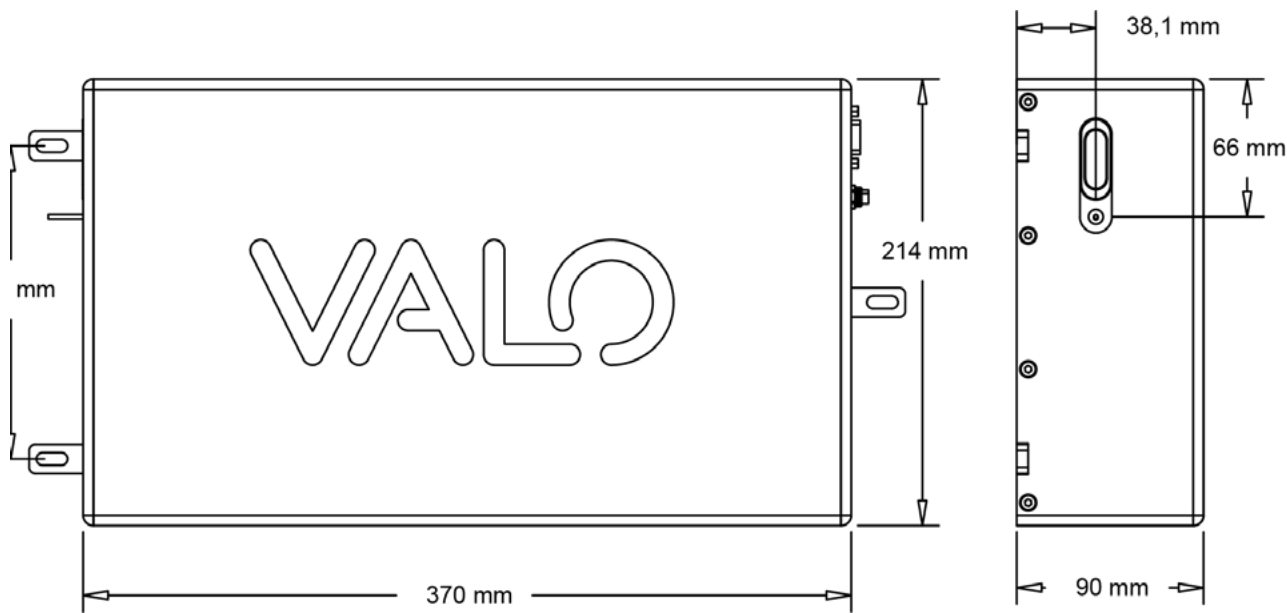


VALO Series

Specifications

	VALO Aalto	VALO Tidal
Pulse duration (FWHM)	< 50 fs	< 50 fs
Center wavelength	1045 ± 10 nm	1050 ± 10 nm
Average power	> 200 mW	> 2 W
Repetition rate	30 ± 1 MHz (Other repetition rates upon request)	30 ± 1 MHz (Other repetition rates upon request)
Pulse energy	> 6.5 nJ	> 66 nJ
Polarization	Linear	Linear
Spectral bandwidth	> 90 nm (@ -10 dB)	> 90 nm (@ -10 dB)
M ²	< 1.2 (typ. < 1.1)	< 1.25
Warm up time	< 1 min	< 1 min

Mechanical Specifications



WARNING
VISABLE AND INVISIBLE
LASER RADIATION



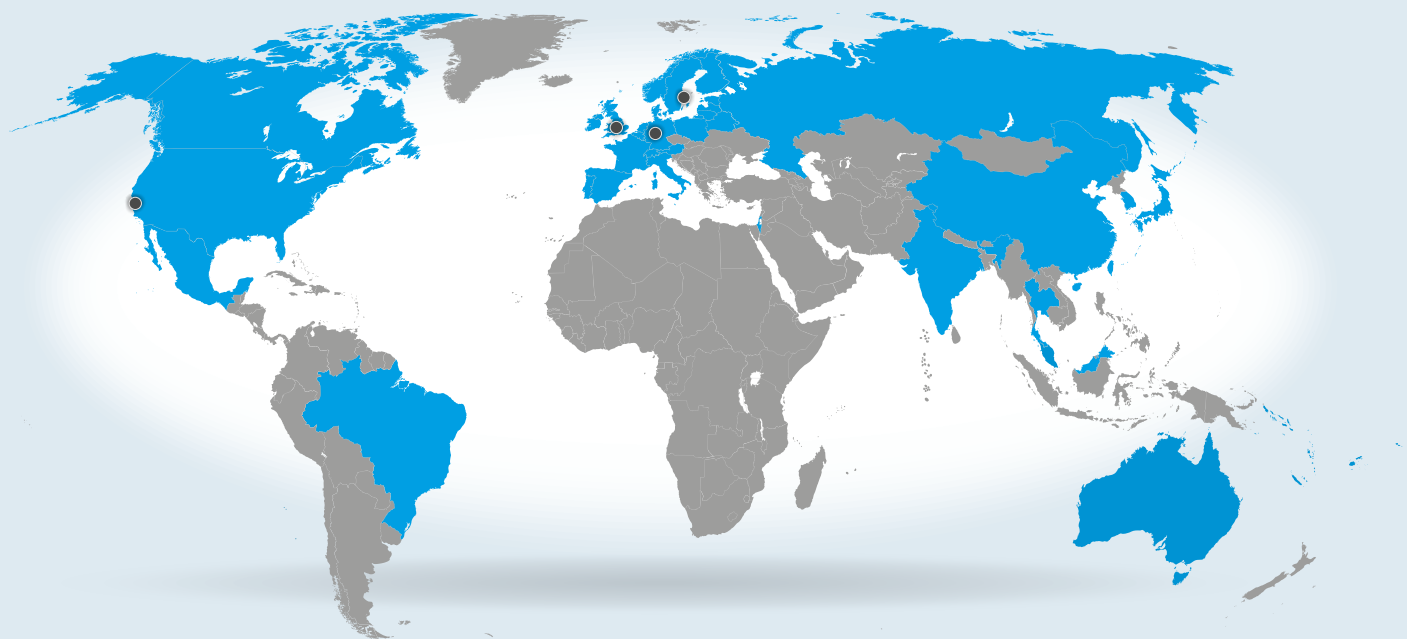
This device contains components that might be sensitive to Electrostatic Discharge (ESD). ESD Protection can be achieved with proper electrical grounding



VALO Tidal
Invisible Laser Radiation
Avoid eye or skin exposure to direct or scattered radiation
Class 4 Laser Product
Classified by DIN EN 60825-1:2015-07



VALO Aalto
Invisible laser radiation
Avoid exposure to beam
Class 3B Laser Product
Classified by IEC 60825-1:2014-05



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