

ULTRACOMPACT Q-SWITCHED MICROCHIP LASERS

QC series

SOLAR LS offers a family of passive Q-switched microlasers. The QC series lasers are diode-pumped solid-state lasers operating at 1064 nm, 532 nm, 355 nm, 266 nm.



Non-misalignable monolithic cavity guarantees reliability of operation and extreme stability of laser parameters. Pulse duration of ~ 1 ns ensures high peak power which in combination with ideal beam quality makes these lasers an indispensable instrument for a variety of scientific tasks.

The extremely reliable and robust design of these lasers makes them the best choice for industrial applications.

Compact footprint, external triggering and pumping via an optical fiber not only simplify application of these devices as stand-alone units but also allow to easily integrate them into any equipment.

The lifetime of more than 10^9 pulses minimises your service costs.

FEATURES

- Compact and dustproof design
- 1064 nm, 532 nm, 355 nm, 266 nm
- Output energy up to 400 μ J
- Peak power up to 500 kW
- Lifetime of more than 10^9 pulses
- TEM₀₀

APPLICATIONS

- Micromachining and materials processing
- Time-resolved fluorescence
- Nonlinear optics
- Laser ignition
- LIDAR
- LIBS

SPECIFICATIONS *

Model		QC110	QC120	QC130	QC140
Wavelength ¹⁾ , nm		1064	532	355	266
Pulsed energy, μ J	at 100 Hz	400 ²⁾	200	100	50
	at 200 Hz	200 ²⁾	80	50	15
	at 300 Hz	100 ²⁾	40	25	8
Pulsewidth (FWHM), ns		0.9			
Beam quality		TEM ₀₀ , M ² < 1.5			
Cooling		Air			
Electrical service		100 . . . 240V, 50/60 Hz, \leq 500W			
Dimensions, mm:					
Laser Head (LxWxH)		\varnothing 33 x 160			
Power Supply (HxWxD)		300 x 230 x 135			

* Specifications are subject to change without notice.

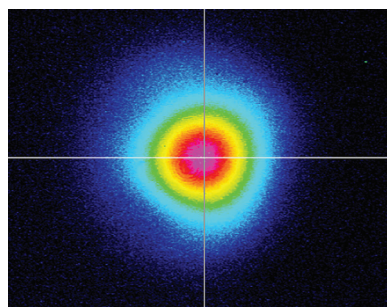
¹⁾ 355, 266, 213 nm wavelength are available with external harmonic generators.

²⁾ Higher pulse energy laser version upon request.

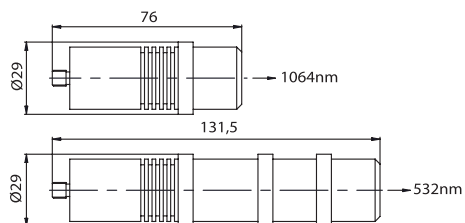
³⁾ For 532 nm configuration.



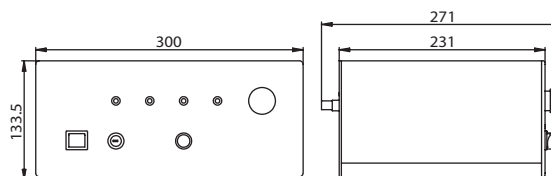
The QC120 laser head and power supply have very compact sizes.



The QC110 laser typical near field beam profile.



The QC series laser head outline drawing.



The QC series laser power supply outline drawing.