

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 1540 nm and 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
- 1540 nm, 1064 nm, 532 nm, 355 nm, 266 nm
- Output energy up to 500 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

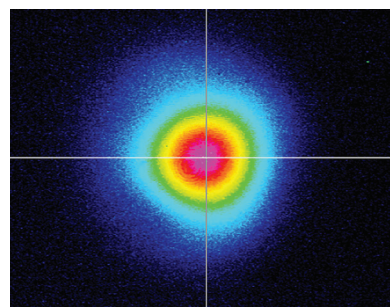
SPECIFICATIONS *

Model		QC110	QC120	QC130	QC140	QC210
Wavelength, nm		1064	532	355	266	1540
Pulsed energy, μJ	at 100 Hz	400	200	100	60	—
	at 200 Hz	400	190	90	55	—
	at 300 Hz	400	180	80	55	—
	at 1000 Hz	—	—	—	—	50
Pulsewidth (FWHM), ns		0.9				< 4
Beam quality		$\text{TEM}_{00}, M^2 < 1.5$				
Cooling		Air				
Electrical service		100...240V, 50/60 Hz, $\leq 500\text{W}$				
Dimensions, mm:						
Laser Head (LxWxH)		$\varnothing 33 \times 160$				
Power Supply (HxWxD)		300 x 230 x 135				

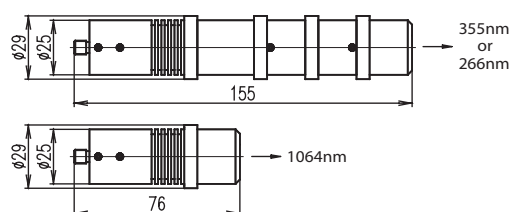
* Specifications are subject to change without notice.



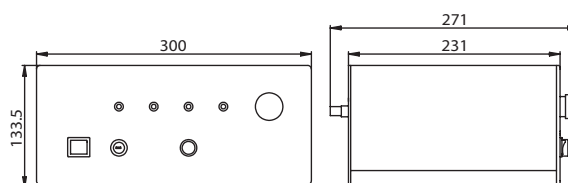
The QC120 laser head and power supply have very compact sizes.



The QC110 laser typical near field beam profile.



The QC110 and QC140 laser head outline drawing.



The QC series laser power supply outline drawing.