

LS-2138/100

New High Repetition Rate Q-switched Laser



LS-2138/100 is improved model of LS-2138 laser with pulse repetition rate 100Hz for technology medicine, LIDAR applications.

Design of laser cavity provides thermal birefringence and thermal lens compensation. The main model of laser has built-in second harmonic (532 nm) and for special applications could supply also with third (355 nm), fourth (266 nm) and fifth (213 nm) harmonics as external units.

Specification

Parameter	Value	
Energy, mJ	1064 nm	160
	532 nm	100
	355 nm*	40
	266 nm*	25 (on request)
	213 nm*	5
Pulse duration (FWHM at 1064 nm), ns	14–16	
Pulse repetition rate, Hz	100	
Beam divergence (full angle for 86 % of energy), mrad	≤1.0	
Beam diameter, mm	≤5.0	
Jitter (RMS)**, ns	±1.0	
Energy stability 1064 nm (RMS), %	±2.5	
Size L x W x H, mm (Weight, kg)	Laser head	930 x 240 x 177 (35.0)
	Power supply	446 x 449 x 177 (22.0)
	Cooling system Thermotek	630 x 485 x 310 (75.0)
	Remote control	105 x 175 (0.5)
Power requirements	Single phase, 220±20 V, 50–60 Hz, 3500 W	

*with external harmonic generator units

** with respect to external trigger of Q-switch