

LS-2137N, LS-2147N MULTI HARMONICS LASER

LS-2137N and LS-2147N are the modern models of the well-known LOTIS multiwaves lasers. Unlike the most of high energy Q-switched Nd:YAG lasers LS-2137N and LS-2147N are lasing at fundamental frequency (FF, 1064 nm), second (SH, 532 nm), third (TH, 355 nm) and forth (FH, 266 nm) harmonics without additional alignment and change of the any laser units or components.



Main features:

- New laser head design provides easy switchable output beams at 1064 nm, 532 nm, 355 nm and 266 nm without removing protective cover and additional alignment.
- The telescopic stable resonator has given the benefits of uniform beam quality, high energy and low beam divergence.
- High stability and durability of the output parameters are provided by special temperature control of nonlinear and Q-switched crystals as well as laser resonator special design.
- Due to its pulse duration (~ 15 ns) the lasers are the ideal tool for various research applications like LIDAR, spectroscopy and a pump source for OPO, Cr:Forsterite, Ti:Sapphire and dye tunable lasers.
- Enhanced Third Harmonic (355 nm) energy and integrated Fifth Harmonic (213 nm) options are available on request.

SPECIFICATIONS¹

Model		LS-2137N/2	LS-2147N/2	LS-2137N	LS-2137N-5	LS-2147N	LS-2147N-5	
Energy, mJ	1064 nm	700	850	700	700	850	850	
	532 nm	400	500	400	400	500	500	
	355 nm	-	-	140/210 ²	140/210 ²	180/270 ²	180/270 ²	
	266 nm	-	-	100	100	120	120	
	213 nm	-	-	25 ³	25	30 ³	30	
Pulse duration (FWHM at 1064 nm), ns		14-16						
Pulse repetition rate, Hz		10 (20 ⁴)						
Beam divergence ($\Theta_{0.86}$), mrad		≤0.8						
Beam diameter, mm		≤8						
Jitter ⁵ , ns		±1						
Energy stability 1064nm (StDev), %		≤1.0						
Size L x W x H, mm (Weight, kg)								
Laser head		820 x 304 x 143 (17.0)			1020 x 304 x 143 (20.0)			
Power Supply LPS-2230M		461x276x504 (26.0)			461x276x504 (26.0)			
Remote control		105 x 175 (0.5)			105 x 175 (0.5)			
Power requirements		Single phase, 100-220 V, 50/60 Hz, 1000 W						

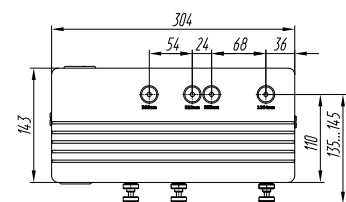
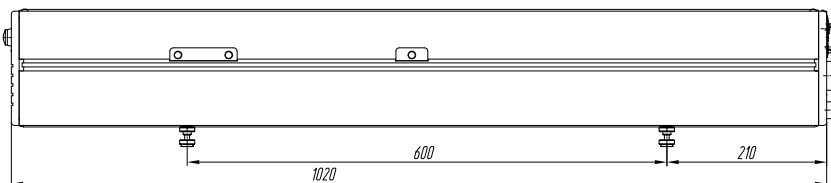
¹ All specifications are subject to change without notice

² High energy TH option

³ With external harmonics assembly

⁴ On request

⁵ With respect to external trigger of Q-switch



Overall sizes of LS-2137N or LS-2147N