

UV-REGION RADIATION CONVEION HARMONIC GENERATORS

HG-TF



HG-FIFTH



LOTIS TII lasers can be fit with harmonic generators (HG) for radiation conversion in the UV-region.

The harmonic generators can be employed with all LS-21xx lasers as well as with those of customers.

The harmonic generating crystals are sealed in the accurately controlled ovens.

A precise mechanism of crystal orientation provides easy careful tuning of Phase Matching angle.

SPECIFICATIONS¹

Parameter	HG-TF		HG-T	HG-F
	355 nm	266 nm	355 nm	266 nm
Energy per pulse for laser, mJ				
LS-2131M-10Hz	30	35	30	35
LS-2134N-15Hz	60	50	60	50
LS-2138N-50Hz	45	30	45	30
LS-2138N/100-100Hz	40	25	40	25
LS-2145N-10Hz	90	70	90	70
Energy stability (StdDev), %	2	3	2	3
Size LxWxH, mm	207x145x55		146x145x55	132x124x55
Weight, kg	3,5		2,5	2
Power requirements	Single phase, 220V, 50/60 Hz, 30W			

Fifth Harmonic Generator HG-Fifth

The fifth harmonic generator (213 nm) can be employed with our lasers as well as with those of other laser manufacturers.

Beta-BBO crystals are used for conversion FF (1064 nm) + FH (266 nm) or SH (532 nm) + TH (355 nm) per customer choice.

The nonlinear crystal is sealed in a temperature controlled oven.

Our unique dispersive harmonic separator provides total separation of the output (213 nm) from the pump laser's harmonic radiation.

SPECIFICATIONS¹

Parameter	LS-2134UTF	LS-2145N-TF	LS-2137N	LS-2147N
Energy at 213 nm, mJ	15	20	25	30
Pulse duration (FWHM), ns	5-6	11-13	12-14	12-14
Pulse repetition rate, Hz	10			
Energy stability (StdDev), %	≤2.5			
Beam diameter, mm	≤6,3		≤8	
Size Lx-WxH, mm	220 x 170 x 62			
Weight, kg	3.5			
Power requirements	Single phase, 220V, 50/60 Hz, 30 W			