

LT-2211A Tunable Ti:sapphire Oscillator-amplifier Laser System



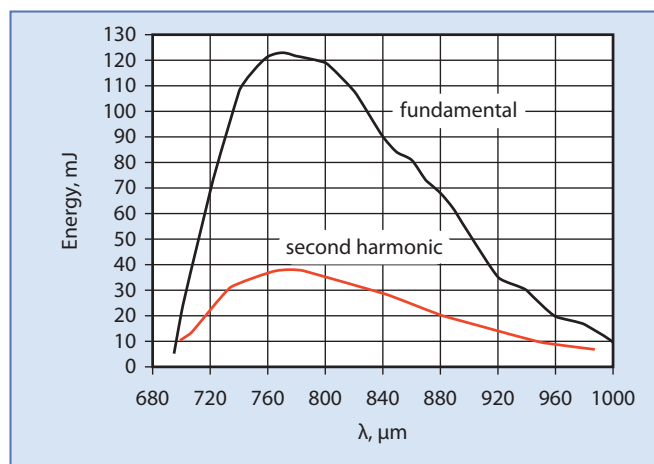
LT-2211A opens a new line of high power narrow line of LOTIS TII tunable lasers.

It combines several design features that maximize all-round performance. LT-2211A high-gain oscillator and double-pass amplifier produce short high energy pulses with narrow linewidth (10 ns, >120 mJ, 0.1 nm at 780–820 nm)

For customer requirements we propose a wide range of LT-2211A options:

- ❖ PC control of tuning,
- ❖ a highly efficient built-in SH unit,
- ❖ additional fourth and third harmonics generators modules,
- ❖ intracavity etalon Fabry-Perot providing narrowing of linewidth.

Tuning Curve LT-2211A



Pump energy $E_{532}=450$ mJ

Specification

Parameter	Value	
Tuning range $\Delta\lambda$, mm	at FF	690–1000
	at SH	345–500
Linewidth $\delta\lambda$ at the maximum of tuning range of FF, mm		≤ 0.1
		≤ 0.01 with intracavity Etalon Fabry–Perot
Beam divergence, mrad		≤ 1.5
Pump radiation conversion efficiency at maximum of tuning curve ($300 \text{ mJ} \leq E_{532} \leq 500 \text{ mJ}$), %	FF	$\leq 25, E_{FF}/E_{532} \cdot 100 \%$
	SH	$\leq 25, E_{SH}/E_{532} \cdot 100 \%$
Pulse duration (FWHM), ns		8–25 determined by the pump pulse duration and generated λ
Polarization*	at FF	Linear horizontal
	at SH	Linear Vertical
Size L x W x H, mm (Weight, kg)	LT-2211A	470 x 260 x 90 (8.0)
	LT-2211A with SHG unit	570 x 260 x 90 (9.0)

* polarization of SH of pump laser (532 nm) must be horizontal

