

# LT-2211 Tunable Ti:sapphire Laser



*LOTIS TII LT-2211 tunable solid state laser is designed for conversion of the second harmonic radiation of Nd:YAG lasers to widely tunable radiation in the UV, visible and near IR spectral ranges.*

Unlike most Ti:Sapphire lasers, our LT-2211 laser requires only one set of optics for all tuning ranges to eliminate the downtime associated with changing and realigning the optics during an experiment. The special design of the active element improves the beam alignment stability and reliability of laser operation. The model has a highly efficient built-in SHG, to provide operation in the IR, visible and UV spectral ranges. LT-2211 can be fit with the third harmonic unit, which increase the total tuning range of Ti: Sapphire laser.

It is possible the option: LT-2211 with intracavity Etalon Fabry-Perot (model LT-2211FP). It allows to get a narrow line width 0.02 nm (the red color line on Turning curves).

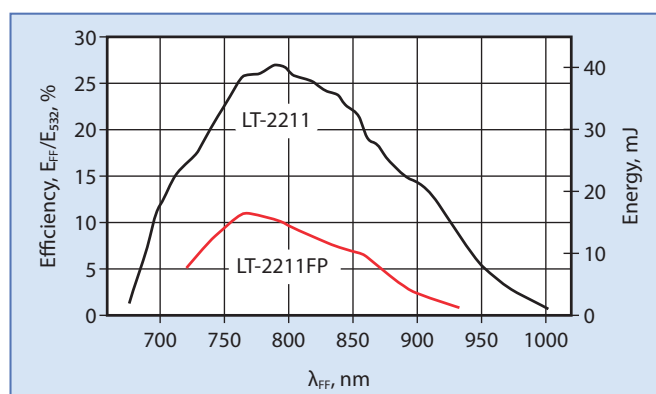
## Specification

Parameter	Value	
Active medium	Al <sub>2</sub> O <sub>3</sub> :Ti <sup>3+</sup> (Ti:Sapphire)	
Tuning range, nm	at Fundamental	690–970
	at Second Harmonic	350–485
	at Third Harmonic	235–320*
Linewidth, nm	0.2**	
Pump radiation conversion efficiency, %	at Fundamental	25
	at Second Harmonic	5
	at Third Harmonic	≤25 (E <sub>TH</sub> /E <sub>SH</sub> )*
Pulse duration (FWHM), ns	8–30	
Beam divergence (full angle for 86% of energy), mrad	1.5	
Size L x W x H, mm (Weight, kg)	LT-2211	425 x 160 x 80 (6.5)
	FH, TH Unit for LT-2211	152 x 105 x 55 (3.0)

\* with Harmonic Generators HG-T

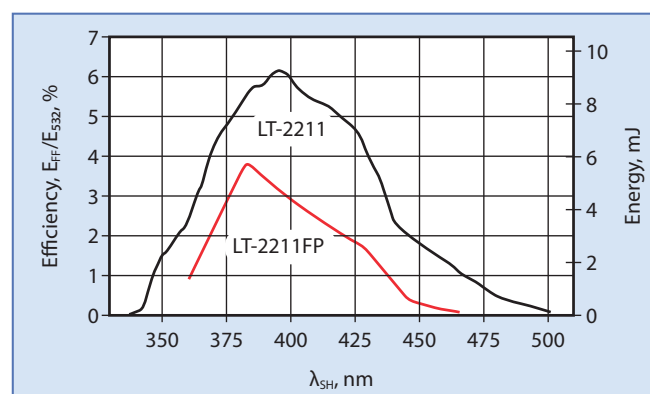
\*\* at 780–800 nm

## Tuning Curve LT-2211 Fundamental (FF)



Pumped with LS-2134, E<sub>532</sub>=150 mJ, 2.5 mrad, 10 ns

## Tuning Curve LT-2211 Second Harmonic (SH)



Pumped with LS-2134, E<sub>532</sub>=150 mJ, 2.5 mrad, 10 ns