

QUASI-CW Ti:SAPPHIRE LASER



Quasi-CW Ti:Sapphire Laser

MODEL

CF 231

- KHz pulse repetition rate
- Narrow linewidth
- Wide spectral range
- Built-in SHG

- ◆ High-quality output is generated in a computer-optimized aberration-free cavity. Low threshold generation is provided by extra-quality optics in use.
- ◆ The output coupler is adapted to variation of the Ti:Sapphire gain. A single set of cavity optics provides the extremely wide 695-960 nm tuning range.
- ◆ The built-in SHG unit with cylindric optics and an efficient nonlinear crystal extend the tunability range from 350 to 475 nm.

OPTIONS

- CF231 Ti:Sapphire laser can be supplied together with LF2210 Quasi-CW Nd:YAG pump laser
- Wide band harmonic separators provide high-contrast spectral separation of fundamental from the second harmonic.
- Wavelength PC-control is available on request.

APPLICATIONS

- Medicine
- Photochemistry and Photobiology
- Laser Spectroscopy
- Fiber Optics
- Optical Communication

SPECIFICATIONS

OUTPUT PARAMETERS

Active medium:	Ti:Sapphire
Tuning range ¹⁾	
at fundamental:	695-960 nm
at second harmonic:	350-475 nm
Pump radiation conversion efficiency in the maximum of tuning curve	
at fundamental:	> 8,0%
at second harmonic:	> 1,5%
Linewidth ²⁾ (for all harmonics):	< 30 pm
Beam diameter (at output coupler):	0,9 mm
Beam divergence:	< 1,0 mrad
M2:	1,2
Pulse duration ³⁾ :	15-20 ns

PUMP PARAMETERS

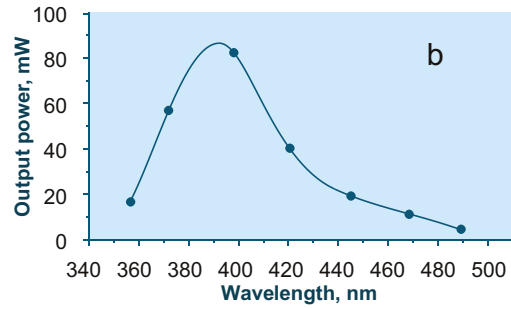
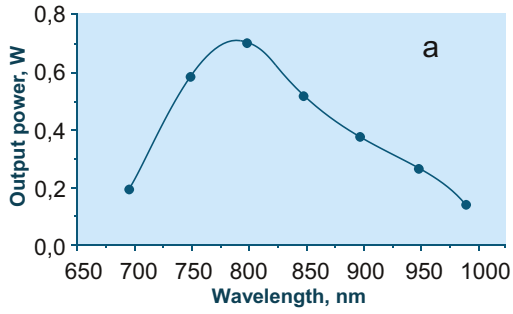
Wavelength:	532 nm
Pulse energy:	0,3-4,0 mJ
Pulse duration:	90-150 ns
Pulse repetition rate:	1000-15000 Hz
Beam diameter (max):	5 mm

OVERALL SIZE: 432x180x80 mm, WEIGHT: 10 kg

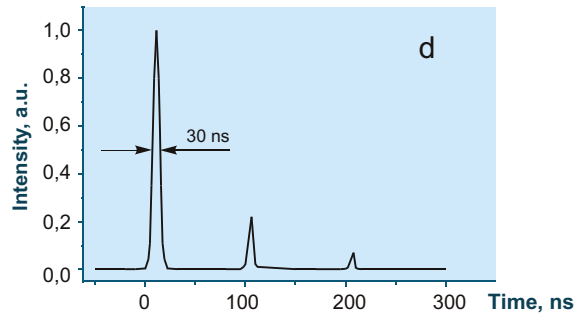
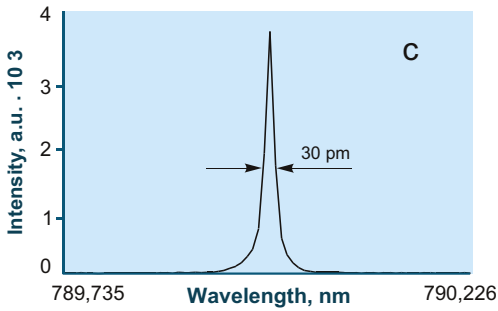
Quasi-CW Ti:Sapphire Laser, Model CF231

Notes: Typical CF231 output parameters with 8.0 W pumping power at 532 nm for 4 kHz pulse repetition rate:

1) tuning curve for fundamental (a) and second harmonic (b) output;



2) lineshape (c) and 3) temporal profile (d) in the maximum of tuning curve for CF231 output. The second and third spikes in the temporal profile occur at output power of more than 0.4 W and 0.8 W respectively.



DIMENSIONAL DRAWING

