



## TIS-SF Product Line

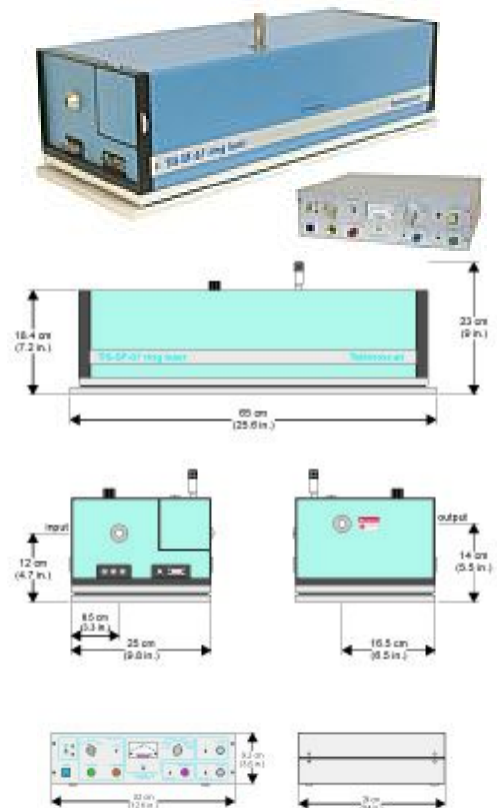
Single frequency TIS-SF-777 (077/07) Ti:Sapphire laser  
TIS-SF - series

### Key features

- Broad tunable wavelength range 695 - 1050 nm
- Ultra narrow linewidth ( $< 5$  kHz)
- High output power ( up to 2 W)
- Precision adjustment
- Frequency stabilized

### Applications:

- High resolution spectroscopy;
- Atomic cooling and trapping;
- Multiphoton deep-tissue imaging;
- Nanostructure fabrication;
- Atomic lithography;
- Gas analysis;
- Trace substance detection;
- High speed wafer inspection.

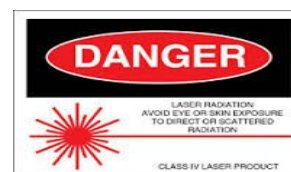


Optromix **TIS-SF** Ti:Sapphire laser provides a wide range of 695-1050 nm and with a frequency doubler 350-525 nm single frequency radiation. Our cutting-edge single frequency Ti:Sapphire laser TIS-SF offers a very narrow emission linewidth ( $< 5$  kHz) with an output power over 1.5 W which is perfect for atom cooling and trapping as well as super-fine resolution spectroscopy. Second-harmonic conversion in Ti:Sapphire laser system, TIS-SF is the most efficient for CW single frequency emission, and its linewidth in the UV to blue-green range is ultra narrow. TIS-SF tunable laser system is equipped with an exclusive Auto Relock function, electronic control system and resonant enhancement frequency doubler which allow it to operate steadily even under external perturbations.

## TIS-SF series specifications

Model	TIS-SF-777	TIS-SF-077	TIS-SF07
Tunable wavelength range	695 - 780, 750 - 850, 850 - 950, 950 - 1050 nm, 395 - 525 nm (with the frequency doubler)		
FWHM	< 5 kHz	< 50 kHz	< 5 MHz
Max. output power	> 1.9W (12W pump), > 1.5W (10W pump), > 1W(8 W pump), >450mW (5W pump)		
Frequency drift	< 40/50 MHz/hour		
Smooth scanning	> 5 GHz		
Spatial mode	TEM <sub>00</sub>		
Polarization	horizontal		
Control interface	Control unit, RS232		
Operating voltage	220 -240 Volt, 50-60 Hz, Single Phase		
Operation temperature	10 to 40 °C		
Storage temperature	0 to +50 °C		
MTBF	> 5.000 Hrs		
Operation Humidity	10 - 70%		
Cooling	Forced air		
Dimensions (WxHxL)	250 x 230 x 650 mm, 320 x 92 x 240 mm		
Weight	≤ 12 kg		

- Optromix fiber systems can be customized especially by request.
- Optromix fiber systems are under 1 year warranty.



Information in this document is subject to change without notice.

2015 OPTROMIX Inc, 2464 Massachusetts Ave, Cambridge, MA 02140 USA Tel: +1 617 558 98 58  
e-mail: [info@optromix.com](mailto:info@optromix.com) [www.optromix.com](http://www.optromix.com)