780/1560 nm Dual Output Femtosecond Laser
STR1550D

2023 V1

For customized projects please Contact us:

info@simtrum.com

780/1560 nm Dual Output Femtosecond Laser – STR1550D

STR1550D features a dual-port design and may provide high-power output at both 1550nm and 780nm simultaneously. It gives customers the ultimate flexibilities in constructing multi-purpose photonic systems. The proportion of 1550 and 780 output power can be customized upon user request. The laser is an easy-to-use turn-key system and can also be computer controlled.

STR1550D is well-suited for scientific uses such as THz-TDS (time-domain terahertz generation), SHG/THG imaging, pump-probe spectroscopy and multi-photon imaging. It can meet a broad range of R&D requirements of the scientific community.

Key Features

- Double wavelength output
- High peak power
- Linear polarization
- Diffraction-limited beam

Applications

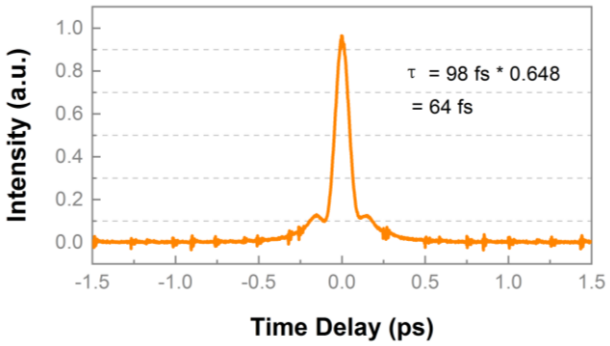
- SHG Imaging
- Two-photon Polymerization
- Multiphoton imaging
- Time-resolved fluorescence

Main Specification

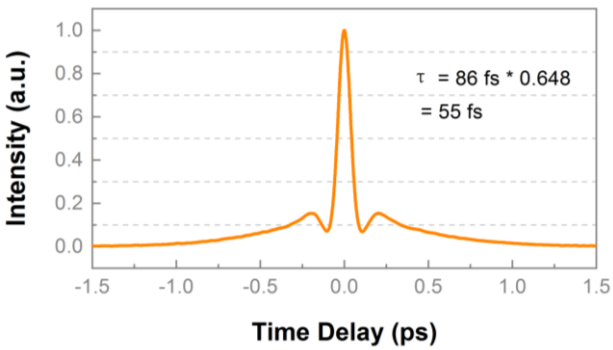
Laser Parameters			
Operating Wavelength	nm	1560 ± 10 nm	780 ± 10 nm
Pulse Width (FWHM)	fs	< 80 fs	< 100 fs
Polarization Extinction Ratio	dB	> 20 dB	
Repetition Rate	MHz	80 MHz	
Average Power	mW	>100 mW	> 60 mW (up to 90mW)
Average Power Stability	% RMS	< 0.5 %RMS (12h@25°C)	
Pulse Energy	nJ	> 1.25 nJ	> 0.75 nJ
Output Type		PM1550 fiber, FC/APC connector	Spatial collimation output
Electrical, Environmental and Mechanical Parameters			
Supply Voltage	VAC	100-240 VAC	
Operational Temperature Range	°C	15-35	
Operational Humidity Range	°C	20-80 (non-condensing)	
Weight	kg	17	
Dimensions	mm (LxWxH)	395 x 348 x 126 mm	
Cooling		Air Cooling	

Test Data

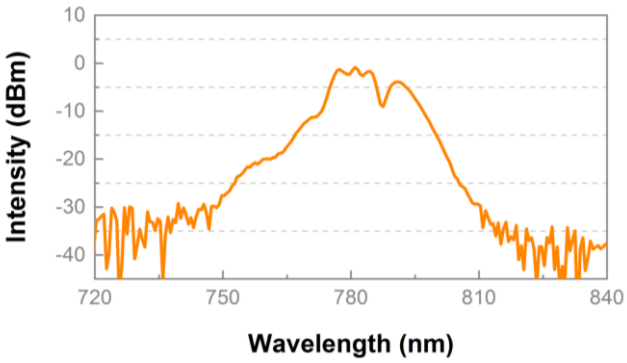
Typical Autocorrelation Trace



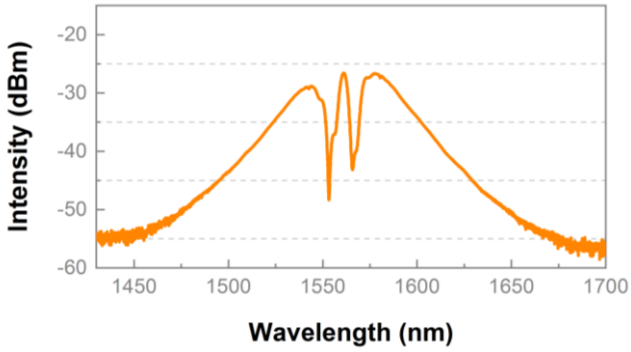
Typical Autocorrelation Trace



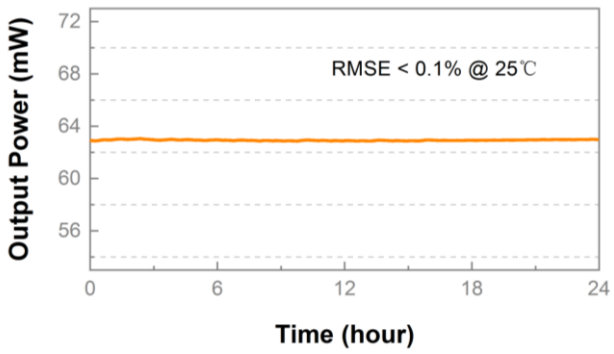
Output Spectrum



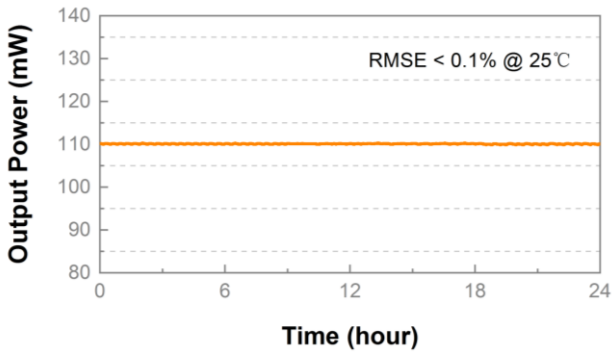
Output Spectrum



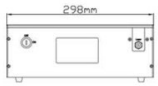
Power Stability

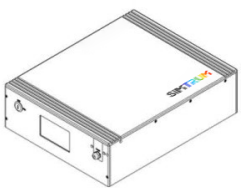


Power Stability



Machine Drawing





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