10X0 nm High Power Ultrafast Femtosecond Laser
STR10X0HP

2023 V1
For customized projects please Contact us:
info@simtrum.com

10X0 nm High Power Ultrafast Femtosecond Laser – STR10X0HP

STR10X0HP is our new generation of "wavelength versatile" high power fiber laser that features unparalleled output parameters. The laser adopts an innovative new cavity design that allows setting of the central wavelength within 1030-1060 nm. As with other SIMTRUM mode-locked products, the STR10X0HP laser is produced using our proprietary 'Smart-Lock' processes to ensure long-term stability and reliability. It has an average output power exceeding 5-10 W and a pulse width under 150 fs. A frequency-doubling module can be used to enable W-level 532nm (Green) femtosecond output.

STR10X0HP is well suited for applications such as OPO/OPA pumping, fluorescence microscopy, two-photon polymerization, seeding high-power amplifiers and other advanced photonic experiments.

Key Features
- Long-term stable operation
- High pulse energy
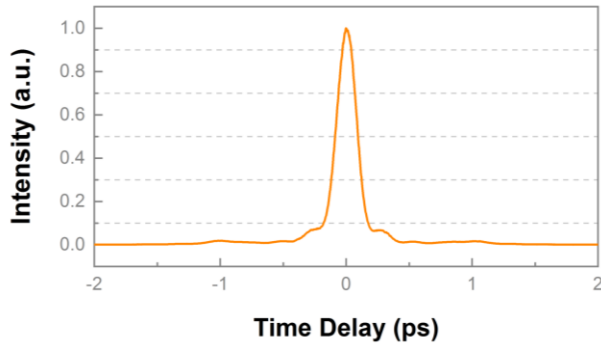- Reliable mode-locking
- All-PM solution

Applications
- Harmonic imaging
- Two-photon polymerization
- Two-photon fluorescence imaging
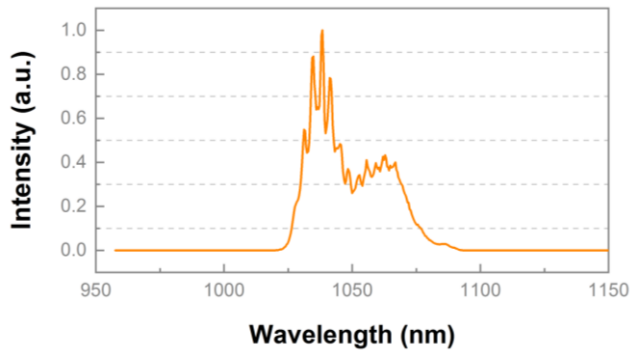- High precision laser ranging

Main Specification

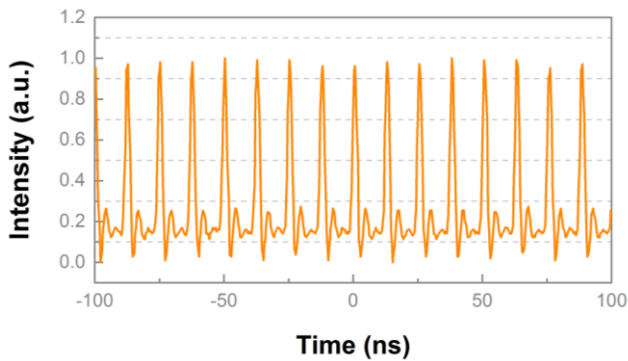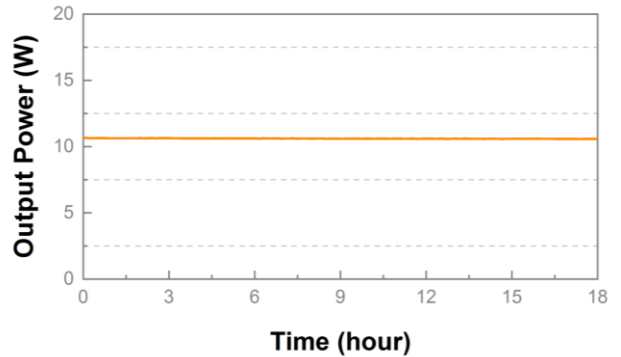| Laser Parameters		
Operating Wavelength	nm	1030/1040/1050/1060 nm
Pulse Width (FWHM)	fs	< 150 fs, < 200 fs (for 8W)
Polarization Extinction Ratio	dB	> 20 dB
Repetition Rate	MHz	80 MHz
Average Power	W	5 - 10 W
Average Power Stability	% RMS	< 0.5 %RMS (12h@25°C)
Pulse Energy	nJ	> 80 nJ
Output Fiber		Spatially collimated output
Electrical, Environmental and Mechanical Parameters		
Supply Voltage	VAC	100-240
Operational Temperature Range	°C	15-35
Operational Humidity Range	°C	20-80 (non-condensing)
Weight	kg	20
Dimensions	mm (LxWxH)	445 x 300 x 134 , 390 x 445 x 94
Cooling		Air Cooling

Test Data

Autocorrelation Trace

Output Spectrum

Pulse Energy

Pulse Stability

Machine Drawing

SIMTRUM Singapore
Telephone: +65 6996 0391
Email: info@simtrum.com

SIMTRUM China
Telephone: +86 150 0085 3620
Email: sales@simtrum.cn

www.simtrum.com