

SL-Pico : Pico-second Supercontinuum Laser

Powerful pico-second pulsed laser source with precision software controls



Spectrolight's pico-second supercontinuum lasers are designed to meet the diverse and dynamic needs of cutting-edge research and industrial applications. These supercontinuum white light lasers are highly regarded for their wide wavelength range and cost-effectiveness.

SL-Pico offers a spectral range from 410 nm to 2400 nm, has high power, is very stable, and is capable of delivering power up to 20 W. The SL-Pico's SL series shows relatively high power in the SWIR region. The SL-Pico's SLM series is a mode-locked fiber laser with a fixed repetition rate and stable and uniform power spectrum in visible range, and the SL-Pico's SLMV series has a tunable repetition rate in MHz, ensuring compatibility with a wide range of devices. Integrating a tunable bandpass filter improves the laser's versatility, enabling tunable broadband laser output. This capability is important for a variety of applications, including fluorescence microscopy, TCSPC, hyperspectral imaging, machine vision, semiconductor inspection, sensor development, and more.



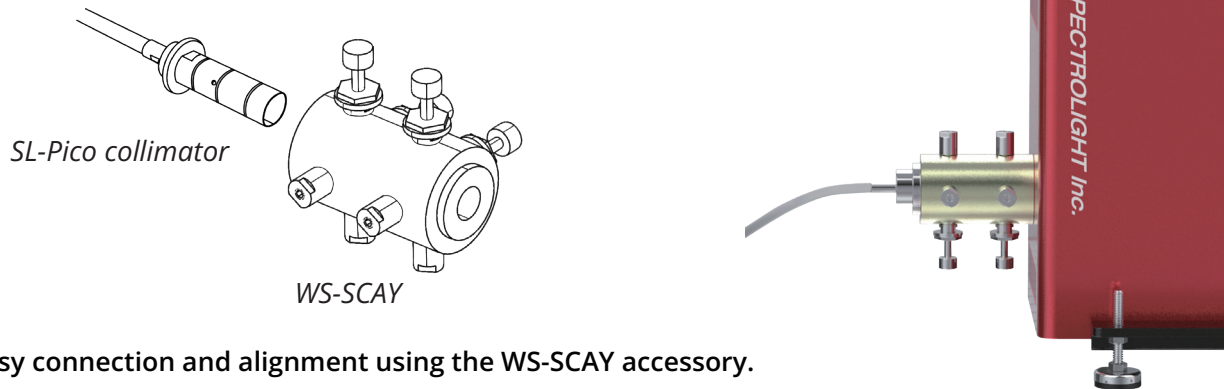
Wide broadband spectral range

General Specifications

Model	Supercontinuum output power		Repetition Rate	Output pulse width (ps)	Spectral Range (nm)
	Visible	Total			
SL10	100 mW	1 W	5 MHz	< 300 ps	450 - 2400 nm
SLM10	250 mW	1 W	10 MHz	< 50 ps	410 - 2400 nm
SLM20	500 mW	2 W	20 MHz	< 50 ps	410 - 2400 nm
SLM40	1 W	4 W	40 MHz	< 50 ps	410 - 2400 nm
SLM35V	1 W	3.5 W	0.01 to 40 MHz	< 50 ps	410 - 2400 nm
SL80V	1 W	8 W	0.01 to 200 MHz	< 300 ps	430 - 2400 nm
SLM70	2 W	7 W	80 MHz	< 50 ps	410 - 2400 nm

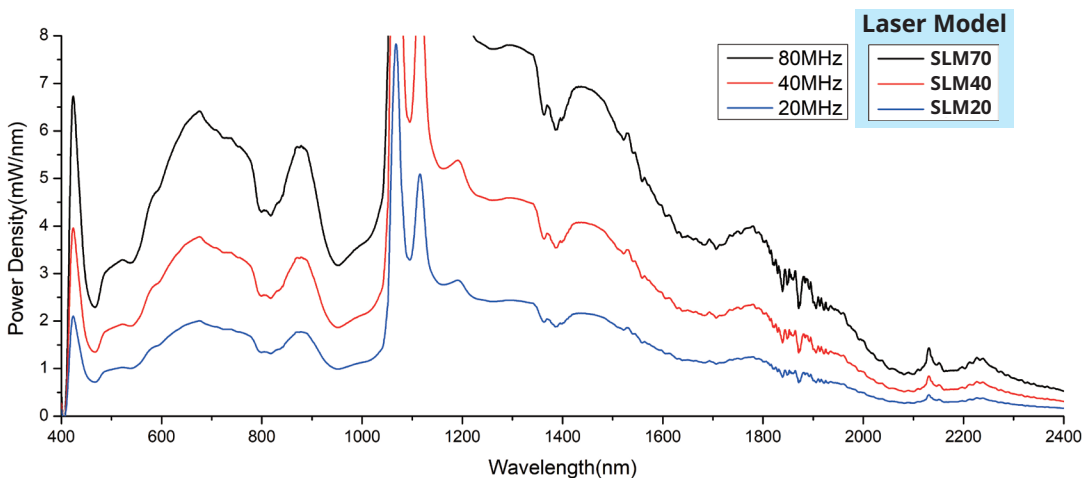
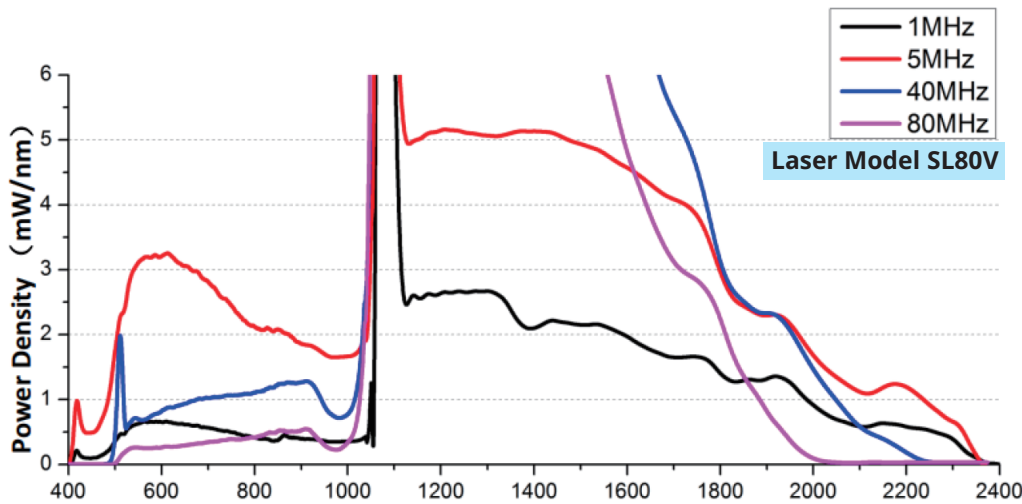
Supercontinuum Laser – SL-Pico

The SL-Pico can be applied to various applications requiring high power and repetition rates, such as low-noise OCT, fluorescence microscopy, nanophotonics, semiconductor inspection, ultra-high-resolution imaging capabilities, and other applications.



- Easy connection and alignment using the WS-SCAY accessory.
- Fully compatible and tunable with the Flexible Wavelength Selector.

Typical Spectrum Graph



Full Specifications

		SL10	SLM10	SLM20	SLM40	SLM35V	SL80V	SLM70
Output Power	Visible	100 mW	250 mW	500 mW	1 W	1 W	1 W	2 W
	Total	1 W	1 W	2 W	4 W	3.5 W	8 W	7 W
Repetition Rate		5 MHz	10 MHz	20 MHz	40 MHz	0.01 to 40 MHz adjustable	0.01 to 200 MHz adjustable	80 MHz
Output pulse width		< 300 ps	< 50 ps	< 50 ps	< 50 ps	< 50 ps	< 300 ps	< 50 ps
Spectral range		450 - 2400 nm	410 - 2400 nm	410 - 2400 nm	410 - 2400 nm	410 - 2400 nm	430 - 2400 nm	410 - 2400 nm
Power stability		< 1 %						
Sync(trigger) Output		(Optional) NIM Output 0 - (-1) V or TTL Output 0 - 3.3 V						
Beam diameter and quality		~ 2 mm@633 nm; M2<1.1						
Beam divergence (half angle)		< 1 mrad						
State of polarization		Unpolarized						
Length of output fiber		1.5 m						
Software		SL-Pico ver.1						
Dimension (L x W x H, mm)		340 x 370 x 150	440 x 470 x 150					
Input power		AC 100 - 240 V, 50/60 Hz						
Data interface		USB 2.0						