

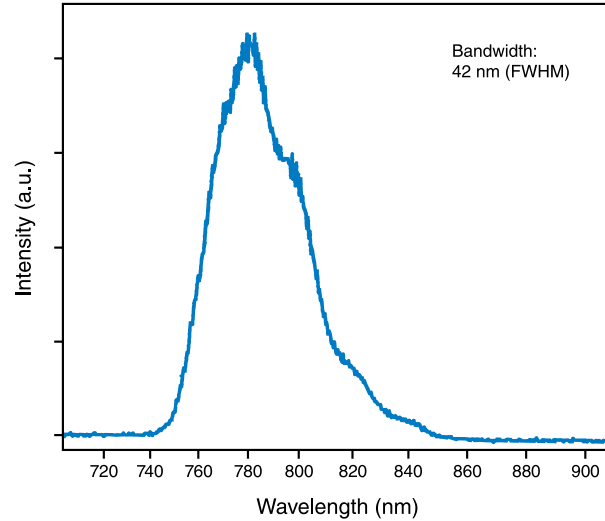
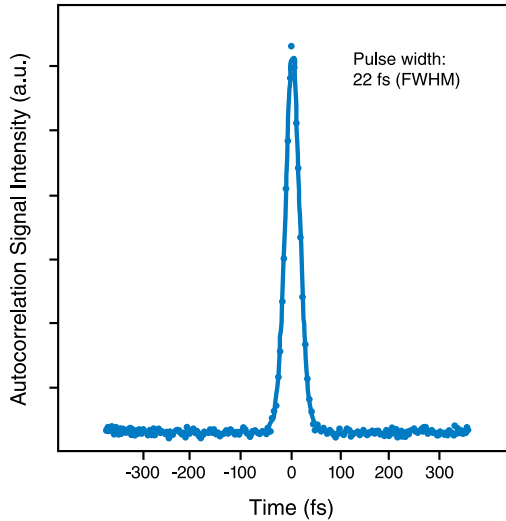


Millennia-Pumped Tsunami Sub 35 Femtosecond Specifications

Output Characteristics	Tsunami® Sub 35 Femtosecond Performance ¹
	790 nm
Average Power ² with Millennia Xs pump with Millennia Vllls pump with Millennia Vs pump	750 mW 600 mW 400 mW
Peak Power ² with Millennia Xs pump with Millennia Vllls pump with Millennia Vs pump	> 260 kW > 210 kW > 140 kW
Pulse Width ³	< 35 fs
Tuning Range with Millennia Xs pump with Millennia Vllls pump with Millennia Vs pump	780-820 nm 780-820 nm 780-820 nm
Repetition Rate ⁴	82 MHz
Noise ⁵	< 0.5%
Stability ⁶	< 5%
Spatial Mode	TEM ₀₀
Beam Diameter at 1/e ² points	< 2 mm
Beam Divergence, full angle	< 1 mrad
Polarization	> 500:1 vertical

1. Due to our continuous product improvement program, specifications may change without notice. Specifications only apply when the Tsunami is pumped by a Spectra-Physics Millennia Vs, Vllls, or Xs solid state laser and the entire Tsunami environmental package is installed.
2. Specifications apply to operation at the wavelength noted.
3. A sech^2 pulse shape (0.65 deconvolution factor) is used to determine the pulse width as measured with a Spectra-Physics Model 409 autocorrelator and dispersion compensation with an external prism pair.
4. Laser operation is specified at a nominal repetition rate of 82 MHz.
5. Specifications represent rms noise measured in a 10 Hz to 2 MHz bandwidth.
6. Percent power drift in any 2-hour period with less than $\pm 1^\circ\text{C}$ temperature change after a 1-hour warm-up.

Millennia-Pumped Tsunami Sub 35 Femtosecond Performance

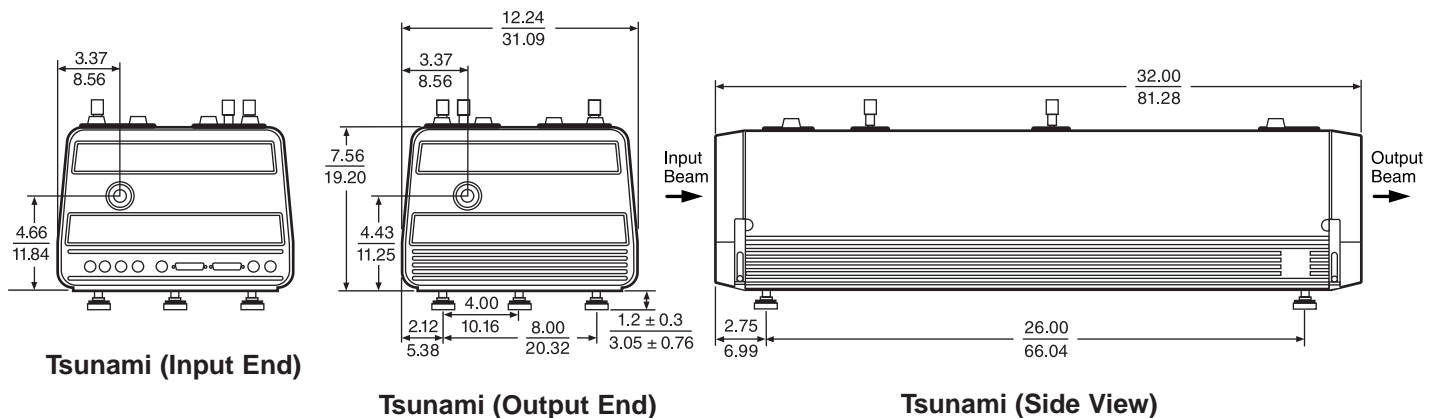


Typical autocorrelation trace (left) and spectrum (right) of a sub 35 fs Tsunami. A sech^2 pulse shape (0.65 deconvolution factor) is used to determine the pulse width of 22 fs.

Warranty

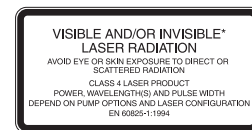
Tsunami is protected by a one-year warranty. All mechanical, electronic, and optical parts and assemblies are unconditionally warranted to be free of defects in workmanship and material for the first year following delivery. This warranty is in lieu of all other warranties, expressed or implied, and does not cover incidental loss.

To arrange an appointment to discuss how Tsunami can enhance your femtosecond research, contact your Spectra-Physics representative. In the United States, call toll-free 1 (800) SPL-LASER.



The Solid State Laser Company™

Dimensions inches
cm



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