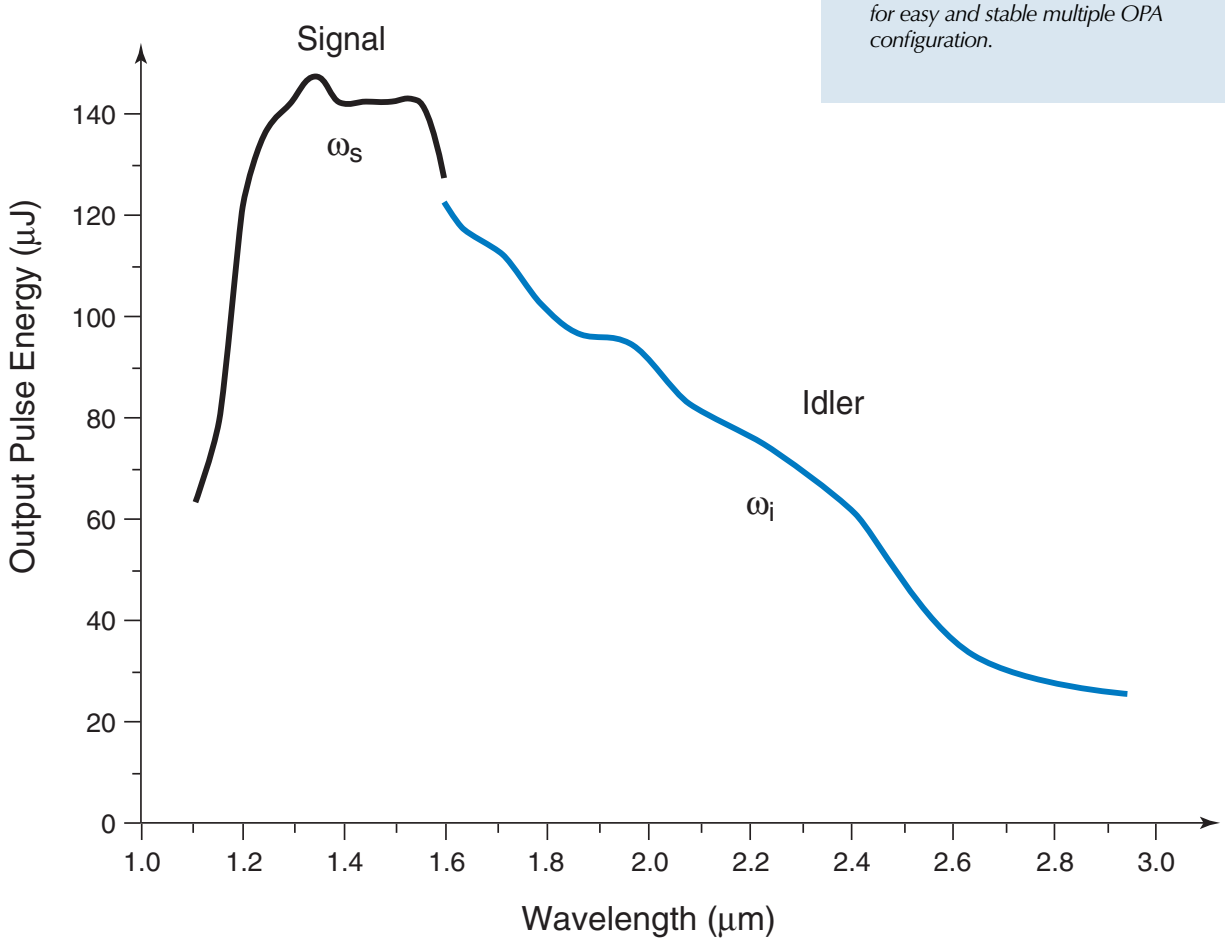
PERFORMANCE

OPA-800C Femtosecond Specifications

The OPA-800C Femtosecond Advantage

- *White light seeding for superior output stability.*
- *Type II BBO crystal for near transform limited output pulses and gap-free tunability from 1.1 to 3.0 µm.*
- *Compact one-box design with user-friendly layout for greater flexibility and ease of operation.*
- *Wavelength extensions available for < 235nm to > 10 µm operation.*
- *Integrated pump beam separation for easy and stable multiple OPA configuration.*



Spectra-Physics
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SPECIFICATIONS

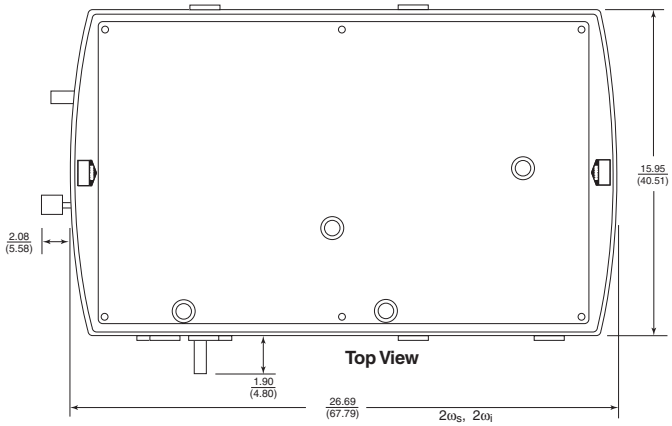
OPA-800C Femtosecond Specifications

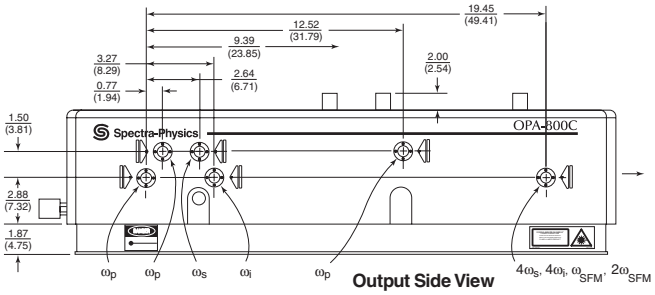
Output Characteristics

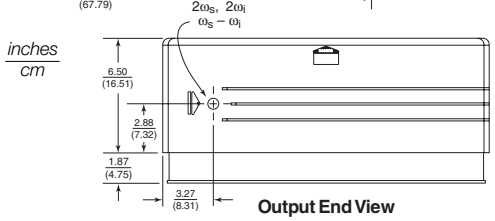
OPA Performance[1]	Pump Beam[2]	Signal Output	Idler Output
Pulse Energy[3]	1.0 mJ	100 µJ at 1.30 µm	50 µJ at 2.08 µm
	0.5 mJ	40 µJ at 1.30 µm	20 µJ at 2.08 µm
	0.3 mJ	25 µJ at 1.30 µm	12 µJ at 2.08 µm
Pulse Width[3]	< 130 fs	< 130 fs at 1.30 µm[4]	< 130 fs at 2.08 µm
	< 40 fs	< 50 fs at 1.30 µm[5]	–
Tuning Range	800nm ± 5nm	1.10 –1.60 µm	1.60 – 3.00 µm
Repetition Rate	1 kHz / 5 kHz	1 kHz / 5 kHz	1 kHz / 5 kHz
Energy Stability[6]	< 1%	< 2% at 1.30 µm	< 2% at 2.08 µm
Polarization	Horizontal	Linear, Vertical	Linear, Vertical

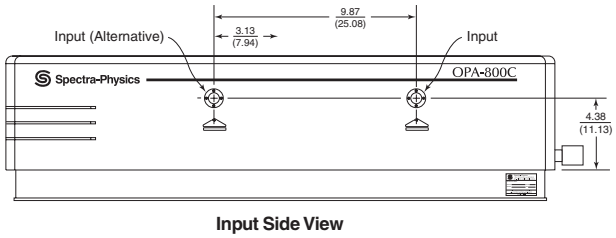
NOTES

1. Due to our continuous product improvement policy, specifications are subject to change without notice and only apply when the OPA is pumped by Spitfire® systems. For the dual OPA system, contact Spectra-Physics.
2. The pump pulse is the output of the Spectra-Physics Spitfire with a pulse width of < 130 fs or < 40 fs at 800 nm.
3. Specifications apply to operation at wavelength noted. A Gaussian pulse shape (0.7 deconvolution factor) is used to determine the pulse width (FWHM) from an autocorrelation signal as measured with a Spectra-Physics Lasers Model PulseScout™.
4. For the OPA pumped by the Spitfire-USF, the OPA output pulse width is < 90 fs at the noted wavelength.
5. Applies to OPA-800CUSF pumped by Spitfire-40FS. To achive <50 fs performance, it is necessary to use external pulse compression (not included). Without compression the pulsewidth is typically <65 fs.
6. RMS with near gaussian distribution.









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CE

VISIBLE AND/OR INVISIBLE* LASER RADIATION
AVOID EYE OR SKIN EXPOSURE TO DIRECT OR SCATTERED RADIATION
CLASS 4 LASER PRODUCT
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Printed in the U.S.A. 07/04
000B-0226 S