

CARS micrograph of peripheral myelinated axons. Red: resonance image of CH vibration showing lipid-rich myelin. Green: off-resonance image outlining interior of the fibers. Photo courtesy of C.Brideau, K. Poon and P. K. Stys, Hotchkiss Brain Institute, University of Calgary, Calgary Alberta Canada.

Picture taken with Clark-MXR Model IMPULSE-pumped Model cOPA synchronized and independently tunable dual OPAs 3-beam ultrashort pulse source.

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<http://en.wikipedia.org/wiki/Clark-MXR>

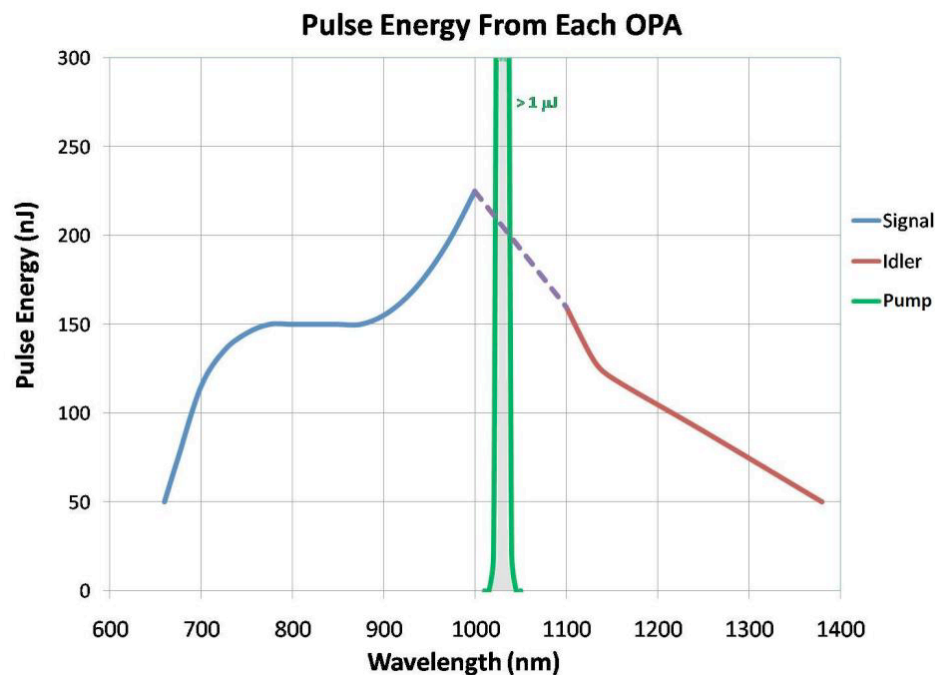


# Model cOPA Tunable Ultrafast Source for Microscopy Applications

The Model cOPA consists of **two** synchronized OPAs in one enclosure pumped by a megahertz repetition rate, fiber-laser oscillator/amplifier system. Each OPA is independently tunable from 700 to 950 nm in the signal range and from 1130 to 1300 nm in the idler range – see pulse energy as a function of wavelength tuning curve below. Residual 1030 nm pump light of > 1 μJ is available from a separate output port. Motorized drives for electronic tuning are included. For additional information please contact sales@cmxr.com.

## Preliminary Specifications:

<b>Tuning Range:</b>	<i>Signal</i>	<b>700-950 nm</b>	Notes: > 100 nJ/pulse throughout signal range See graph below
	<i>Idler</i>	<b>1130-1300 nm</b>	
<b>Pulse Energy:</b>	<i>Signal</i>	<b>&gt;100 nJ</b>	
	<i>Idler</i>	<b>&gt;80 nJ at peak</b>	Over entire tuning range See graph below
<b>Repetition rate:</b>		<b>1 MHz</b>	Other repetition rates possible. Contact Clark-MXR Inc.
<b>Bandwidth</b>		<b>&lt;150 cm<sup>-1</sup></b>	200 cm <sup>-1</sup> to 250 cm <sup>-1</sup> available at higher power output
<b>Compressibility</b>		<b>&lt;1.5 x transform limit</b>	
<b>Pulse Energy Noise</b>		<b>&lt;1% rms for f &gt; 2 Hz</b>	



### Response to date:

*“Very impressive!”*

*“This is a very exciting system considering the higher pulse energy it provides.”*

*“Looks very slick..!”*

*“...ideal for our CARS microscope.”*

*“... looks very interesting indeed, and I am quite excited about it.”*

*“I would like to set up a quick call as soon as possible to discuss the exciting new system...”*

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