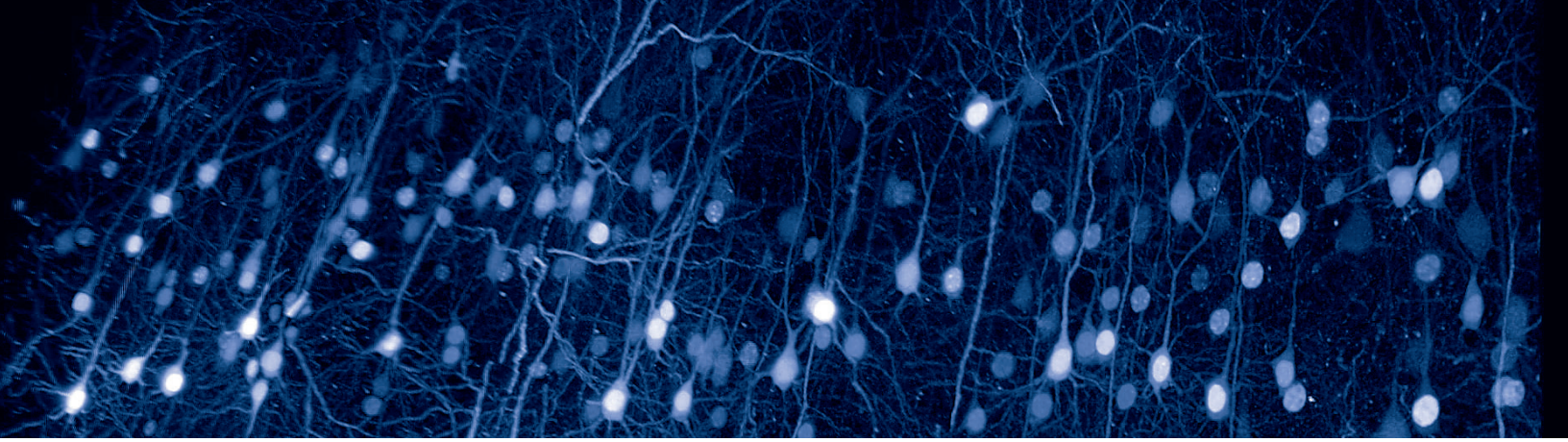


Chameleon Compact OPO

Wavelength Extension for Chameleon Ti:Sapphire Lasers

The Compact Chameleon OPO (optical parametric oscillator) is a wavelength extension up to 1600 nm giving a combined tuning range of 680-1600 nm when used with a Chameleon Ultra or Vision laser as a pump source.

The OPO signal output is tunable between 1000 and 1600 nm without optics changes. An idler option is also available to access wavelengths from 1750 – 4000 nm

The pump laser wavelength and OPO wavelength can be tuned independently, enabling two color imaging or pump/probe applications. Specifically, the laser pump wavelength can be varied between 740 nm and 880 nm with simultaneous independent tuning of the OPO in the IR.

FEATURES & BENEFITS

- Fully automated for hands-free wavelength tuning
- Independent wavelength tuning of pump laser and OPO for two color experiments
- Fan poled OPO crystal for flexible pump wavelength tuning
- Full tuning range without change of optics or re-alignment
- Gap-free overlap with tuning from Chameleon Ti:Sapphire
- Effortless tuning over water absorption bands
- Idler option available for access up to 4000 nm

APPLICATIONS

- Multiphoton Excitation (MPE) Microscopy
- Non-linear Optics
- Time Resolved Spectroscopy
- CARS/SRS Microscopy
- Third Harmonic Generation Imaging

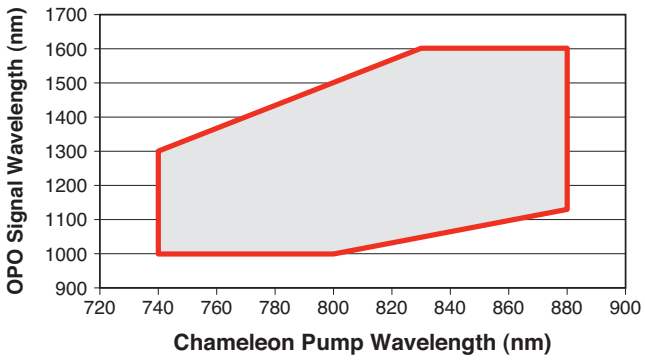
COHERENT®
Superior Reliability & Performance

SPECIFICATIONS	Chameleon Compact OPO Pumped by Chameleon Ultra II	Chameleon Compact OPO Pumped by Chameleon Vision II
Tuning Range[1] (nm)	1000 to 1600	1000 to 1350
Pump Wavelength Range (nm)	740 to 880	760 to 880
Output Power, Signal[2] (mW)	>700	>700[3]
Pump Output Power Available[4] (%) when pumping OPO in bypass mode	 ~15 ~95	
Pulsewidth (fs) (typical)	200	
M^2 (typical)	1.1	
Beam Diameter (mm)	2	
Beam Divergence (mrad) (typical)	0.5	
Polarization	Horizontal	
Repetition-Rate (MHz)	80 (locked to pump laser)	
Dimensions (L x W x H)	520 x 369 x 158 mm (20.5 x 14.5 x 6.2 in.)	
IDLER OPTION		
Additional Tuning Range[1,5] (nm)	1750 to 4000	
Idler Output Power[6] (mW)	>100	
MAXIMUM IR OPTION		
Additional Signal Output Power[7] (%)	15	

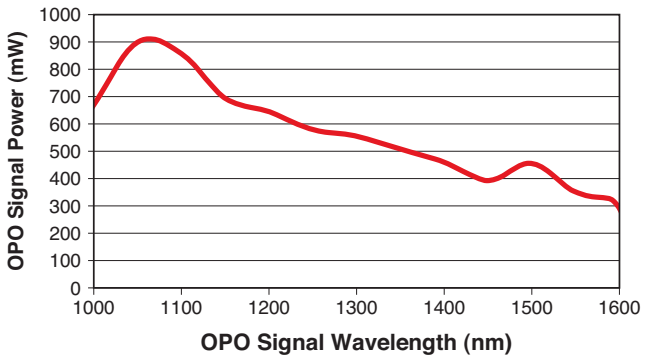
1 Tuning range depends on Pump Wavelength.
2 At maximum of pump and OPO signal tuning curve.
3 Vision Dispersion settings optimized for OPO.
4 Typical. Please refer to Chameleon datasheet for respective power specifications. Pump output not available with Max IR option.
5 In addition to OPO signal output range. All other specifications are unaffected.
6 At maximum of pump and OPO idler tuning range .
7 No access to pump beam.

TYPICAL PERFORMANCE DATA

Chameleon Ultra II and Compact OPO Tuning Range



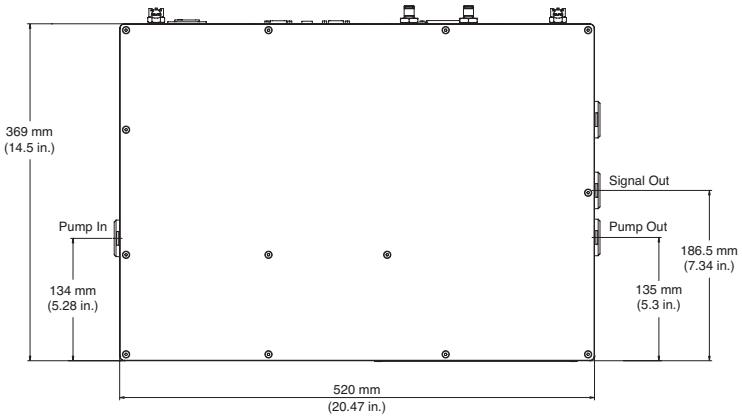
Chameleon Compact OPO Output Power (typical)



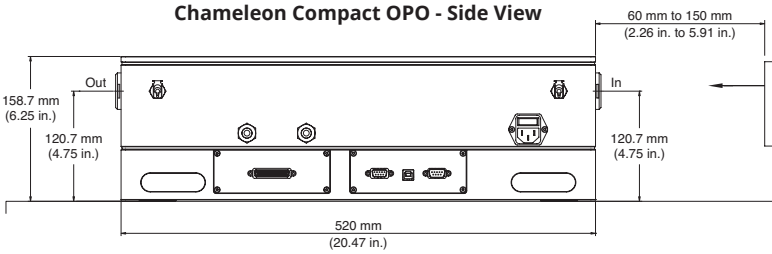
MECHANICAL SPECIFICATIONS

Chameleon Compact OPO

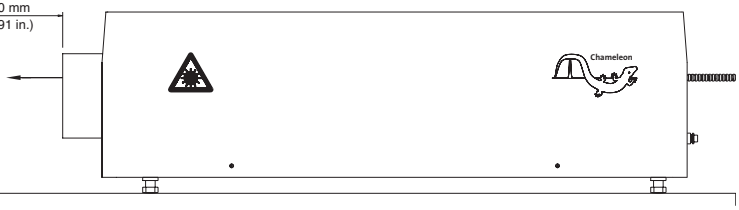
Chameleon Compact OPO - Top View



Chameleon Compact OPO - Side View



Chameleon Compact OPO - Side View



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Coherent, Inc.,
5100 Patrick Henry Drive Santa Clara, CA 95054
p. (800) 527-3786 | (408) 764-4983
f. (408) 764-4646

tech.sales@Coherent.com **www.coherent.com**

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