



Chameleon Compact OPO-Vis

Automated Wavelength Extension for Chameleon Ti:Sapphire Lasers

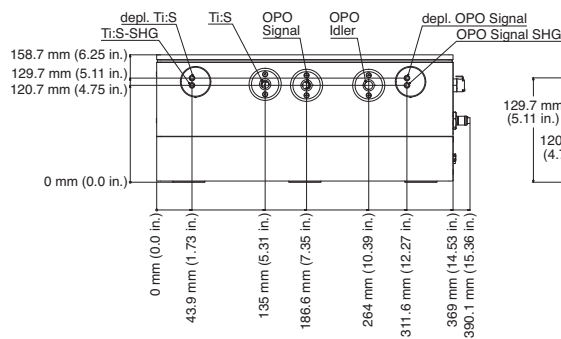
Features

- Automated hands-free wavelength tuning
- Wavelength extension into IR and Visible
- Independent wavelength tuning of laser, OPO and second harmonics with multiple simultaneous outputs
- Fan poled OPO crystal for flexible pump wavelength tuning
- Full tuning range without change of optics or re-alignment
- Gap-free tuning from 340 nm to 1600 nm
- USB and RS-232 control
- Optimized for pumping with the Chameleon Ti:Sapphire family
- Air filtering recirculation unit to allow tuning across IR water absorption bands
- Idler option available for tuning up to 4 μm
- Remote service facility

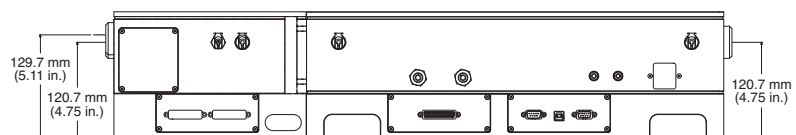


Mechanical Specifications

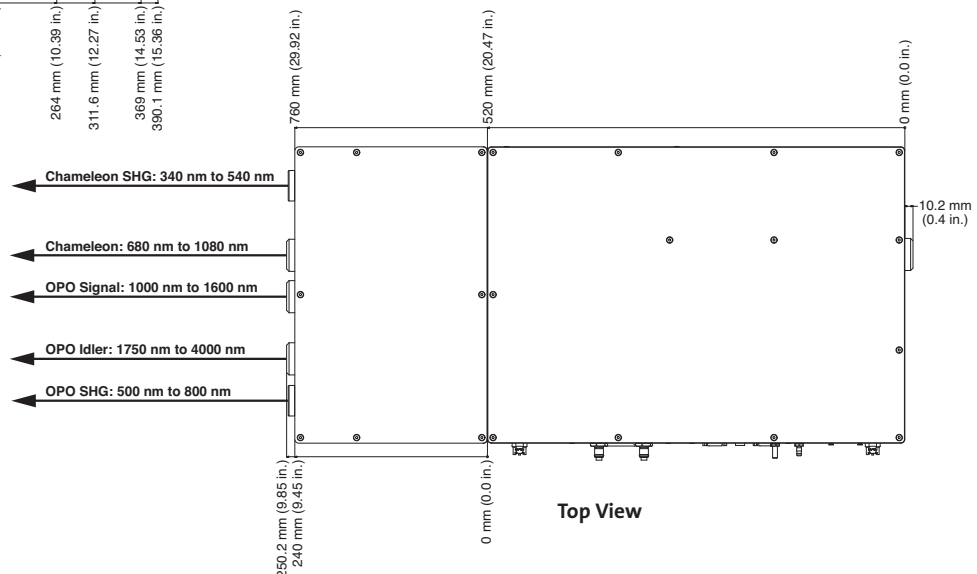
Front View



Side View



Top View



Superior Reliability & Performance

Chameleon™ Compact OPO-Vis

Automated Wavelength Extension for Chameleon Ti:Sapphire Lasers

System Specifications¹

OPO Bypass Mode

	Chameleon Laser	Chameleon SHG
Tuning Range (nm)	680 to 1080	340 to 540
Output Power ²	~95% ⁵	>1000 mW
Pulse Width (fs)(typical)	140	140
M ² (typical)	<1.1	<1.1

OPO Operation

	Chameleon	OPO	Chameleon SHG	OPO SHG
Tuning Range (nm)	740 to 880 ⁶	1000 to 1600 ⁷	370 to 440 ⁶	500 to 800 ⁷
Output Power ³	~15% ⁵	>700 mW	>50 mW	>110 mW
Pulse Width ² (fs)(typical)	140	200	140	200
Polarization	Horizontal			
Repetition Rate (MHz)	80			
Dimensions (L x W x H)	768 x 388 x 158 mm (30.2 x 15.3 x 6.2 in.)			

Idler Option

Tuning Range (nm)	1750 to 4000 ⁷
Idler Output Power ⁴ (mW)	>100

- ¹ All specifications are shown for pumping with Chameleon model Ultra II. Other pump options available.
² At peak of tuning curve.
³ At peak of pump laser wavelength and OPO wavelengths.
⁴ At maximum of pump and OPO idler tuning range.

- ⁵ Typical. Please refer to Chameleon datasheet for respective power specifications.
⁶ Typical, Chameleon Ultra II.
⁷ Pump wavelength dependent.

Wavelength Combination Table

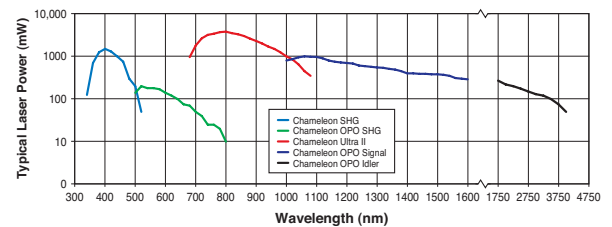
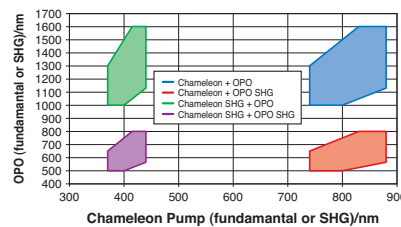
Output Port

Output Scheme

	I	II	III	IV	V	VI
Chameleon Fundamental - High Power (680 nm to 1080 nm)	•					
Chameleon Fundamental - Low Power (740 nm to 880 nm)			•	•		
Chameleon Fundamental - Depleted		•			•	•
Chameleon SHG - High Power (340 nm to 540 nm)		•				
Chameleon SHG - Low Power					•	•
OPO Signal (1000 nm to 1600 nm)			•		•	
OPO Signal - Depleted				•		•
OPO Signal SHG (500 nm to 800 nm)				•		•
OPO Idler			•	•	•	•

Chameleon Compact OPO-Vis Tuning Range

Possible wavelength combinations are in shaded area



Coherent follows a policy of continuous product improvement. Specifications are subject to change without notice.

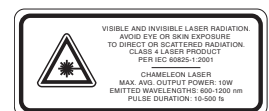
Coherent's scientific and industrial lasers are certified to comply with the Federal Regulations (21 CFR Subchapter J) as administered by the Center for Devices and Radiological Health on all systems ordered for shipment after August 2, 1976.

Coherent offers a limited warranty for all Chameleon systems. For full details of this warranty coverage, please refer to the Service section at www.Coherent.com or contact your local Sales or Service Representative.



Coherent, Inc.
 5100 Patrick Henry Drive
 Santa Clara, CA 95054
 phone (800) 527-3786
 (408) 764-4983
 fax (408) 764-4646
 e-mail tech.sales@Coherent.com

Benelux +31 (30) 280 6060
 China +86 (10) 8215 3600
 France +33 (0)1 8038 1000
 Germany/Austria/Switzerland
 +49 (6071) 968 333
 Italy +39 (02) 31 03 951
 Japan +81 (3) 5635 8700
 Korea +82 (2) 460 7900
 Taiwan +886 (3) 505 2900
 UK/Ireland +44 (1353) 658 833



ISO 9001 Registered