COHERENT

Chameleon MPX

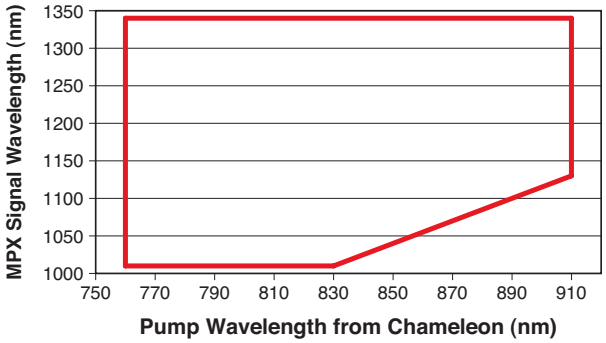
Multiphoton Microscopy Wavelength Extension

Chameleon MPX extends the wavelength range of Chameleon Vision and Ultra Ti:Sapphire lasers, and is specifically designed and optimized for non-linear imaging techniques.

Employing the latest generation fan-poled OPO technology, the fully automated Chameleon MPX delivers high peak power to the sample plane with short pulses and dispersion compensation optimized for typical commercial microscope systems.

Featuring a wide pump tuning range, the Chameleon MPX offers independently tunable dual beam excitation of popular fluorescent probes (e.g. eGFP, mCherry), enabling powerful and truly flexible multimodal imaging.

Chameleon MPX Dual Tuning Range



Superior Reliability & Performance

Chameleon MPX Features:

- Performance optimized for non-linear imaging applications
- 130 fs short pulses for high peak power
- GDD dispersion compensated output
- Automated, gap-free tuning from 680 nm to 1340 nm with Chameleon pump laser
- Independent wavelength tuning of both laser and OPO for simultaneous 2-color excitation and multimodal imaging
- Synchronized output pulse trains for CARS/SRS and wavelength mixing

Chameleon MPX Applications:

- Multiphoton Excitation Microscopy
- Second Harmonic Generation Imaging
- Third Harmonic Generation Imaging
- CARS/SRS Microscopy
- Ultrafast Spectroscopy
- Non-linear Optics

www.Coherent.com/ChameleonMPX

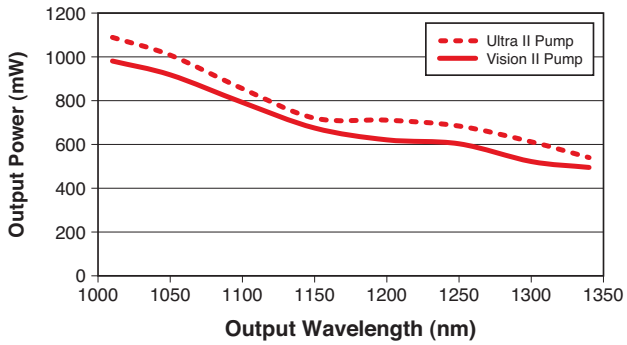
Chameleon MPX

Multiphoton Microscopy Wavelength Extension

System Specifications	Pumped by Chameleon Ultra II	Pumped by Chameleon Vision II
Tuning Range[1] (nm)	1010 to 1340	1010 to 1340
Pump Wavelength Range (nm)	760 to 910	760 to 910
Output Power[2] (mW)(signal)	>750	>700[3]
Pump Output Power Available[4] (%)		
when pumping OPO	~15	
in bypass mode	95	
Pulse Width[5] (fs)(typical)	130	
Output GDD Precompensation[6] (fs^2)	-6000	
M^2 (typical)	<1.1	
Beam Diameter (mm)	2	
Beam Divergence (mrad)(typical)	0.7	
Polarization	Horizontal	
Repetition Rate (MHz)	80 MHz, 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.)	

[1] Tuning range depends on Pump Wavelength.
[2] At maximum of pump and OPO signal tuning curve.
[3] Vision Dispersion settings optimized.
[4] Typical. Please refer to Chameleon datasheet for respective power specifications.
[5] Typical value at sample plane after microscope dispersion.
[6] Typical value at 1100 nm.

Chameleon MPX
Typical Output Power

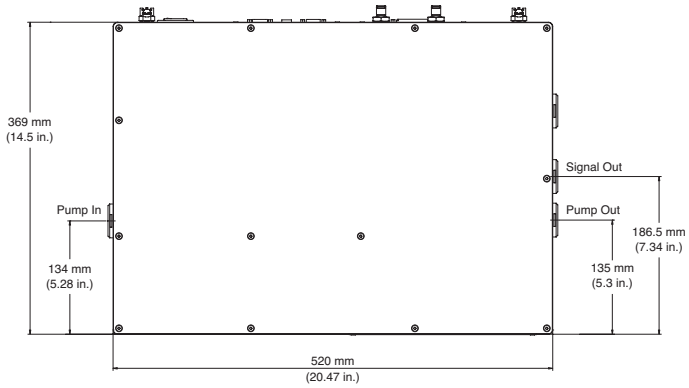


Chameleon MPX

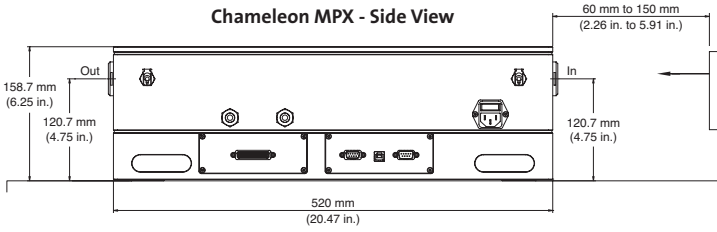
Multiphoton Microscopy Wavelength Extension

Mechanical Specifications

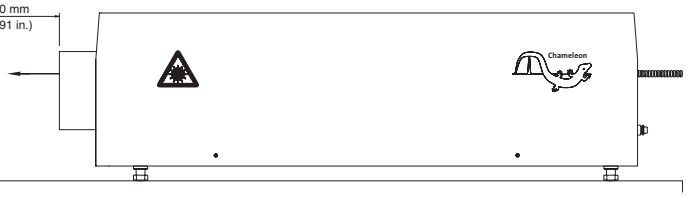
Chameleon MPX - Top View



Chameleon MPX - Side View



Chameleon - Side View



Chameleon and Chameleon MPX Table Layout

www.Coherent.com

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

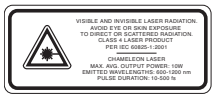
Benelux +31 (30) 280 6060
China +86 (10) 8215 3600
France +33 (0)1 8038 1000
Germany/Austria/
Switzerland +49 (6071) 968 333
Italy +39 (02) 31 03 951
Japan +81 (3) 5635 8700
Korea +82 (2) 460 7900
Taiwan +886 (3) 505 2900
UK/Ireland +44 (1353) 658 833

Printed in the U.S.A. MC-021-14-0M0414

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.



ISO 9001 Registered