

PG411 and PG511 series



A tunable wavelength laser systems for research requiring narrow bandwidth picosecond pulses.

This systems provides smooth and reliable operation with computer controlled tuning.



FEATURES

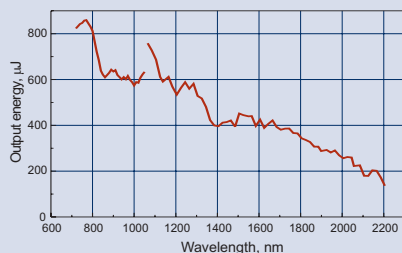
- $< 2 \text{ cm}^{-1}$ bandwidth.
- $< 7 \%$ (StDev) output energy stability.
- High energy conversion efficiency.
- Innovative synchronously pumped picosecond optical parametric oscillator (SPOPO) and traveling wave optical parametric amplifier (OPA) configuration, featuring the efficient narrowing of the output linewidth in the OPO cavity and amplification of a single parametric pulse in the OPA.
- Keypad or PC control options (LabView drivers included).

PL2143AT model pump laser ¹⁾

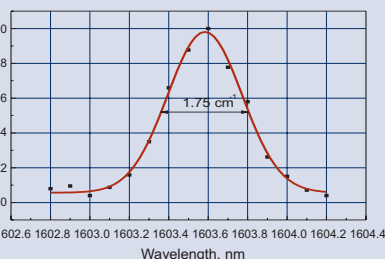
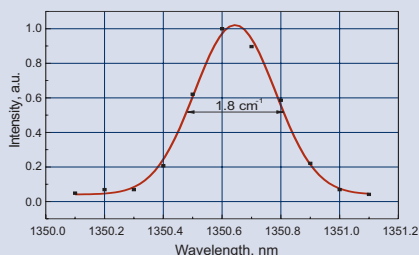
- An innovative system based on our standard picosecond laser, specially designed to provide pump pulses for both parts of the PG411, PG511.
- High output energy.
- Excellent pulse duration and energy stability.
- High beam quality.

¹⁾ For more information on this laser contact your local representatives or EKSPLA directly.

SPECIFICATIONS OF PG411 AND PG511 SERIES OPTICAL PARAMETRIC GENERATORS



Typical PG511 tuning curve. Pump energy: 5 mJ train (OPO) and 6 mJ pulse (OPA) @532 nm.



Typical PG511 output linewidth

MODEL	PG411	PG511
Pump laser specifications		
Energy (train/single pulse), mJ:		5 – 7 / 8 – 12
at 532 nm		
at 355 nm	4 – 6 / 8 – 10	
Pulse duration, ps		25 – 50
Beam polarization:	Vertical	Horizontal
Beam profile:	Homogeneous	
OPO/OPA specifications		
Output wavelength tuning range ²⁾ , nm	420 – 680, 740 – 2300	720 – 2200
Scanning accuracy, nm	0.1	
Linewidth ³⁾ , cm ⁻¹ :	< 6 (420 – 680 nm) < 2 (740 – 2300 nm)	< 4 (720 – 1064 nm) < 2 (1064 – 2200 nm)
Max. conversion efficiency, %	20 (signal+idler)	
Output energy stability (StDev), %	7 (when pumped by EKSPLA laser PL2143AT)	
Beam size, mm:	~ 4	
Polarization:		
Signal	Horizontal	Vertical
Idler	Horizontal	Horizontal

²⁾ It is possible to extend tuning range of PG411 to UV (210 – 420 nm) by second harmonic generation and tuning range of both PG411 and PG511 to mid-IR (2.3 – 18 mm) by difference frequency generation

³⁾ It is possible to make < 2 cm⁻¹ linewidth in signal range (420 – 680 nm for PG411), (720 – 1064 nm for PG511). In this case idler linewidth will be < 6 cm⁻¹ (740 – 2300 nm for PG411) and < 4 cm⁻¹ (1064 – 2200 nm for PG511).



SALES AND SERVICING REPRESENTATIVES

E K S P L A Ltd.
Lasers and Laser Systems Div.
Savanoriu av. 231
02300 Vilnius-53
L I T H U A N I A

Ph.: +370 5 2649629
Fax: +370 5 2641809
sales@ekspla.com
www.ekspla.com

U S A
ALTOS Inc.
Ph.: +1-949-216 9012
Fax: +1-909-363 8637
sales@altos-inc.com

I S R A E L
BEN MOSHE
Ph.: +972-3-670 0007
Fax: +972-3-672 7319
bms@shani.net

J A P A N
TOKYO INSTRUMENTS
Ph.: +81-3-368 647 11
Fax: +81-3-368 608 31
sales@tokyoinst.co.jp

G R E A T B R I T A I N
PHOTONICS SOLUTIONS plc.
Ph.: +44-0131-664 8122
Fax: +44-0131-664 8144
sales@psplc.com

G E R M A N Y
TOPAG LASERTECHNIK GmbH
Ph.: +49-6151-425 978
Fax: +49-6151-425 988
info@topag.de

K O R E A
WOORYANG Co.
Ph.: +82-2-525 3816
Fax: +82-2-586 6721
wooyang@coslaser.com

F R A N C E
BFIOPTILAS
Ph.: +33-(0)1-607 95936
Fax: +33-(0)1-607 98901
dadi.wang@bfioptilas.com

A U S T R A L I A
FIBERBYTE
Ph.: +08-8410 4955
Fax: +08-8410 4544
rshaw@fiberbyte.com

C H I N A
BEIJING OPLAN S&T Co., Ltd.
Tel: +86-10-62623871
Fax: +86-10-62616041
mxh@oplanchina.com

I N D I A
ANATECH INSTRUMENTS
Ph.: +91-22-26730463/26730464
Fax: +91-22-26730465/26932893
anatech@bol.net.in

T A I W A N
SUPERBIN Ltd.
Ph.: +886-2-270 136 26
Fax: +886-2-270 135 31
davidyang@superbin.com.tw