

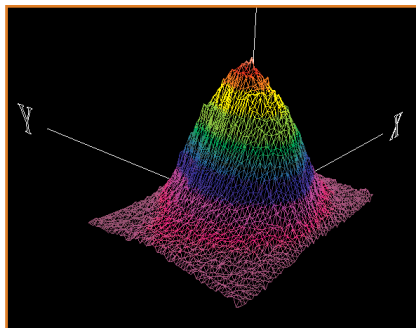
Panther® EX OPO & Panther® EX Plus OPO

The new generation of OPOs

TUNABLE OPO



Panther® EX Plus OPO shown pumped by the Powerlite™ 9010



Panther® EX Plus OPO output beam characteristics

FEATURES & BENEFITS

Excellent beam quality and low divergence in both axes

Signal energies to > 100 mJ per pulse

Linewidths down to < 1.5 cm⁻¹

Tunability from 205 nm to 2550 nm

Pump with any Surelite™ or Powerlite™ pulsed Nd: YAG laser

Integrated frequency doubler

Hermetically sealed and temperature stabilized crystal housings

PANTHER® EX & PANTHER® EX PLUS SPECIFICATIONS

355 nm Laser Output (mJ)	Panther Pump Energy (mJ)	Energy at Peak in Signal unseeded (mJ)	linewidth (cm ⁻¹)	seeded (mJ)	linewidth (cm ⁻¹)	Energy at Peak in Doubled Signal unseeded (mJ)	linewidth (cm ⁻¹)	seeded (mJ)	linewidth (cm ⁻¹)
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Panther® EX (pumped with 200 mJ or less)

SL I-10	100	100	12	< 6	N/A	N/A	1.5	< 5	N/A	N/A
SL I-20	100	100	12	< 6	N/A	N/A	1.5	< 5	N/A	N/A
SL II-10	160	160	24	< 6	N/A	N/A	2.5	< 5	N/A	N/A
PL 8030	150	130	20	< 5	25	< 2.5	2.5	< 5	3.5	< 4

Panther® EX PLUS (pumped with more than 200 mJ)

SL III-10	225	225	35	< 6	N/A	N/A	3.5	< 5	N/A	N/A
PL 8000	310	250	40	< 5	50	< 2.5	5	< 5	7.5	< 4
PL 9010	550	450	70	< 5	85	< 2.5	7	< 5	10	< 4
PL 9020	475	380	60	< 5	75	< 2.5	6	< 5	9	< 4
PL 9030	400	320	40	< 5	48	< 2.5	5	< 5	7.5	< 4

The Panther® EX and Panther® EX Plus, yet another generation of industry leading OPO's.

Panther® EX OPO and Panther® EX Plus OPO are the next generation in Mid-Band OPOs. With all of the benefits of the original Panther, such as linewidth less than 6 cm⁻¹, energies up to 100 mJ, and full tuning range of 205 nm to 2550 nm, the new Panther® EX and Panther® EX Plus also feature excellent beam quality and low divergence (in both axes) to meet the most demanding applications. Also unique to the Panther® EX and Panther® EX Plus is the ability to be pumped by either a non-injection seeded, or an injection seeded laser for narrower output linewidth. With scan speeds up to 10 nm/sec, and a tuning range of over 2300 nm, the Panther® EX and Panther® EX Plus make excellent alternatives to dye lasers for a wide range of applications.

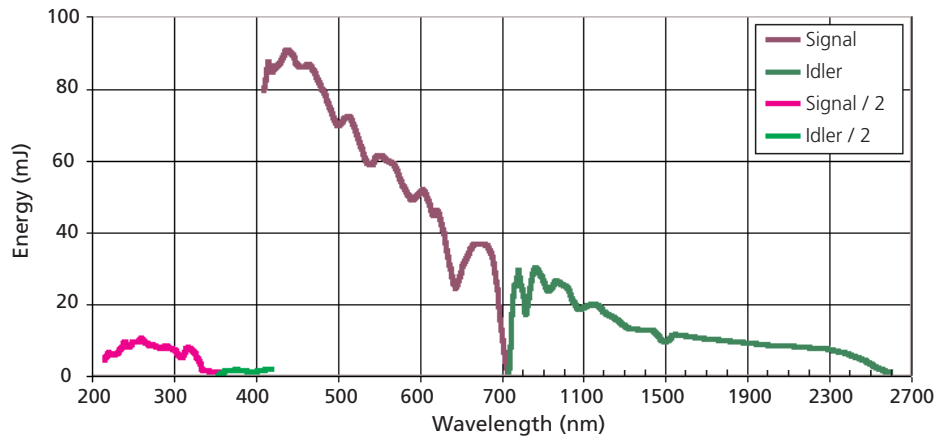
NOTES

All signal specifications at 450 nm and all doubled signal specifications at 240 nm, unless otherwise noted. As a part of our continuous improvement program, all specifications are subject to change without notice.

PANTHER® EX OPO & PANTHER® EX PLUS OPO SPECIFICATIONS

DESCRIPTION	SL I,II,III	PL 8000	PL 9000
Pulsewidth (nsec)	3-5	3-7	3-7
Pointing Stability (μrad)	< ± 150	< ± 100	< ± 100
Energy stability (% , 99% of shots)	< ± 10% @ 10 & 20 Hz	< ± 10% @ 10 & 20 Hz	< ± 15% @ 30 Hz
Divergence (mrad, FWHM)	< 2 mrad (both axes)		
Beam Diameter (mm, near field)	4-7		
Beam Ellipticity (near field)	< 20 %		
Polarization			
Signal Vertical %	> 99		
Idler Horizontal %	> 99		

PANTHER® EX PLUS PERFORMANCE WITH SEEDED PL 9010 PUMP



PANTHER® EX OPO PHYSICAL LAYOUT

All dimensions in mm (inches)

