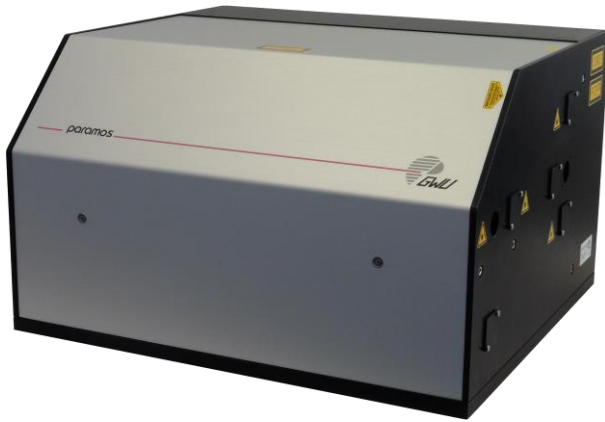


# primoScan DPSS

High End Optical Parametric Oscillator  
for DPSS Lasers



## primoScan Specification

primoScan Midband	/ULD-DPSS
Repetition Rate	100 Hz
Pump Energy	90 mJ
Output Energy at 450 nm	20 mJ
Output Energy at 345 nm	3.8 mJ
Output Energy at 260 nm	2.8 mJ
Beam Diameter at Exit Aperture	< 6.5 mm
Tuning Range OPO	405 – 2700 nm
Tuning Range UV <sup>2</sup>	210 – 405 nm
Linewidth <sup>3</sup>	3.5 cm <sup>-1</sup> – 6 cm <sup>-1</sup>
OPO Pulse Width	0 – 3 ns < Pump
Beam Divergence (FWHM)	< 2.2 mrad
Wavelength Shift Time	< 100 ms

<sup>1</sup>: at 450 nm

<sup>2</sup>: Depending on UV Options

<sup>3</sup>: Except deep UV < 300 nm linewidth < 8 cm<sup>-1</sup>

## Features and Benefits

Fully integrated midband OPO with ultra-low divergence

Highest UV efficiency

Tuning range  
210 - 2750 nm

Single output port for entire tuning range

Fully automated control standard

Fast shot-to-shot wavelength switching

Soft pumping scheme for high reliability and long lifetime

### Applications

Material Analysis

Laser induced fluorescence

Combustion studies

Remote sensing

Multiphoton interactions

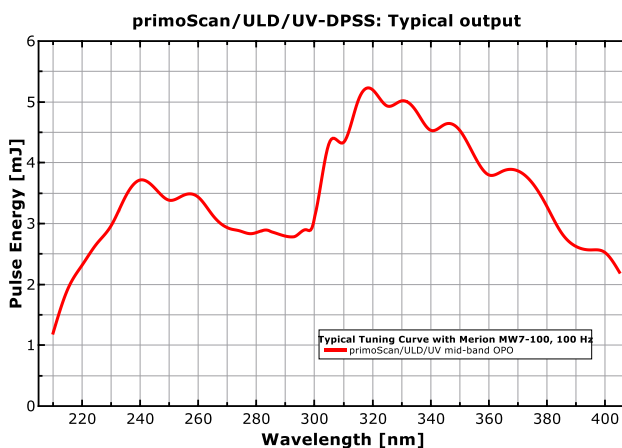
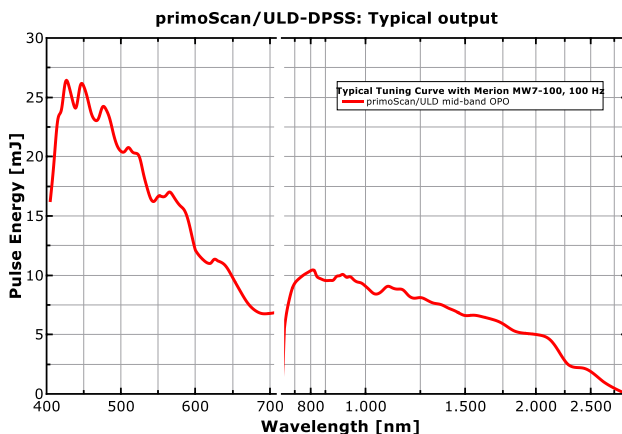
Medical & Biotechnology

## Notes

All specifications depend in the pump laser specifications and performance. Please contact the factory or our sales representatives for details. All specifications are subject to change without notice.

# primoScan Performance

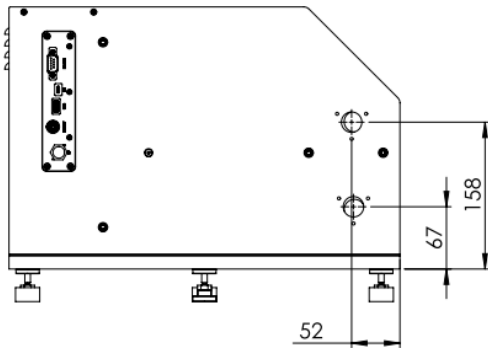
Typical performance with Lumibird Merion MW Laser, not a guaranteed or warranted specification



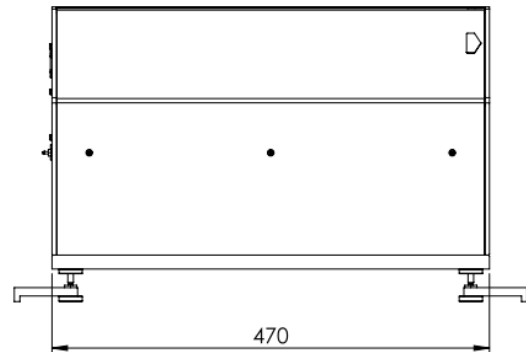
## Pumplaser Requirements

Wavelength	355 nm
Energy	90 mJ
Pulse Width	3.5 – 10 ns
Repetition Rate	100 Hz
Spatial Beam Profile	Homogeneous
Divergence	< 1 mrad

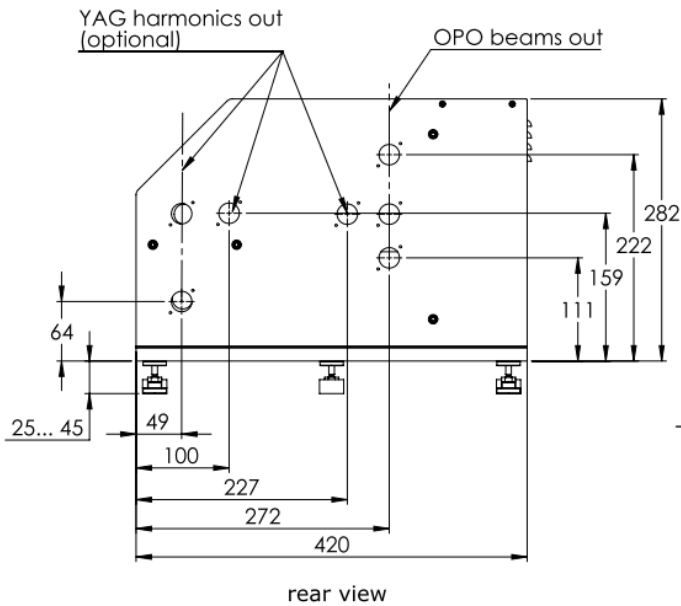
# primoScan Dimensions and Properties



front view



side view



rear view

## Mechanical + Utilities

Size OPO body  
(L x W x H):  
470 x 420 x 317 mm<sup>3</sup>

Weight OPO body:  
24 – 29 kg (depending on configuration)

Power requirements  
Electronics & Motorizers:  
100 – 240 V, 50 – 60 Hz

For dimensions with feet  
please refer to the  
dimensional drawing