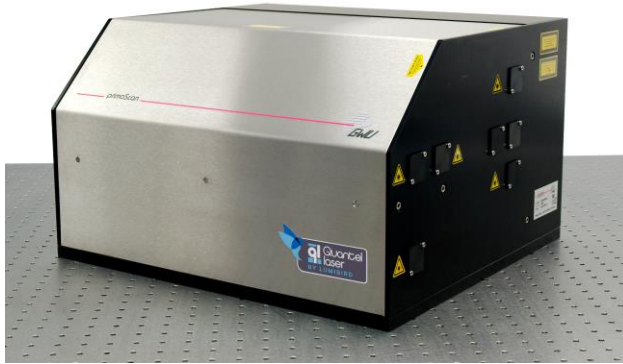


# primoScan DPSS

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 <sup>4</sup> at 345 nm	3.8 mJ
Output Energy <sup>4</sup> 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>

<sup>4</sup>: Losses are to be expected with additional add-ons, e. g. when common port UV is added. Please contact sales for detailed specification.

## Features and Benefits

Fully integrated midband OPO with ultra-low divergence

Highest UV efficiency

Tuning range  
210 - 2700 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

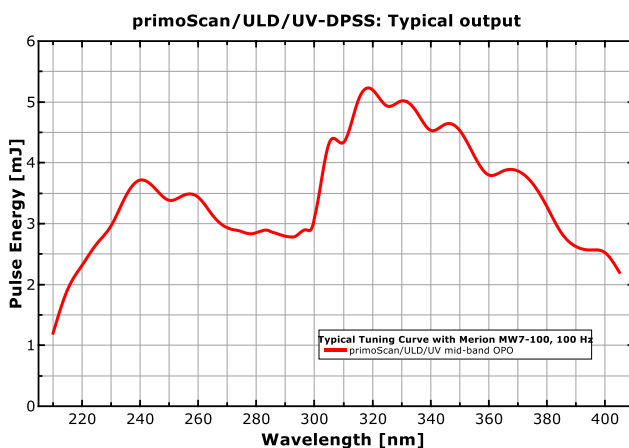
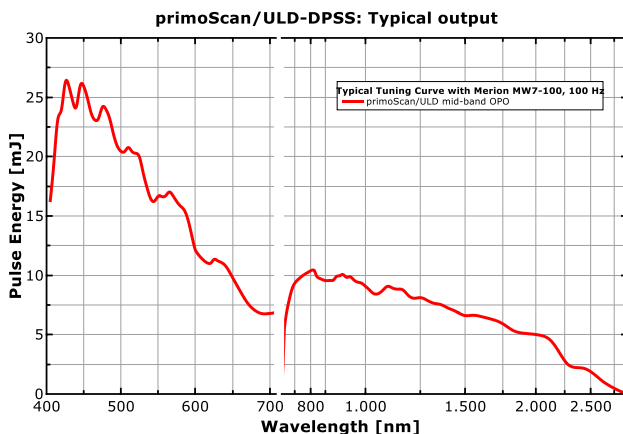
## Notes

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

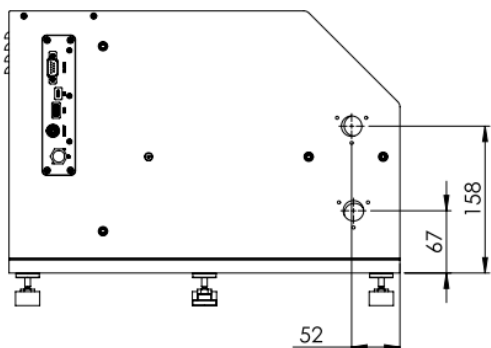


## Pumplaser Requirements

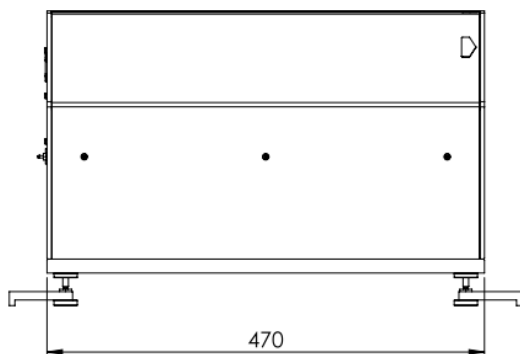
Wavelength	355 nm
Energy	90 mJ
Pulse Width	3.5 – 10 ns
Repetition Rate	100 Hz
Spatial Beam Profile	Homogeneous
Divergence	< 1 mrad



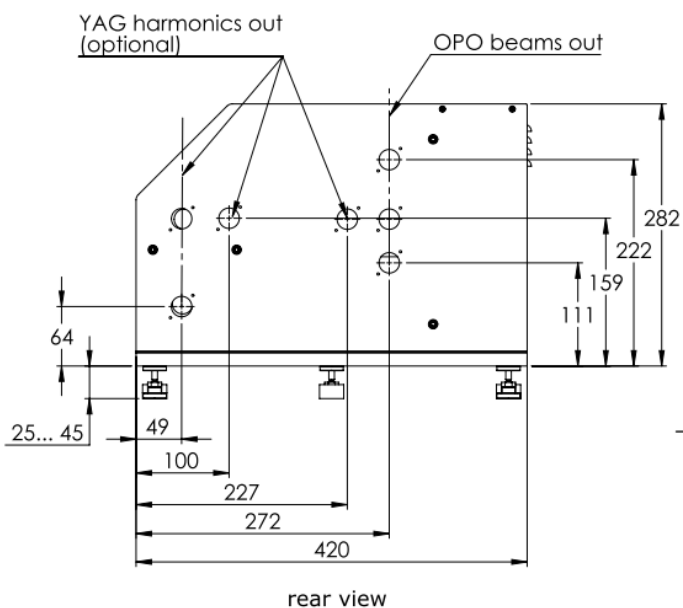
# primoScan Dimensions and Properties



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

