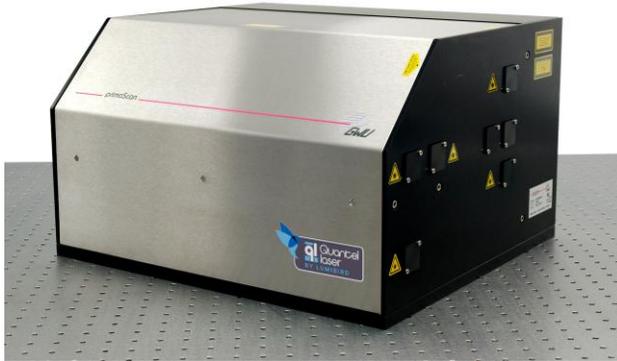


primoScan DPSS

High End Optical Parametric Oscillator
for DPSS Lasers



primoScan Specification

primoScan Midband	/ULD-DPSS
Repetition Rate	100 Hz
Pump Energy	90 mJ
Output Energy ¹ at 450 nm	20 mJ
Output Energy ^{2,3} at 345 nm	3.8 mJ
Output Energy ^{2,3} at 280 nm	2.8 mJ
Beam Diameter at Exit Aperture	< 6.5 mm
Tuning Range OPO	405 – 2700 nm
Tuning Range UV ⁴	210 – 405 nm
Linewidth ⁵	3.5 cm ⁻¹ – 6 cm ⁻¹
OPO Pulse Width	0 – 3 ns < Pump
Beam Divergence (FWHM)	< 2.2 mrad
Wavelength Shift Time	<100 ms

Footnotes:

¹: Output Peak ± 10 nm

²: Output Peak ± 5 nm

³: Losses are to be expected with additional add-ons, e. g. up to 10% losses on UV wavelengths (210 – 405 nm) when common port UV is added. Please contact sales for detailed specification.

⁴: Depending on UV Options

⁵: Except deep UV < 300 nm linewidth < 8 cm⁻¹

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

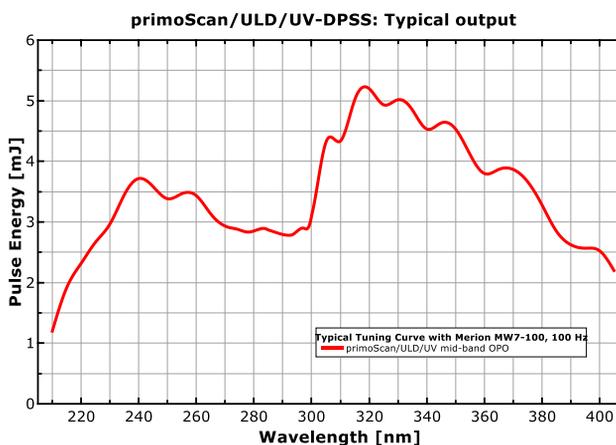
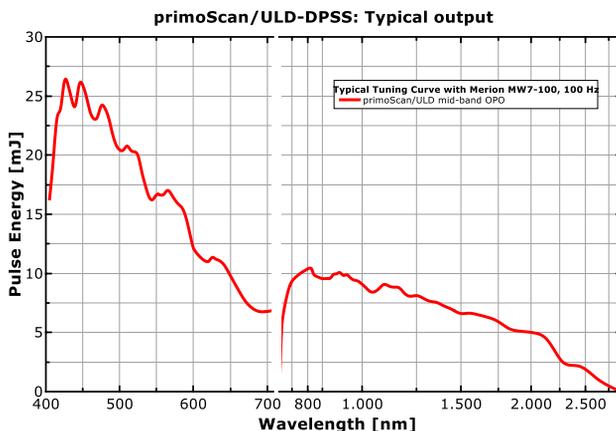
All specifications depend in the pump laser specifications and performance. Please contact the factory or our sales representatives for details. All specifications are subject to change without notice.



Scan Me!

primoScan Performance

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

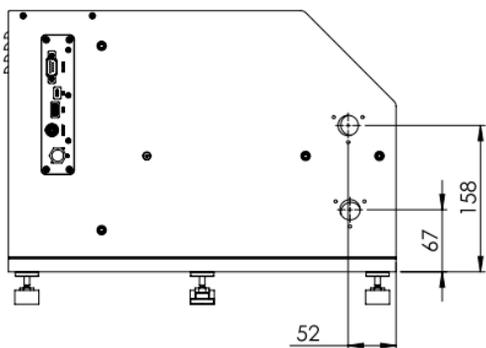


Pumplaser Requirements

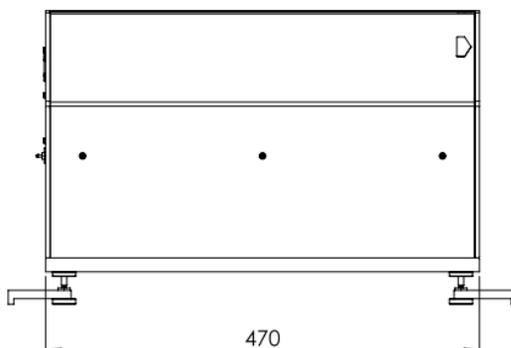
Wavelength	355 nm
Energy	60 – 90 mJ
Pulse Width	3.5 – 10 ns
Repetition Rate	1 – 200 Hz
Spatial Beam Profile	Homogeneous
Divergence	< 1 mrad



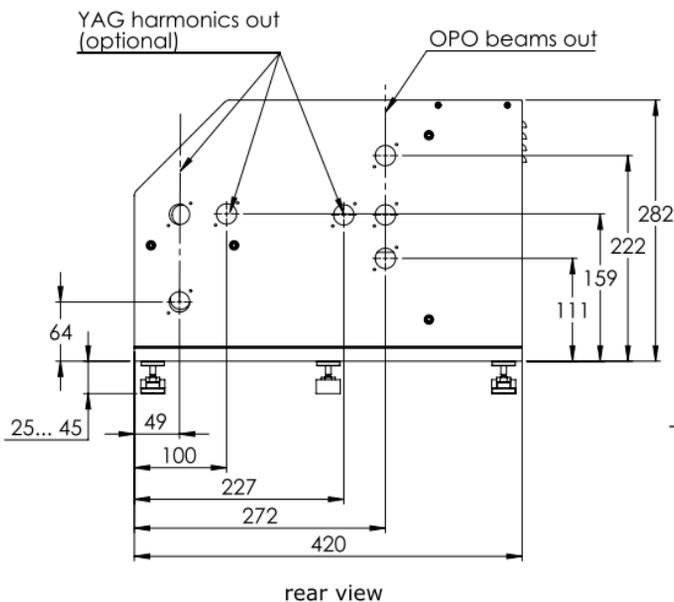
primoScan Dimensions and Properties



front view



side view



rear view

Mechanical + Utilities

Size OPO body
(L x W x H):
470 x 420 x 317 mm³

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

