

uvScan

Frequency Converter for OPOs



Highly efficient frequency converter for midband OPO systems

Features and Benefits

Simultaneous installation of 2 spectral ranges

Fully separated Signal, Idler and pump radiation within system housing

Highest conversion efficiency with Option L+ (> 40 mJ UV!)

Computer controlled tuning integrated in OPO software, absolute wavelength calibration with optional lambdaScan

Model uvScan Wavelength Option	UV-D	UV-S	UV-L	UV-L + Option (1)
Wavelength Range (2)	206 -220 nm	213 - 257 nm	257 - 354 nm	257 - 420 nm
Repetition Rate	0 -100 Hz (given by pump laser)			
Pulse Duration	1 - 5 ns shorter than pump pulse			
Linewidth	5 - 12 cm-1			
Output Energy for uvScan and uvScan L+				
Pump Laser Energy @ 355 nm	120 mJ	170 mJ	240 mJ	320 mJ
uvScan Energy, typ. @ 285 nm	3.7 mJ	5.2 mJ	7.4 mJ	9.9 mJ
uvScan L+ typ.E.@ 335/365 nm	8.5 mJ	12 mJ	17 mJ	23 mJ
Pump Laser Energy @ 355 nm	400 mJ	500 mJ	650 mJ	
uvScan Energy, typ. @ 285 nm	12.4 mJ	15.5 mJ	20 mJ	
uvScan L+ typ.E.@ 335/365 nm	28 mJ	35 mJ	45 mJ	

- (1) Option L plus lambda/2 (doubling of Idler) or Option L+ (high power option, (3))
- (2) 2 wavelength options (D, S, L) can be installed simultaneously
- (3) Option L+ requires additional housing (Integra, flexiScan) or beam shielding

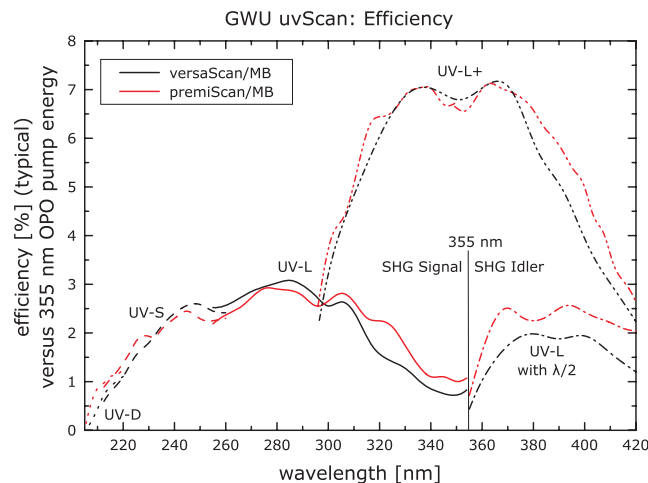
uvScan

Versatile, easy-to-use frequency converter for mid-band OPOs

Extends tuning range of GWU midband and ULD OPOs into the deep UV (down to 206nm, UV-D). Convenient wavelength separation with Pellin-Broca prism, which also allows the use of Signal and Idler without uvScan. Extremely user friendly software interface. Beam dumps for unused radiation. Ask for details.

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is the ultimate frequency converter for OPOs featuring an all-solid-state coherent UV source covering 206 nm - > 2500 nm together with the OPO more tuning curves: p.t.o.



Notes:

All specifications depend on pump laser specifications and performance. Please contact factory or your sales representative for details. All specifications subject to change without notice.

Mechanical + Utilities		
Size (L x W x H) (1)	uvScan (Body Only)	410 mm x 163 mm x 155 mm
	Electronics Box (2)	280 mm x 285 mm x 176 mm
Weight	uvScan Head w/ Motors	8 kg
	Electronics Box (2)	5.2 kg max.
Power Requirements	Electronics & Motorizers	100 - 240 V, 50/60 Hz, 1.7 A

(1) Dimensions with feet, micrometer screws, and other protruding elements: refer to dimensional drawing

(2) Electronics box shared with OPO, included in option M, not included in uvScan

