Credo Second Harmonic Generation

Credo SHG

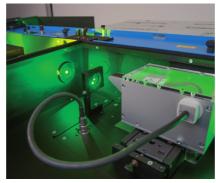
For the extension of the Credo's tuning range into the blue spectral region, second harmonic generation (SHG) is used.

The unit provides rotation stages for non-linear crystals and compensators. The entire unit is enclosed to protect it from dust and excessive

humidity.

It is possible to match two non-linear crystal for higher conversion efficiency. This option is recommended for pump power exceeding 80 Watt at 532 nm and 50 Watt at 355 nm.







Power Output

Dye	SHG	Pump Power, 53	Pump Power, 532 nm, 10 kHz		
		8 W	40 W	150 W	
Rhodamine 60	G 285 nm	0.10 W	1.70 W	6.30 W ¹⁾	
DCM	315 nm	0.06 W	1.20 W	4.50 W 1)	
Styryl 8	387.5 nm	0.01 W	0.50 W	2.25 W ¹⁾	

Dye	SHG	Pump Power, 355 nm, 10 kHz		
		3 W	40 W	70 W
Coumarin 307	250 nm	0.015 W	0.45 W	1.0 W 1)
Coumarin 2	225 nm	0.015 W	0.45 W	1.0 W 1)

¹⁾ with UV-Boost option

General Characteristics

Crystal Tuning Mode	Look-up table	
UV Beam Polarization	Horizontal, > 98%	
UV Beam Size	1 - 2 mm, depending on Credo configuration	
UV Beam Divergence (typical)	same as input beam	
Linewidth	< 1.5 x Credo Linewidth / cm ⁻¹	

Options

UV-Boost frequency conversion

Specifications are subject to change without notice





