

LIOPSTAR-HQ

high repetition rate dye laser



- low ASE < 0,05%
- repetition rates up to 100 kHz
- highly efficient laser resonator
- eroded stainless steel case for oscillator and amplifier cells
- new state-of-the-art integrated electronics and user friendly LabView Software
- intelligent PI control for FCU autotracking unit
- temperature stabilized crystals
- USB port
- remote control via TCP / IP protocol
- smallest footprint

frequency conversion units

- internal open loop frequency doubling with look-up-table
- autotracking FCU available
- high scan speed, up to 10 nm/min
- usable for repetition rates from < 1 Hz up to 100 kHz
- temperature control for doubling crystal

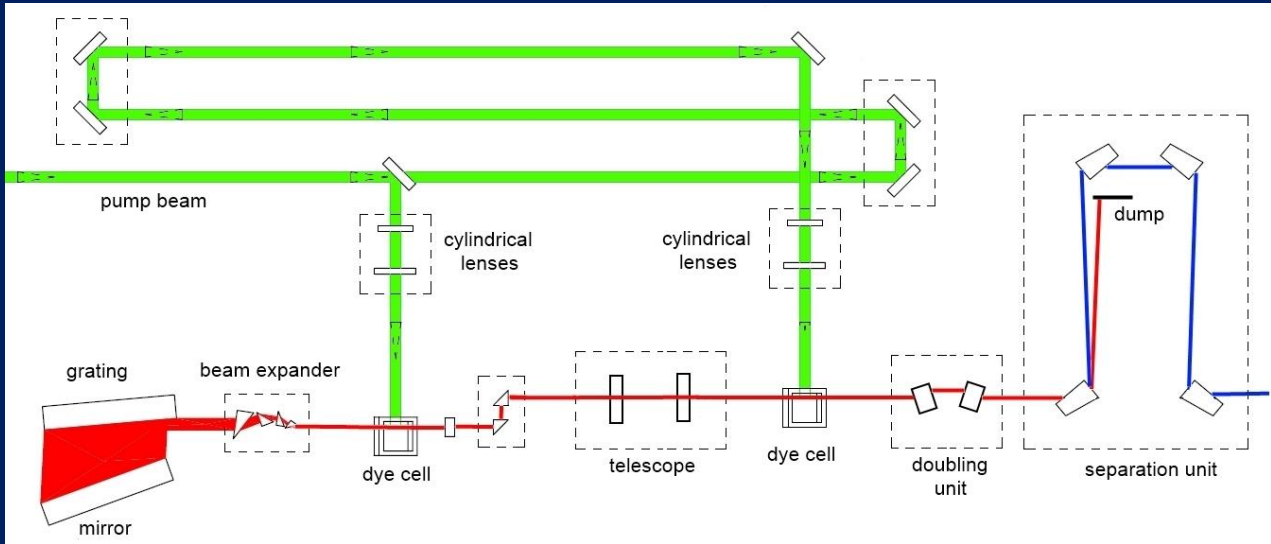
Options

- 3rd amplifier cell for high power operation
- temperature and flow monitoring

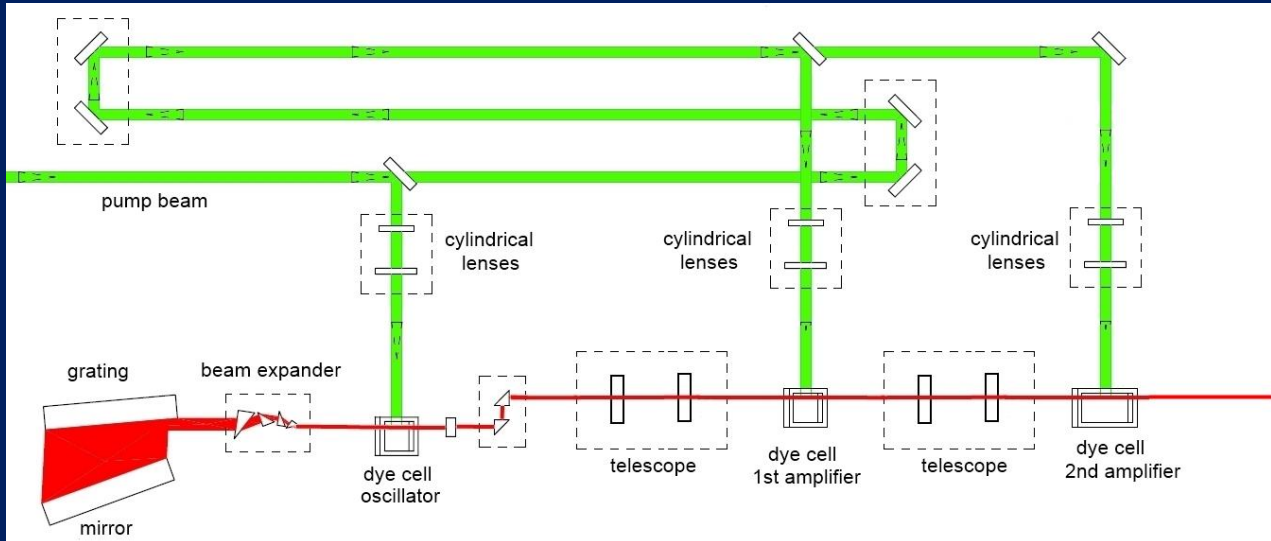
linewidth specifications		LIOPSTAR-HQ	
	grating	tuning range	linewidth
LIOPSTAR-HQ	1800 l/mm, 90 mm	430 nm – 900 nm	< 0.08 cm ⁻¹ @ 565 nm
LIOPSTAR-HQ	2400 l/mm, 90 mm	430 nm – 740 nm	< 0.06 cm ⁻¹ @ 565 nm
specifications		LIOPSTAR-HQ	
conversion efficiency: Nd:YAG pumped 532 nm, 10 kHz, 10ns, 40W	10 W, 25% @ 564 nm	Rhodamine 6G	
Nd:YAG pumped 532 nm, 10 kHz, 10ns, 15W	6.8 W, 17% @ 640 nm	DCM	
conversion efficiency: Nd:YAG pumped 532 nm, 10 kHz, 10ns, 90W	2 W, 13% @ 440 nm	Coumarin 120	
Nd:YAG pumped 355 nm, 10 kHz, 10ns, 30W	20 W, 22% @ 564 nm	Rhodamine 6G	
conversion efficiency SHG	13.5 W, 15% @ 640 nm	DCM	
	3.3 W, 11% @ 440 nm	Coumarin 120	
	>10%		
conversion efficiency: Nd:YAG pumped 532 nm, 1 kHz, 150ns, 90W	20 W, 22% @ 564 nm	Rhodamine 6G	
	500 mW, 2.5% @ 282 nm	SHG	
wavelength reproducibility	< 0.002 nm		
absolute accuracy	< 0.01 nm		
scan linearity	< 0.002 nm		
wavelength stability	< 0.001 nm/°C		
divergence	0.5 mrad		
polarisation	> 98 %	vertical	
ASE-background	< 0.5 %		
dimensions		LIOPSTAR-HQ	
LIOPSTAR-HQ	1040 mm x 400 mm x 300 mm ± 10 mm, 80 kg		
beam input height	180 mm ± 10 mm		
beam output height	200 mm ± 10 mm		
requirements		LIOPSTAR-HQ	
cooling for dye solvent	800 Watt, resonator & amplifier system		
laboratory	dust-free air (flow box)		
voltage	110...230V, single phase, 50 Hz/ 60 Hz		
computer	single USB port		
operating system	Windows XP/ Windows Vista/ Windows 7		
pump laser pulse power, kHz operation	up to 150 Watt		

specification are subject to change without notice

LiopStar-HQ



LiopStar-HQ with 3rd amplifier (rectangular cell or Bethune cell)



LIOP-TEC GmbH
 Industriestrasse 4
 42477 Radevormwald
 Germany

phone: +49 (0)2195 6889932 / 6898719
 fax: +49 (0)2195 9299113
 E-Mail: info@liop-tec.com
 Web: www.liop-tec.com