

Linewidth Specifications

Dispersion Option	Tuning Range	Linewidth		Efficiency
Three Quartz Prisms	370 nm .. 920 nm	0.15 nm ¹⁾	5 cm ⁻¹ @ 570 nm	24 % ²⁾
1800 lines / mm, 60 mm	400 nm .. 920 nm	3.6 pm	0.1 cm ⁻¹ @ 625 nm	12 % ³⁾
1800 lines / mm, 90 mm	400 nm .. 920 nm	2.4 pm	0.06 cm ⁻¹ @ 625 nm	12 % ³⁾
2400 lines / mm, 60 mm	350 nm .. 760 nm	2.7 pm	0.08 cm ⁻¹ @ 570 nm	12 % ²⁾
2400 lines / mm, 90 mm	350 nm .. 760 nm	1.8 pm	0.06 cm ⁻¹ @ 570 nm	12 % ²⁾
3000 lines / mm, 60 mm	350 nm .. 620 nm	2.0 pm	0.06 cm ⁻¹ @ 570 nm	12 % ²⁾
3000 lines / mm, 90 mm	350 nm .. 620 nm	1.4 pm	0.05 cm ⁻¹ @ 570 nm	12 % ²⁾
Dual 1800 lines / mm	410 nm .. 900 nm	1.7 pm ⁴⁾	0.05 cm ⁻¹ @ 625 nm	10 % ³⁾
Dual 2400 lines / mm	370 nm .. 710 nm	1.2 pm ⁴⁾	0.04 cm ⁻¹ @ 570 nm	10 % ²⁾
Dual 3000 lines / mm	370 nm .. 580 nm	1.0 pm ⁴⁾	0.03 cm ⁻¹ @ 570 nm	10 % ²⁾

¹⁾ for wavelength < 660 nm

²⁾ resonator, pre- and main amplifier at 570 nm (peak Rhodamine 6G) pumped at 532 nm

³⁾ resonator, pre- and main amplifier at 625 nm (peak DCM) pumped at 532 nm

⁴⁾ exact linewidth depends weakly on wavelength; value given for 450 nm

Wavelength and Beam Characteristics

Absolute Wavelength Accuracy	< 15 pm	(prism models: 0.5 nm)
Wavelength Resetability	< 2 pm	(prism models: 0.05 nm)
Wavelength Stability	< 1.5 pm / °C	(prism models: 10 pm / °C)
Divergence (typical)	1.0 mrad	
Polarization	> 98 %	(vertical)
ASE	< 0.5 %	
Pump Energies (grating models)	8 .. 150 mJ @ 532 nm	
	8 .. 130 mJ @ 355 nm	
Pump Energies (prism models)	8 .. 230 mJ @ 532 nm	
	8 .. 230 mJ @ 355 nm	

Requirements

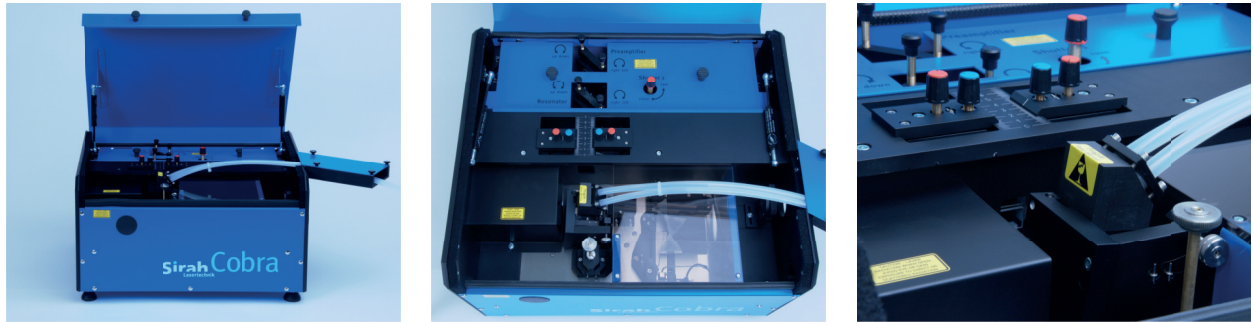
Voltage	110 .. 230 V, single phase, 50 Hz / 60 Hz
Computer Control	XP / Vista / Windows 7 / Windows 8 / Windows 10, USB port

Options

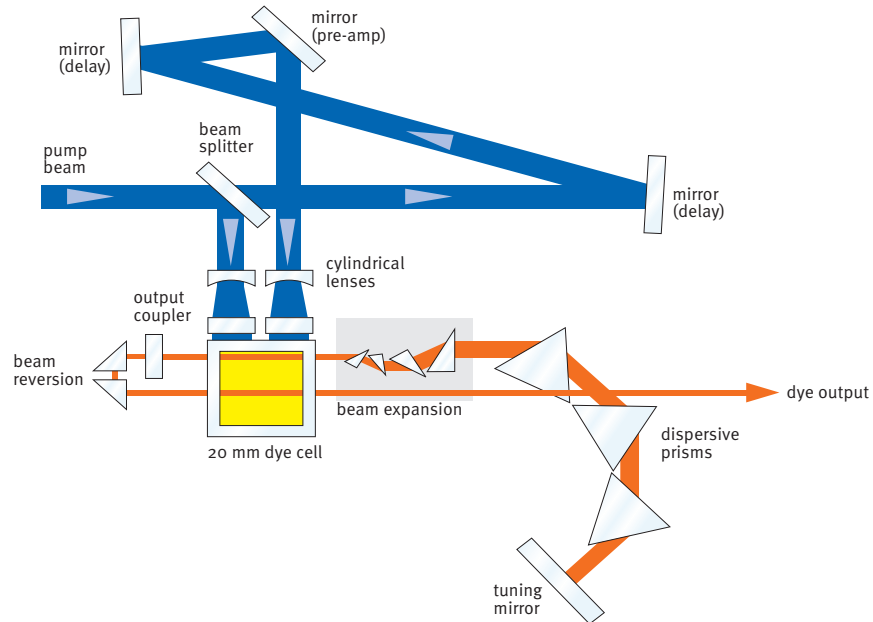
- Double wavelength pump optic (532 nm, 355 nm)
- Frequency doubling / mixing units (external housing)
- Automatic exchange of gratings
- Piezo wavelegth control
- Dynamic mode option
- Double bandwidth option

Cobra Dye Laser

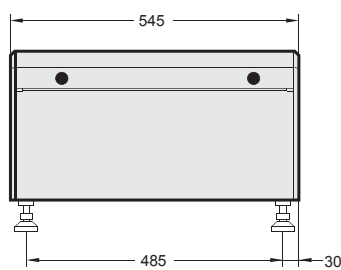
Cobra Dye Laser



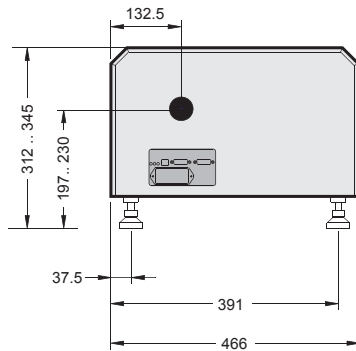
Optical Layout



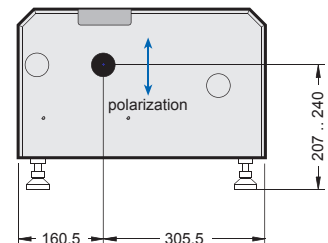
Dimensions



Cobra (side view)

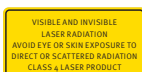


Cobra (pump laser input end)



Cobra (dye laser output end)

All Dimensions in mm
Specifications are subject to change without notice



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