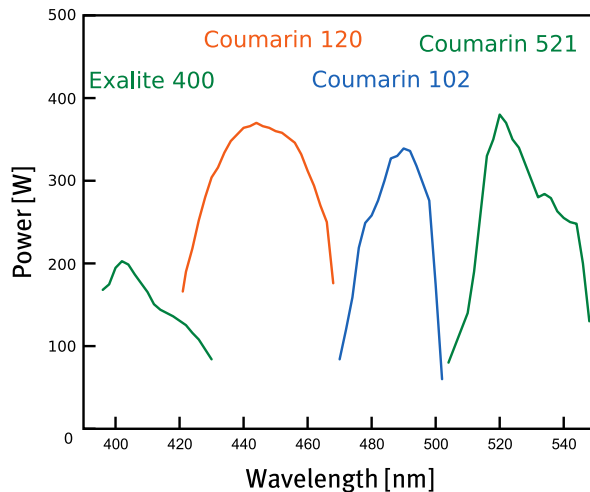


Synchronously Pumped Tunable Picosecond Dye Laser

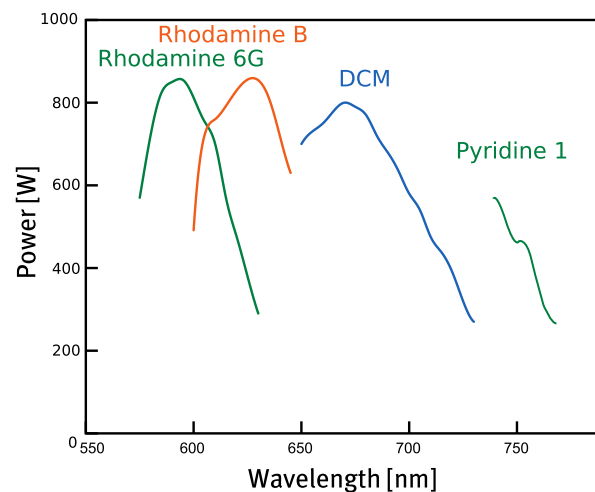
The synchronously pumped Gropius dye laser is a simple and versatile source for tunable picosecond and sub-picosecond pulses in the VIS to NIR range. The term synchronous pumping refers to matching the cavity round-trip time of the dye laser to an

integer multiple of the mode-locking frequency. The resulting output from the Gropius is a train of pulses at 80 MHz repetition rate which can be tuned over a wide spectral range.

Tuning Range



Pumped by 355 nm / 2 W / 10 ps



Pumped by 532 nm / 4 W / 10 ps

General Characteristics

Beam Radius ¹⁾	0.6-0.7 mm (typical)
Beam Divergence	< 1 mrad (half angle)
Time Bandwidth Product	< 0.6
Pulse Width	5 ps with 3-plate BiFi
Beam Polarization	horizontal

Options ²⁾

Short Pulse Configuration	down to 0.5 ps
Long Pulse Configuration	up to 100 ps with additional Etalon

Requirements

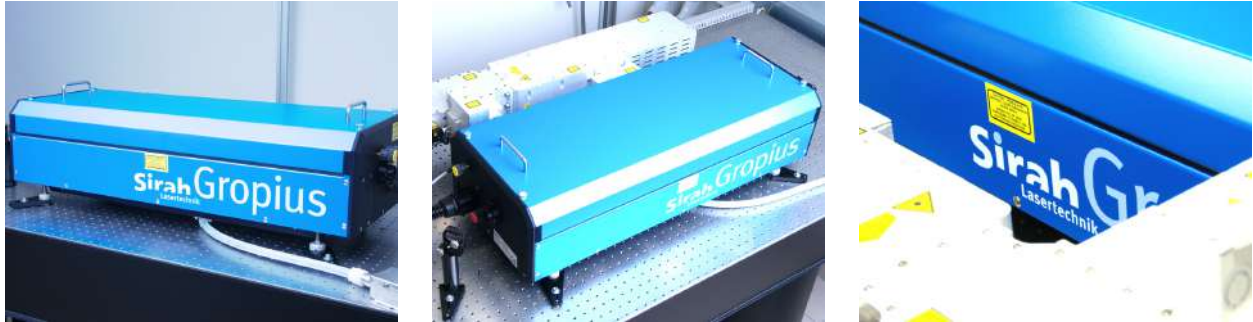
Pump Laser ³⁾	355 nm, < 12 W power max. 516 nm / 532 nm, 25 W power max. 1-50 ps, 75-80 MHz repetition rate
Ambient Conditions	constant temperature in the 20-30 °C range, 80% max. rel. humidity, non condensing
Cooling	required for circulator (~ 300 Watt)
Laboratory	vibrational isolated optical table, dust-free air (flow box)
Computer Control	Windows XP / Vista / 7 / 8 / 10, USB-Port

¹⁾ at Gropius output port

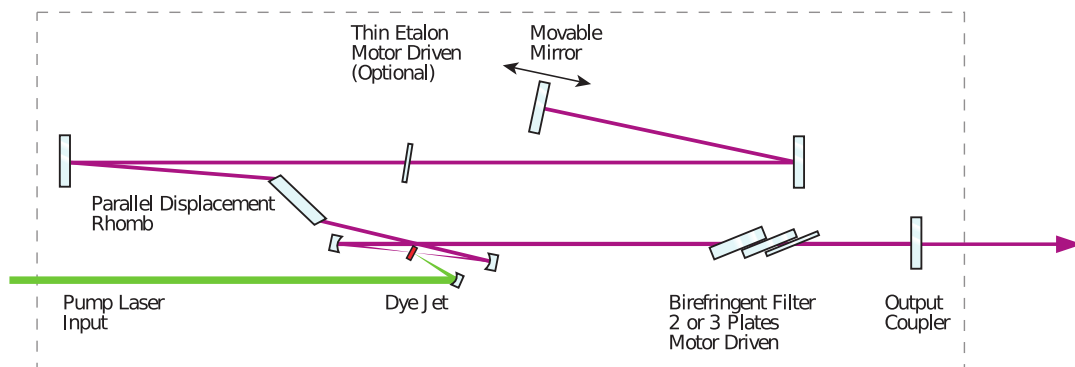
²⁾ please contact Sirah for details

³⁾ please contact Sirah for compatibility with other pump lasers

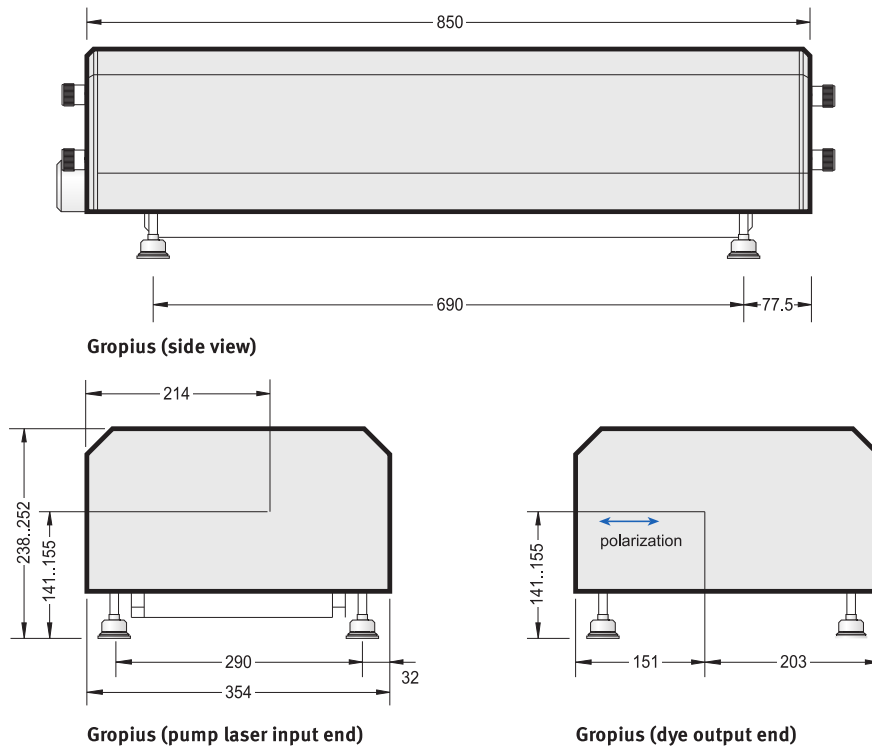
Gropius



Optical Layout



Dimensions



All Dimensions in mm
Specifications are subject to change without notice



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