# Radiant Dyes Laser & Acc. GmbH

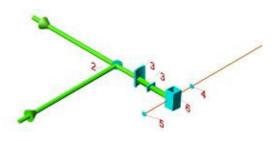
# Broadband- & Midband - pulsed dye laser

## Broadband pulsed dye laser

## RDP-1

Broadband- dye laser with non-selective cavity. The laser can be equipped with the following pump mirror sets:

Mirror set 1: 330 - 420 nm Mirror set 2: 420 - 720 nm Mirror set 3: 550 - 900 nm



2: Beam splitter

3: Lens

4: Output coupler

5: End mirror

6: Dye Cell

Dye circulator system RD 250 FC 20 with 20 mm flow cell unit, suitable up to 100 Hz 100 mJ pump energy. This system is also available with RD 1000 FC 40 with 40mm flow cell unit and water cooling for pump energy up to 400

Conversion efficiency is very high, hardly any losses:

Excimer laser pumped [308 nm]: 20% - 473 nm Nd:YAG-laser pumped [532 nm]: 30% - 570 nm Bandwidth (typically): 3 - 5 nm

(at the maximum of the laser dye)

## **Midband Pulsed Dye Laser**

### RDP-1M

Tunable dye laser, resonator with prism as disperse element and one dye circulator RD 250 FC 20, 10x beam expander

Linewidth (typically): approx. 1-2 nm

80 mJ Maximum pump energy: 330-850 nm Tuning range:

## RDP-2M

This system is very close to RDP-1M, but with oscillator and amplifier in one 20 mm dye cell. Max. pump energy: 160 mJ.

- 1: Mirror
- 2: Beam splitter
- 3: Lens
- 4: End mirror
- 5: Prism
- 6: Beam expander
- 7: Output coupler
- 8: Polarisator
- 9: Turning Prism
- 11: Dye Cell

### RDP-3M

This system is close to RDP-2M, but with oscillator, amplifier in one 20 mm dye cell and main amplifier in a 40 mm dye cell. Pump energy: up to 1 Joule



All RDP-Dye Lasers can be manufactured with 3 prisms as tuning element and the bandwidth will be under 0.5 nm.