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

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 mJ.

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

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.

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.