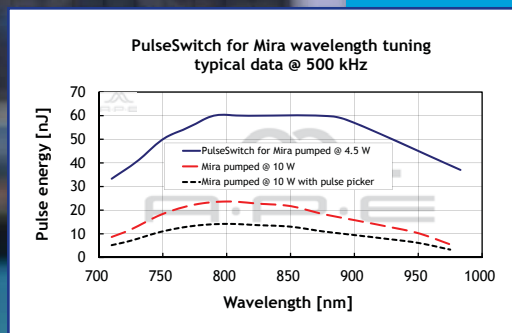
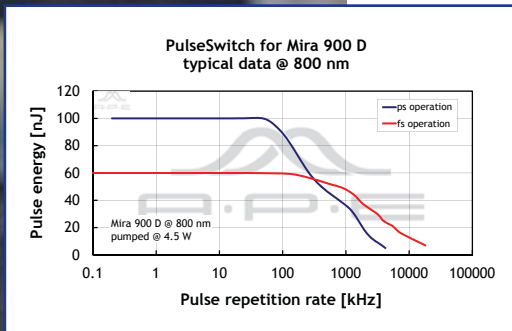


pulseSwitch

The cavity dumper *pulseSwitch* is an acousto-optical switch, which - unlike pulse pickers - is integrated in the laser resonator.

The intracavity operation allows for variably reduction of the pulse repetition rate in mode-locked laser systems while increasing the pulse energy at the same time. This is particularly effective in combination with non-linear converters like SHG and THG.



- Designed for use with the Coherent Mira 900 femtosecond Ti:Sapphire laser
- Combined cavity dumper / pulse picker (optional)
- Picosecond cavity dumper version
- Integrated SHG option with conversion efficiencies of 40 % and more
- Easy to install and remove



Specifications

Wavelength (with Coherent Mira 900F)	710 ... 980 nm for 8 W pumped Mira ¹⁾ 710 ... 900 nm for 5 W pumped Mira ¹⁾
Repetition rate	10 MHz ... 210 Hz (internal divider) 3 MHz down to single shot (external trigger)
Pulse energy	40 nJ / pulse @ 500 kHz, 800 nm (typ. > 60 nJ) ¹⁾
Contrast ratio	> 500:1 (for non-adjacent pulses) > 300:1 (typ., for adjacent pulses)
Pulse duration	< 150 fs @ 500 kHz, 800 nm (typ. 120 fs)
Spatial mode	TEM ₀₀
Polarization	linear / horizontal
Beam quality (typ. values)	
- M ²	1.15
- beam diameter (1/e ²)	1.1 mm at exit port
- beam divergence (full angle)	1.4 mrad

1) Max. pump power - max. pulse energy limited by onset of double pulsing

Options

- SHG (integrated) efficiency 35 % @ 800 nm, 40 nJ (typ. 45 %)
- Pulse picker configuration efficiency 50 % @ 800 nm, 4 MHz (typ. 60 %)

Dimensions (in mm)

