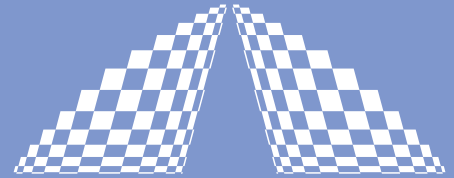


PULSE SWITCH



A P E

CAVITY DUMPER



The APE cavity dumper **PulseSwitch** is an acoustooptical switch, which - unlike pulse pickers - is integrated in the laser resonator.

The intracavity operation allows for variably reducing 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 nonlinear converters like SHG and THG.

Designed for use with the Coherent Mira 900 femtosecond Ti:Sa laser

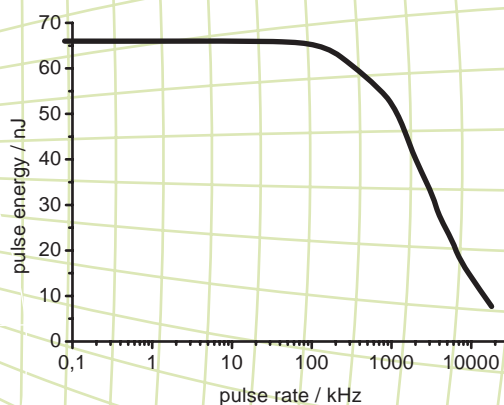
Combined Cavity Dumper/Pulse Picker option

Picosecond cavity dumper operation optional

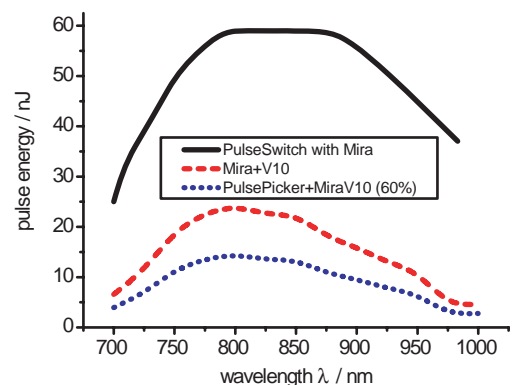
Integrated SHG option with conversion efficiencies of 45% and more

Easy to install and remove

Typical PulseSwitch performance together with the Coherent Mira 900F @800nm



PulseSwitch wavelength tuning (typical values at 500 kHz)



Ultrafast Pulse Diagnostics

Wavelength Conversion

Pulse Management

Acoustooptics

Your Partner in Ultrafast

PULSE SWITCH

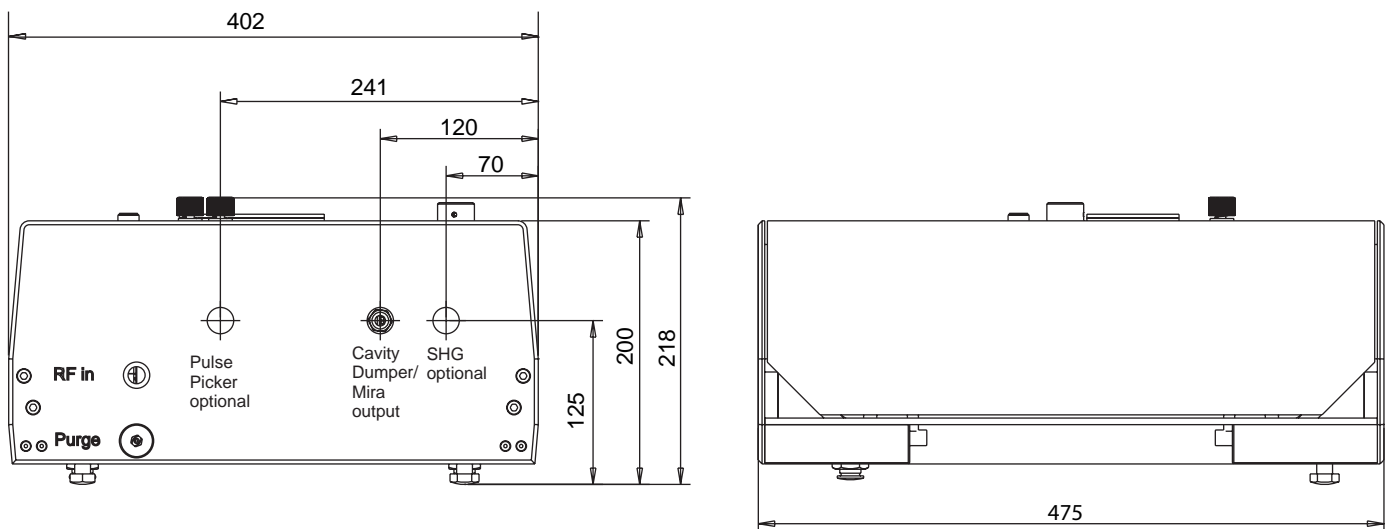
SPECIFICATIONS

Wavelength (with Coherent Mira 900F)	710 ... 980 nm for 8W pumped Mira 710 ... 900 nm for 5W pumped Mira
Repetition rate	10 MHz ... 200 Hz (internal) down to single shot (external trigger)
Pulse energy	40 nJ /pulse @ 500 kHz, 800 nm (typical >60 nJ)
Contrast ratio	>500 :1 (for non adjacent pulses) >300:1 (typical, for adjacent pulses)
Pulse duration	<150 fs @ 500 kHz, 800 nm (typical 120 fs)
Spatial Mode	TEM00
Polarization	horizontal
Beam quality (typical values)	
- M ²	1.15
- beam diameter (1/e ²) 1.1 mm at exit port	
- beam divergence	1.4 mrad (full angle)

OPTIONS

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

DIMENSIONS (in mm)



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APE follows a policy of continued product improvement. Therefore, specifications are subject to change without notice.