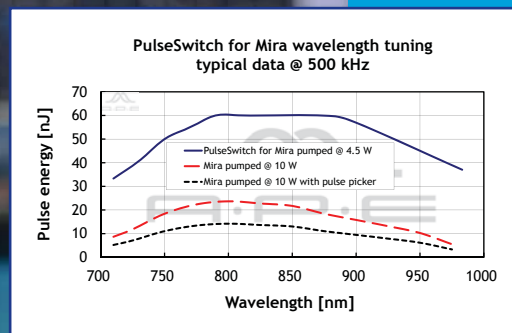
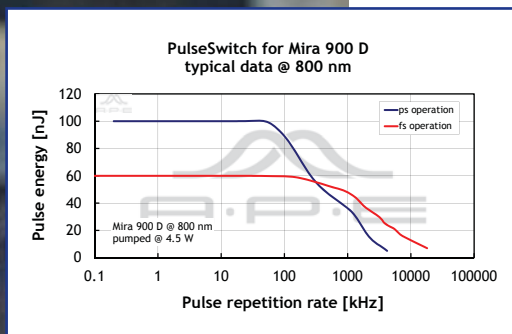




# *pulseSwitch*

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

The intracavity operation allows for variable 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

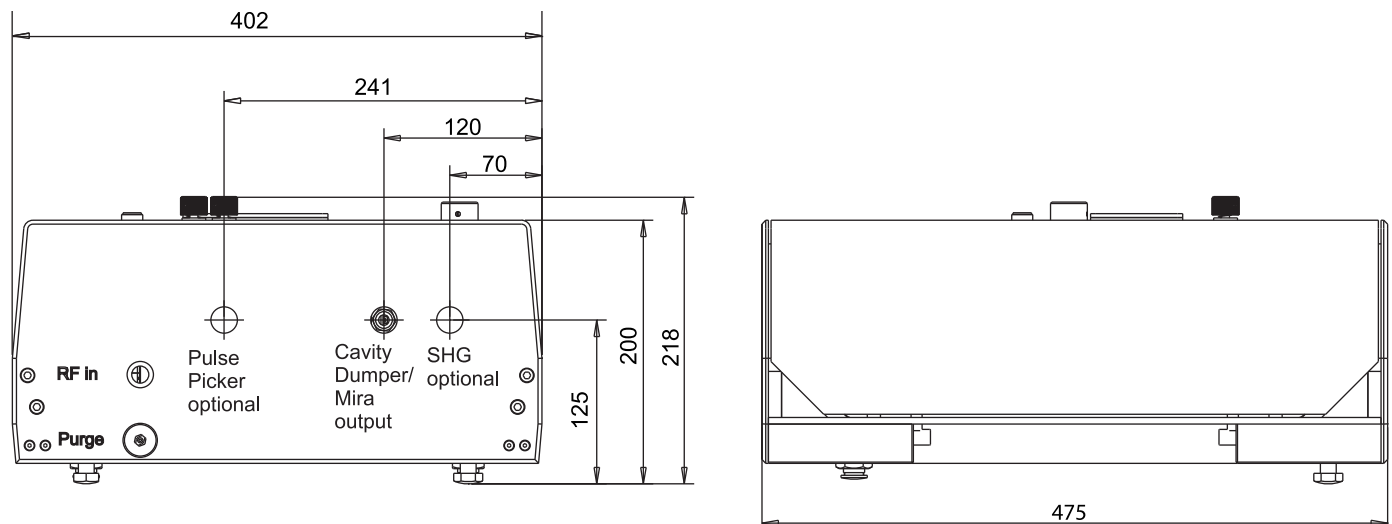
Wavelength (with Coherent Mira 900F)	710 ... 980 nm for 8 W pumped Mira <sup>1)</sup> 710 ... 900 nm for 5 W pumped Mira <sup>1)</sup>
Repetition rate	10 MHz ... 210 Hz (internal divider) 3 MHz down to single shot (external trigger)
Pulse energy	40 nJ / pulse @ 500 kHz, 800 nm (typ. > 60 nJ) <sup>1)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



### Contact:

A-P-E Angewandte Physik & Elektronik GmbH  
Plauener Str. 163-165 | Haus N | 13053 Berlin | Germany  
T: +49 30 986 011-30 | E: sales@ape-berlin.de | www.ape-berlin.com

or

A-P-E America (for the Americas)  
45401 Research Avenue | Suite 141 | Fremont, CA 94539 | USA  
T: +1 (888) 690 3250 | E: sales@ape-america.com | www.ape-america.com

A-P-E follows a policy of continued product improvement.  
Therefore, specifications are subject to change without notice.  
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