

# Pulse Switch for Mira-900

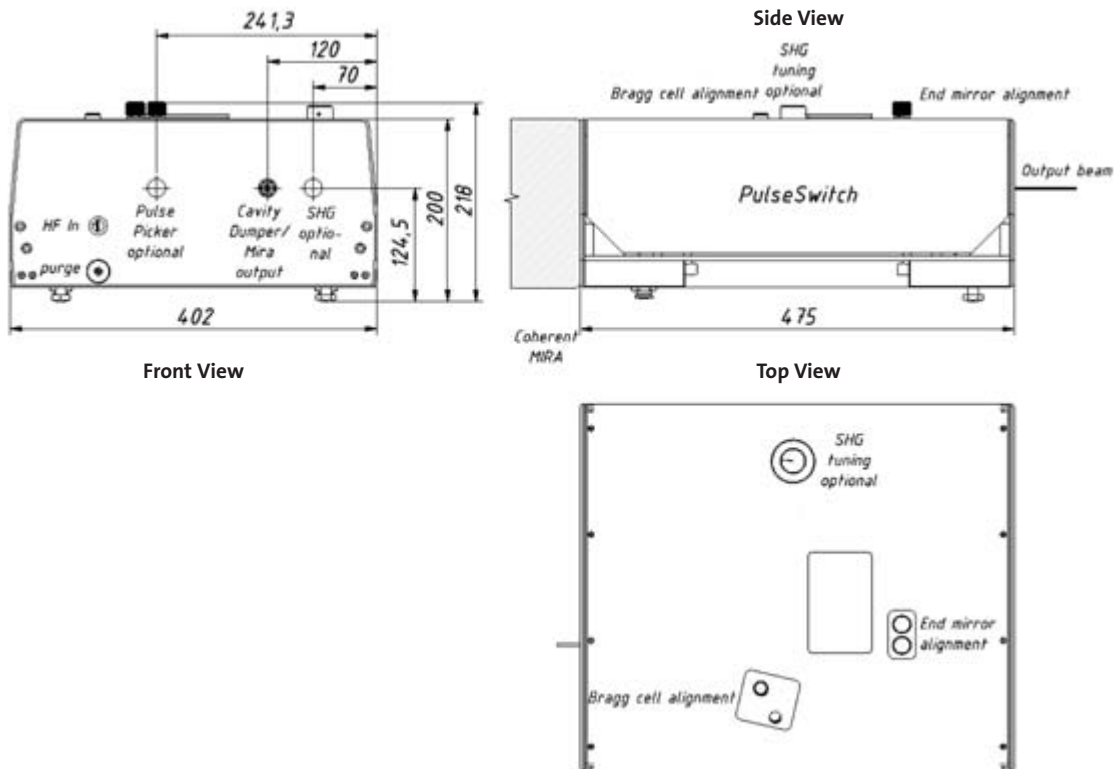
## Cavity Dumper Accessory



### Features

- Provides cavity-dumped operation with Mira-900-F/P/D oscillators
- Simple to install and remove as needed
- Optional integrated SHG provides conversion efficiencies up to 40%
- Can be purged for tuning above 920 nm
- RF overload safety circuit
- Control box (supplied) includes:
  - Internal frequency divider (1:6 to 1:260,000)
  - External trigger input (TTL)
  - Digital and analog phase adjustment of RF pulse (360°)
  - Electronic delay
  - Synchronization and RF pulse monitor outputs

### Mechanical Specifications



**Superior Reliability & Performance**

# Pulse Switch for Mira™-900

## Cavity Dumper Accessory

### Specifications

	Mira-900 with Pulse Switch Cavity Dumper	
	Femtosecond Configuration	Picosecond Configuration
Pulse Energy <sup>1,2,3</sup>	>45 nJ up to 100 kHz >40 nJ at 500 kHz	>75 nJ up to 50 kHz >65 nJ at 100 kHz >30 nJ at 500 kHz
Pulse Duration FWHM <sup>1,4</sup>	<150 fs (120 fs typical)	<2 ps
Tuning Range	710 to 990 nm (Verdi 8W or 10W) 710 to 900 nm (Verdi 5W or 6W)	
Contrast Ratio	>500:1 (for non-adjacent pulses)	
Repetition Rate	9 MHz to 200 Hz (internal trigger) for femtosecond configuration 4 MHz to 200 Hz (internal trigger) for picosecond configuration down to single shot (external trigger)	
Polarization	Horizontal	

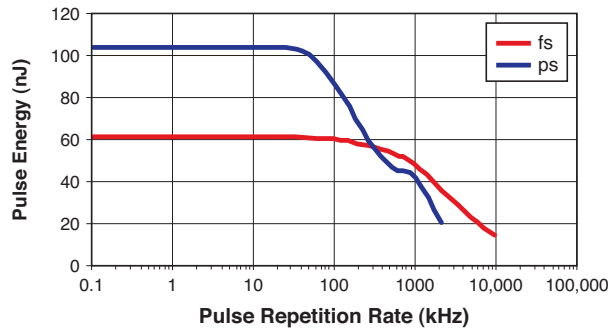
<sup>1</sup> At 800 nm.

<sup>2</sup> Power change in any two-hour period after a one-hour warm-up is typically <9% depending on mounting surface.

<sup>3</sup> Mira-900 pumped by Verdi V5 or Verdi V10.

<sup>4</sup> Real pulse width assuming sech<sup>2</sup> deconvolution factor of autocorrelation.

### Typical Cavity Dumper Performance (Mira-900-D at 800 nm, 4.5W Verdi pump power)



Coherent follows a policy of continuous product improvement. Specifications are subject to change without notice.

Coherent's scientific and industrial lasers are certified to comply with the Federal Regulations (21 CFR Subchapter J) as administered by the Center for Devices and Radiological Health on all systems ordered for shipment after August 2, 1976.

Coherent offers a limited warranty for all Pulse Switch accessories. For full details of this warranty coverage, please refer to the Service section at [www.Coherent.com](http://www.Coherent.com) or contact your local Sales or Service Representative.



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