

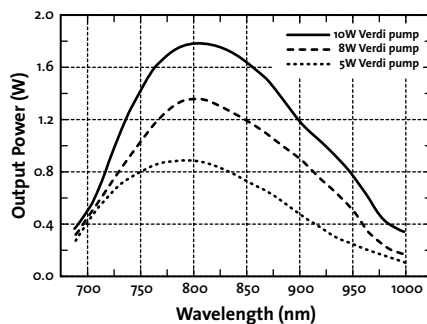


# MIRA<sup>900</sup>

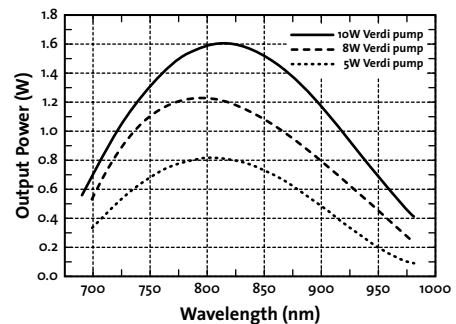
Modelocked  
Ti:Sapphire Lasers

		Mira <sup>®</sup> Optima 900-F	Mira <sup>®</sup> Optima 900-P	Mira <sup>®</sup> Optima 900-D	Mira 900-S
<b>System Specifications<sup>1</sup></b>	Output Power <sup>2,3</sup> (Verdi™- V5 pump)	0.65 W	0.65 W	0.65 W	0.65 W
	(Verdi-V8)	1.0 W	1.0 W	1.0 W	1.0 W
	(Verdi-V10)	1.3 W	1.3 W	1.3 W	1.3 W
	(Innova <sup>®</sup> 310 8 W)	0.8 W	0.8 W	0.8 W	0.8 W
	Sabre <sup>®</sup> 14 W	1.4 W	1.4 W	1.4 W	1.4 W
	Tuning Range <sup>4</sup> (700 to 1000 nm typical)	700 to 980 nm	700 to 980 nm	700 to 980 nm	700 to 980 nm
	Autocorrelation <sup>5</sup>	<200 fs	<3 ps	<3 ps and <200 fs	<200 fs
	Repetition Rate	76 MHz, nominal			
	Noise <sup>6</sup>	<0.1% (Verdi) <2% (Sabre/Innova)			
	Stability <sup>7</sup>	<3% (Verdi) <5% (Sabre/Innova)			
Beam Diameter <sup>8</sup>	0.8 mm				
Beam Divergence <sup>9</sup>	1.7 mrad				
Spatial Mode <sup>10</sup>	TEM <sub>00</sub>				
Polarization	Horizontal				
Physical Dimensions	111.1 x 38.1 x 19.7 cm (43.75 x 15 x 7.75 in.)				

<sup>1</sup> Specifications apply only with Coherent pump lasers. <sup>2</sup> At 800 nm. <sup>3</sup> For Verdi-V6, call factory. <sup>4</sup> Wider coverage possible with short wave or extended long wave optics sets. <sup>5</sup> Multiply by 0.65 sech<sup>2</sup> deconvolution factor for pulse duration. <sup>6</sup> Measured rms in a 10 Hz to 20 MHz bandwidth. <sup>7</sup> Power drift in any two-hour period after warm-up when crystal's cooling water is maintained at ±0.1°C. <sup>8</sup> 1/e<sup>2</sup> diameter (±0.2 mm) at exit port. <sup>9</sup> Full angle divergence (±0.3 mrad) at exit port. <sup>10</sup> Typical measured M<sup>2</sup> value is 1.1

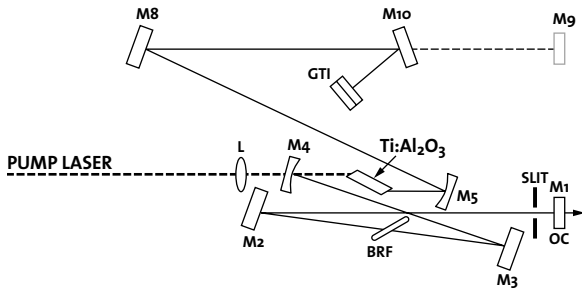


Typical X-Wave Power Tuning Curves for Verdi-pumped Mira Optima 900-F

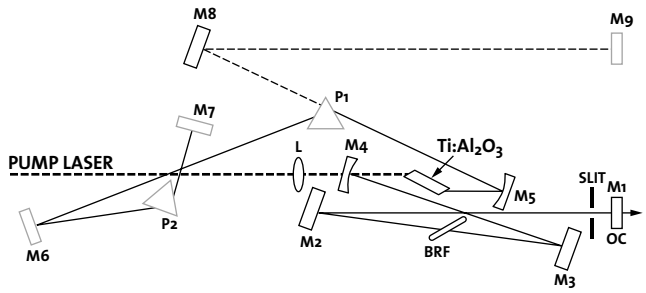


Typical X-Wave Power Tuning Curves for Verdi-pumped Mira Optima 900-P

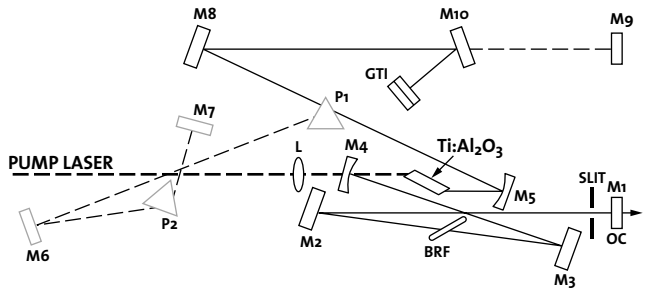
### Mira Optima 900-P



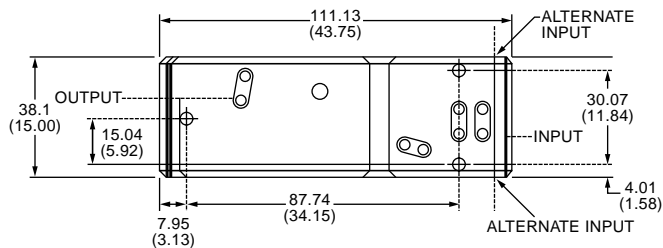
### Mira Optima 900-F / Mira 900-S



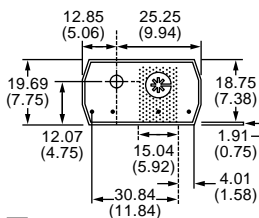
### Mira Optima 900-D



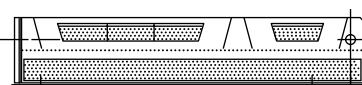
### Laser Head - Top View



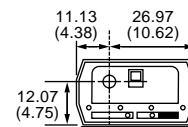
### Laser Head - Front View



### Laser Head - Side View



### Laser Head - Rear View



Dimensions are in cm (inches)



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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 Mira® systems. For full details on warranty coverage, please refer to the Service and Support section at [www.CoherentInc.com](http://www.CoherentInc.com), or contact your local Sales or Service Representative.

