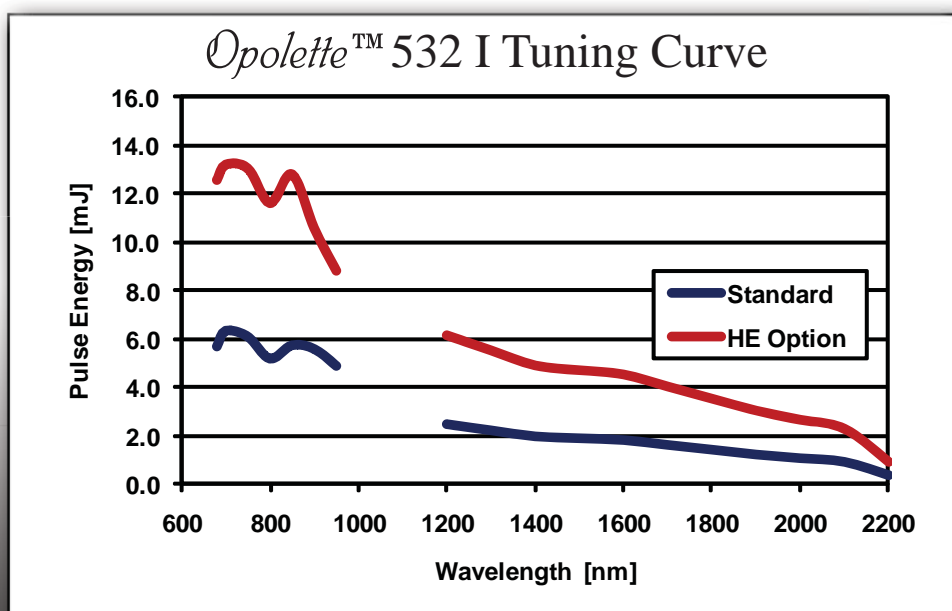




# Opolette™ 532 I

The Opolette™ 532 series of products are **ultra-compact**, **portable**, turn-key tunable laser systems that utilizes OPOTEK's patented\* optical parametric oscillator (OPO) technology to generate a **broad tuning range with high efficiency**. All system components (pump laser, OPO and optional accessories) are integrated into a **single unit** which results in a compact, **7x12"** footprint which is **ready out-of-the-box**. The system includes optics necessary to separate OPO wavelengths which all **exit the system at the same location**. The entire system is **hermetically sealed** to protect sensitive crystal components. All system functions are accessible from user-friendly software which can be operated from any computer with a USB port. A **software development kit (SDK)** is available for integrating system functions into end-user software. A **number of options** are available for added functionality such as motorized harmonics, variable power attenuation and real-time wavelength measurement (see page 2).

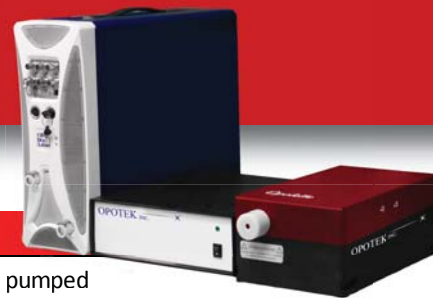


Tuning curve represents standard and HE configuration. Performance may vary depending on other installed options.

## Features

- Wide tuning range
- Little to no maintenance
- No installation required
- Small footprint: 7x12"
- Computer controlled
- Software development kit





## Pump Laser Specifications

Pump Laser Specifications	Nd:YAG	Flashlamp pumped
Pump Wavelength	532 nm	
Pulse Repetition Rate	20 Hz	Computer selectable lower repetition rate
Pulse Length	7 ns	Nominal
Beam Diameter	3 (4)* mm	Nominal
External Trigger	Flashlamp and Q-Switch	

## OPO Parameters

Wavelength Tuning Range	680 - 950 nm & 1200 - 2200 nm	Wavelength "gap" at degeneracy
Peak OPO Energy	6 (13)* mJ	See tuning curve
Spectral Linewidth	~30 cm <sup>-1</sup> (680 nm) - ~100 cm <sup>-1</sup> (950 nm)	
Beam Divergence	~2 mrad (680 nm) - ~10 mrad (950 nm)	FWHM; Circular beam
Polarization	Horizontal	Signal & Idler
Access to residual 532 nm	~13 (25)* mJ	Simultaneous with OPO output
Computer Control	All laser and OPO functions	ON, OFF, Power, Rep-Rate, Tuning, Scan

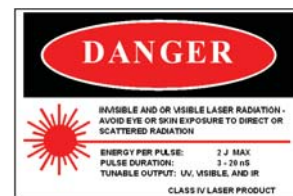
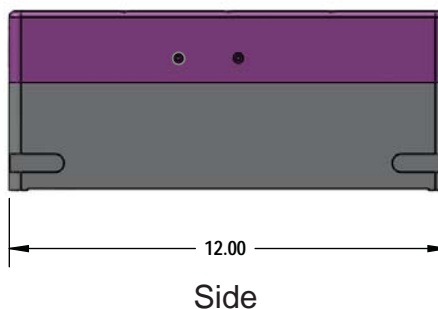
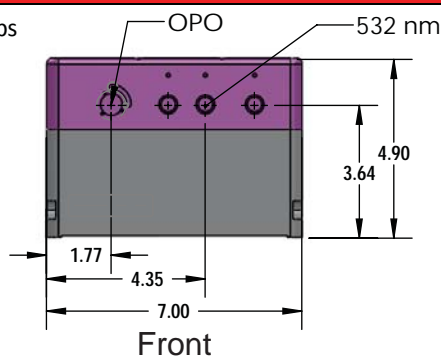
\* Data in ( ) refers to system with -HE option, which incorporates a high energy pump laser.

Options	Option Code	Description
Access to Pump Laser Wavelength	-1X	Access to 1064 nm
High Energy Pump Laser	-HE	Greater OPO energy using higher energy pump laser
Motorized Harmonics	-MH	Control harmonics via computer software
Fiber Delivery	-FD	2-meter fiber, coupling lens, polishing kit
Motorized Variable Attenuator	-MVA	Attenuate OPO output from 0 - 100% via computer
Wavemeter	-WM	Real-time wavelength measurement, Closed-loop tuning
Harmonics Auto-Optimization**	-HAO	Automated harmonic optimization

\*\* Requires -MH and -WM options

## Laser Head Dimensions

Weight: 25 lbs



## Pump Laser Power Supply

## Control Electronics Unit

Dimensions	14" (H) x 5.25" (W) x 17" (L)	3.75" (H) x 10.25" (W) x 11.5" (L)
Weight	32 lbs	5 lbs
Voltage	Single phase, 90 - 240 V	Single phase, 90 - 240V
Input Power	< 850 W	< 100 W
Cooling	Closed-cycle water cooled	