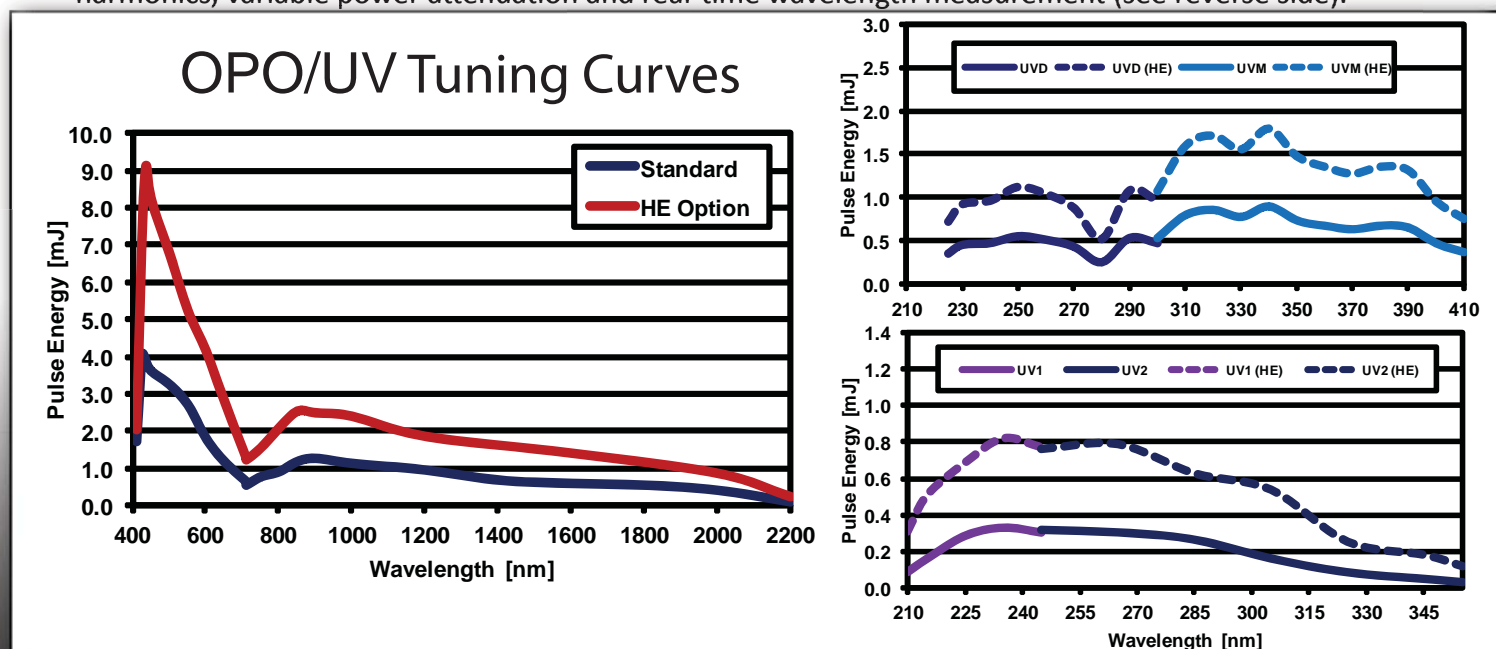




Opolette™ 355 LD

The *Opolette*™ 355 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** and **low divergence** (LD). 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 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 reverse side).



Tuning curves represent standard, HE and UV configurations. 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
- Low divergence (< 2 mrad)



Opolette™ 355 LD



Pump Laser Specifications

Pump Laser	Nd:YAG	Flashlamp pumped
Pump Wavelength	355 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	410 - 2200 nm	No wavelength "gap" at degeneracy
Peak OPO Energy	4 (9)* mJ	See tuning curve
Spectral Linewidth	~4 - 7 cm ⁻¹	
Beam Divergence	< 2 mrad	Circular beam, FWHM
Polarization	Signal Horizontal; Idler Vertical	Linear polarization
Access to residual 355 nm	~7 (14)* 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.

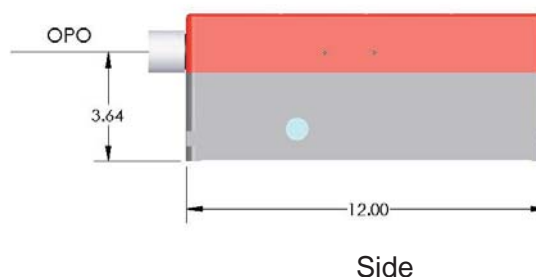
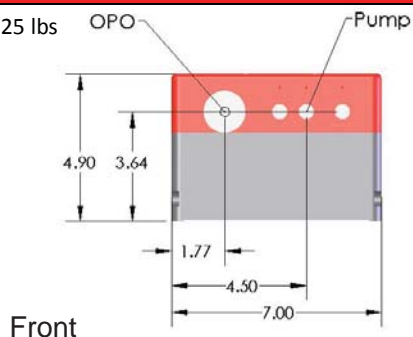
Options	Option Code	Description
Access to Pump Laser Wavelengths	-1X/2X	Access to 1064 nm, 532 nm
High Energy Pump Laser	-HE	Greater OPO energy using higher energy pump laser
Automated Range Selection	-RS	Switch between Signal and Idler automatically
Motorized Harmonics	-MH	Control harmonics via computer software
Fiber Delivery	-FD	2-meter fiber, coupling lens, polishing kit
UV Add-on (210-355 nm)	-UV12	Includes -RS option and UV/OPO separation optics
UV Add-on (225-410 nm)	-UVDM	Includes UV/OPO separation optics; 710-2200 nm optional (side aperture)
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

** Not available with UV add-ons

*** 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	