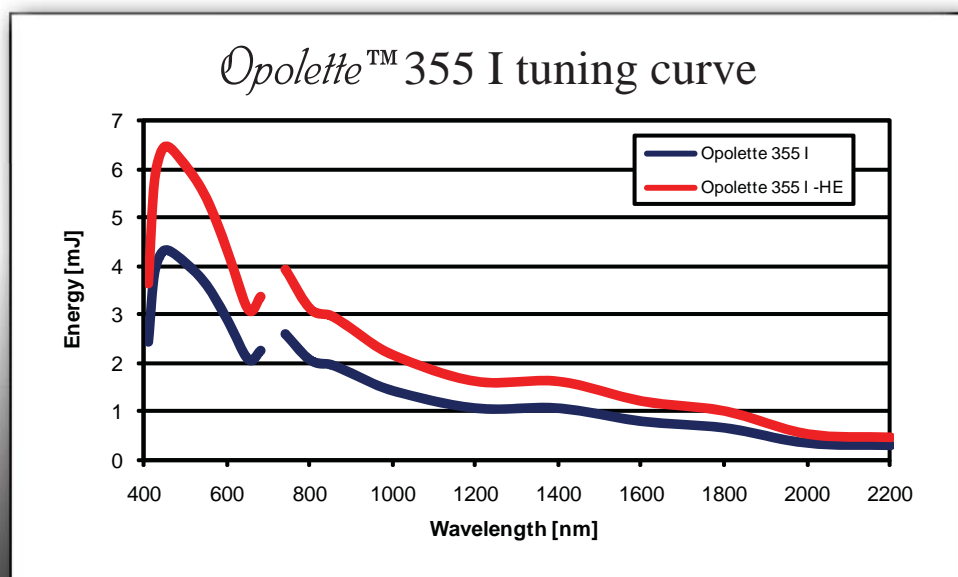




*Opolette*TM 355 I

The *Opolette*TM 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**. 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 reverse side).

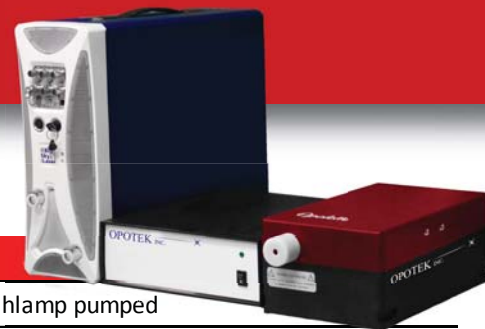


Tuning curve represents standard and -HE configuration. Performance may vary depending on other installed options.

Features

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





Pump Laser Specifications

Pump Laser Specifications	Nd:YAG	Flashlamp pumped
Pump Wavelength	355 nm	
Pulse Repetition Rate	20 Hz	Lower rep rate can be selected
Pulse Length	7 ns	Nominal
Beam Diameter	3 (4)* mm	Nominal
External Trigger	Flashlamp and Q-Switch	

OPO Parameters

Wavelength Tuning Range	410 - 680 nm and 740 - 2200 nm	Wavelength "gap" at degeneracy
Peak OPO Energy	4.5 (6.5)* mJ	See tuning curve
Spectral Linewidth	~5 cm ⁻¹ (410 nm) - >100 cm ⁻¹ (680 nm)	
Beam Divergence	~2 mrad (410 nm) - ~10 mrad (650 nm)	FWHM; Circular beam
Polarization	Horizontal	Signal & Idler
Computer Control	All the laser and OPO functions	ON, OFF, Power, Rep-Rate, Tuning, Scan

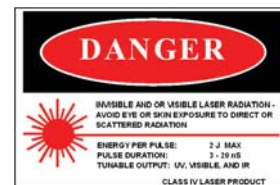
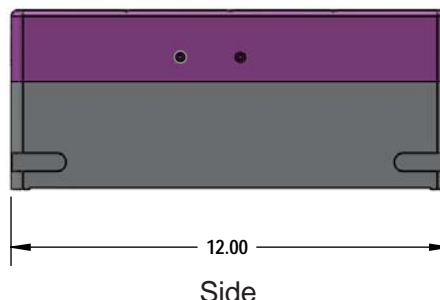
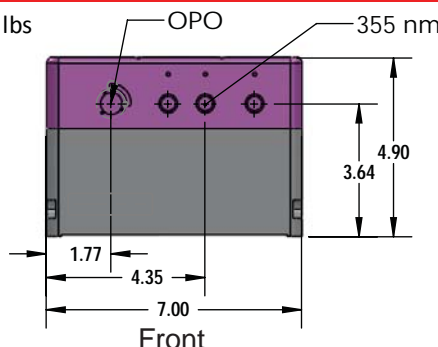
* Data in () refers to system with -HE option, which incorporates a high energy pump laser.

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
Motorized Harmonics	-MH	Control harmonics via computer software
Fiber Delivery	-FD	Two 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	Automatic harmonic optimization

** Requires Motorized Harmonics and Wavemeter 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	