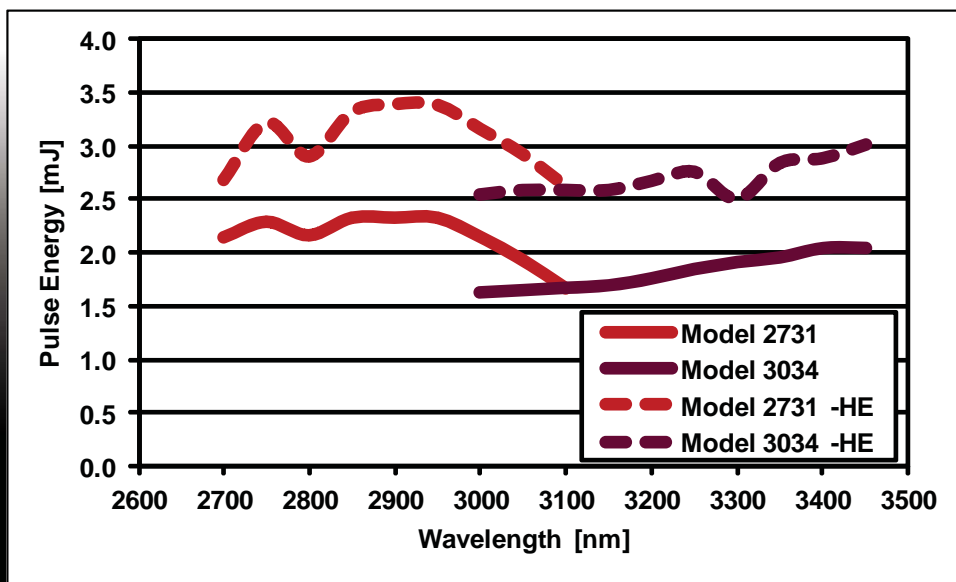




IR *Opolette*™

The IR *Opolette*™ series of products are **ultra-compact**, **portable**, turn-key tunable laser systems that utilize OPOTEK's optical parametric oscillator (OPO) technology to generate **mid-IR wavelengths**. All system components (pump laser, OPO and optional accessories) are integrated into a **single unit** which results in a compact, **7x12"** footprint. A **built-in 635 nm laser diode** is aligned to overlap with the mid-IR output for beam stirring guidance. Wavelength tuning is **motorized** and **PC controlled** through a single USB port. The end-user can operate the system with little to no maintenance or laser expertise. 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 the addition of harmonic modules for 532 and 355 nm laser light generation and variable power attenuation.

Tuning Curve



Tuning curves represent nominal values. Performance may vary depending on installed options.





Pump Laser Specifications

Pump Laser	Nd:YAG	Flashlamp pumped
Pump Wavelength	1064 nm	
Pulse Repetition Rate	20 Hz	Computer selectable lower repetition rate
Pulse Length	7 ns	Nominal
Beam Diameter	3 (4)* mm	Nominal
External Trigger	Lamp and Q-Switch	

OPO Parameters

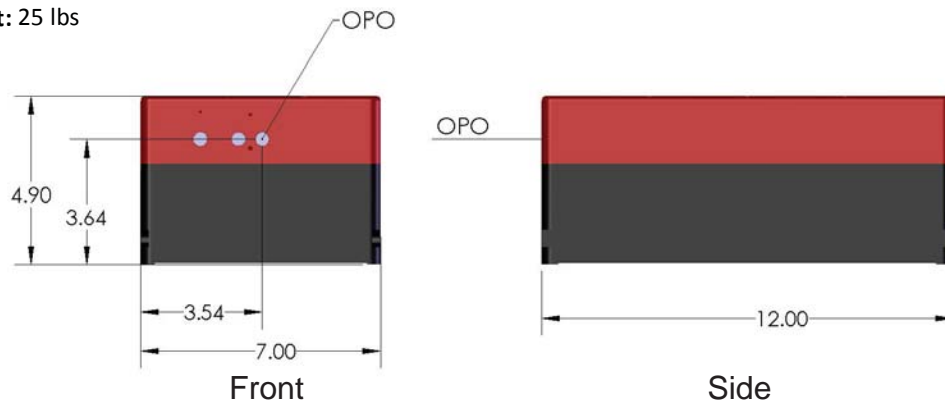
Wavelength Tuning Range	2700 - 3100 nm	Model 2731
	3000 - 3450 nm	Model 3034
Peak OPO Energy	2.3 (3.4)* mJ	See tuning curve (Model 2731)
	2.0 (3.0)* mJ	See tuning curve (Model 3034)
Spectral Linewidth	4 - 7 cm ⁻¹	FWHM
Polarization	Horizontal	Linear polarization
Built-in laser diode	~ 635 nm	OPO beam guidance
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
Harmonics for 355 and 532 nm	-2X/3X	Generate 532 nm and/or 355 nm
High Energy Pump Laser	-HE	Greater OPO energy using higher energy pump laser
Variable Attenuator	-VA	Manually attenuate OPO output from 15 - 100%

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	