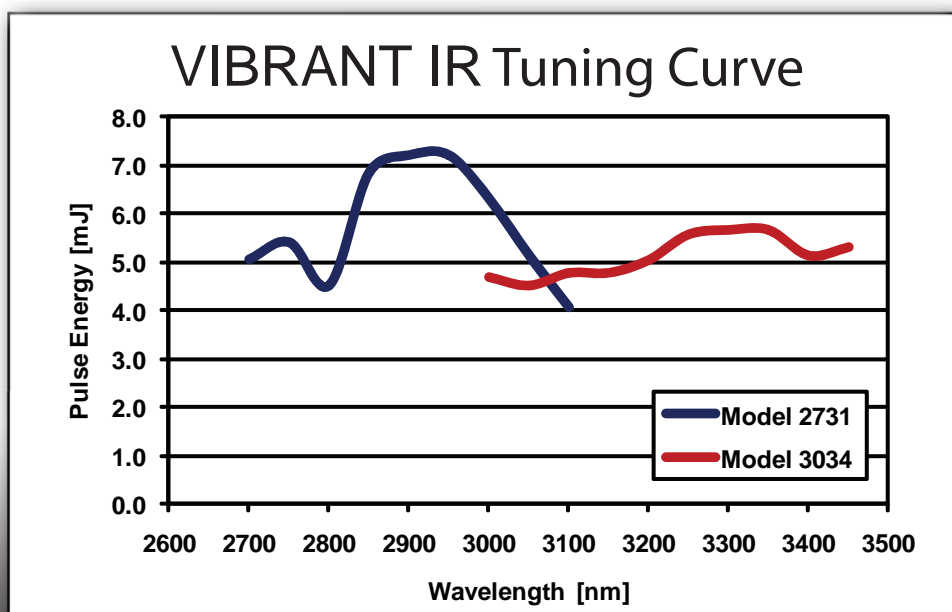




# VIBRANT IR

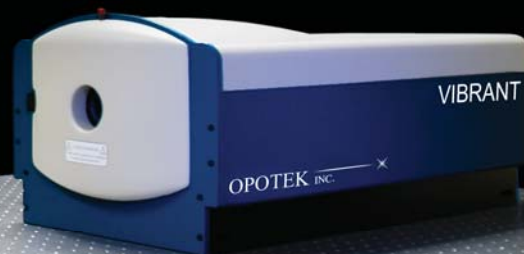
The VIBRANT IR is a motorized, turn-key tunable laser system that utilizes OPOTEK's optical parametric oscillator (OPO) technology to generate a **broad tuning range with high efficiency**. All system components (pump laser, OPO and control electronics) are integrated into a **single unit** which results in a **compact, robust design**. A **built-in 650 nm laser diode** is aligned colinear with the mid-IR output for beam stirring guidance. 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.



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

## Features

- Wide tuning range in the Mid-IR
- Computer controlled
- Little to no maintenance
- Software development kit
- Compact and rugged



# VIBRANT IR



## Pump Laser Specifications

Pump Laser	Nd:YAG	Flashlamp pumped
Pump Wavelength	1064 nm	
Pulse Repetition Rate	10 Hz	Computer selectable lower repetition rate
Pulse Length	5 ns	Nominal
Beam Diameter	6 mm	Nominal
External Trigger	Flashlamp and Q-Switch	

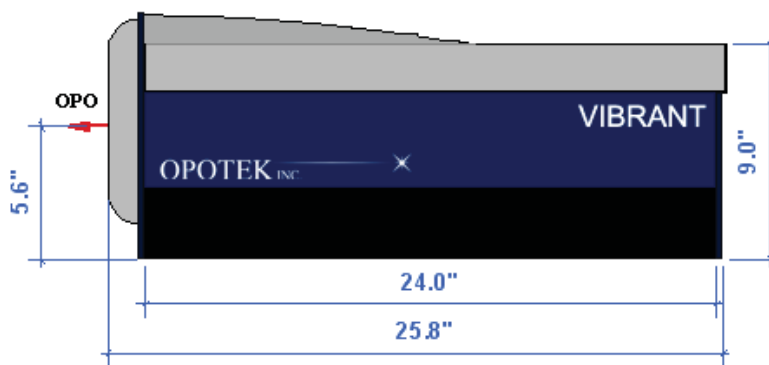
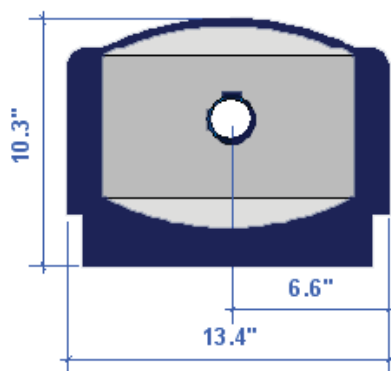
## OPO Parameters

Wavelength Tuning Range	2700 - 3100 nm	Model 2731
	3000 - 3450 nm	Model 3034
Peak OPO Energy	7 mJ	See tuning curve (Model 2731)
	5.5 mJ	See tuning curve (Model 3034)
Spectral Linewidth	4 - 7 cm <sup>-1</sup>	FWHM
Polarization	Vertical	Linear polarization
Built-in Laser Diode	~ 650 nm	OPO beam guidance
Computer Control	All laser and OPO functions	ON, OFF, Power, Rep-Rate, Tuning, Scan

Options	Option Code	Description
Access to Pump Laser Wavelength	-1X	Access to 1064 nm
Variable Attenuator	-VA	Manually attenuate OPO output from 10 - 100%

## Laser Head Dimensions

Weight: 50 lbs



## Power Supply

Dimensions	23" (H) x 13" (W) x 23" (L)
Weight	150 lbs
Voltage	Single phase, 90 - 240 V
Input Power	< 1.1 kW
Cooling	Closed-cycle water cooled

