

SW-Series Laser Systems

Opt Lasers' SW-Series Laser Systems provide industry-leading power levels coupled into multimode fiber.

Specifications:

Wavelength ¹	Power ¹			
	LPL-Series	MPL-Series	HPL-Series	FHPL-Series
405 nm	0.2 / 0.8 W	2.8 W	5.6 W	-
445 nm	2 W	4 W / 8 W	16 W	> 30 W
465 nm	1.5 W	3 W / 6 W	12 W	> 20 W
520 nm	0.8 W	3 W	5.4 W	-
638 nm	0.5 W / 1 W	3.6 W	6.5 W	-
NIR ²	2 W	8 W	16 W	> 30W

1. Customization of power and wavelength are possible. Contact us for details.
2. Various NIR wavelengths such as 780, 808, 940, 980 and 1064nm are available. Other power levels are also available. Contact us for details.

- Base price: TBD
- Stock / lead time:
 - BTO for now (may change later for some popular configurations). Please check with us always to confirm lead times / whether we have stock.
 - 4 – 5 weeks for systems bolded above, confirmed at time of order. Orders accepted currently.
 - 5 – 6 weeks for configurations platforms are the ones not above, confirmed at time of order. Orders accepted before the end of the year.

Internal notes:

Models will be segmented into 4 product families due to the wide dynamic range of power levels from the various laser diodes available. This is only for marketing. From the engineering perspective, there are really 3 platforms: 1 LD, up to 4 LDs and 8 LDs. For many of the NIR units, we will just be integrating a standard fiber-coupled OEM laser module. **No other company offers the higher power levels for visible light to the best of our knowledge.**

- Sub-families:
 - SW-LPL-Series
 - SW-MPL-Series
 - SW-HPL-Series
 - SW-FHPL-Series

IRGBV-LPL-Series

“Up to 1.5W of combined optical power with up to 3 wavelengths operated simultaneously, from a single optical fiber.”

- The “IRGBV-LPL-Series” combines up to 3 Laser Diodes / 3 Wavelengths
- Lead time: 4 - 6 weeks. Orders accepted beginning of December.
- Base prices: TBD
- Stock: TBD
- 400um / 0.22NA fiber coupled option*

*Other fibers available on request for certain configurations.

Specifications:

	Available Wavelength Options (nm)						
	405	445 ²	465 ²	520	638	NIR ³	
Power Levels ¹	400 mW	650 mW	600 mW	500 mW	450 mW	500 mW	Up to 3 Wavelengths ⁴

1. Higher or lower power levels are available on request for many configurations.
2. Either 445 or 465nm can be offered in a standard configuration.
3. Several NIR wavelengths are available. Contact us with your requirements. The power level given is for 808nm as an example of one possibility.
4. Other wavelengths may be available for certain configurations. Contact us for details.

IRGBV-HPL-Series

“Over 10 W of combined optical power and up to 5 wavelengths operated simultaneously, from a single optical fiber.”

- The “IRGBV-HPL-Series” combines up to 15 Laser Diodes / 5 Wavelengths
- Lead time: 5 – 8 weeks. Orders accepted before the end of the year.
- Base prices: TBD
- Stock: TBD
- Aligned for 400um / 0.22NA fiber (standard). Alignment for other fibers available on request for some configurations.
- ****No other company offers these power levels with visible light and multiple wavelengths to the best of our knowledge.****

Specifications:

	Available Wavelength Options (nm)						
	405	445 ²	465 ²	520	638	NIR ³	
Power Levels¹	0.6 W	0.9 W	0.8 W	0.6 W	0.8 W	0.8 W	Up to 5 Wavelengths ⁴
	1.2 W	1.5 W	1.3 W	1.2 W	1.4 W	1.4 W	
	1.8 W	2.4 W	2.4 W	1.8 W	2.2 W	2.0 W	
	2.4 W	> 3.0 W	> 2.4 W	2.4 W	2.8 W	3.0 W	

1. Power levels for each channel/wavelength can be selected independently of others.
2. Either 445 or 465nm can be offered in a standard configuration.
3. Several NIR wavelengths are available. Contact us with your requirements. Power levels are given for 808nm as an example of one possibility.
4. Other wavelengths and power levels may be available for certain configurations. Contact us for details.

SW Series

- SW-LPL-Series
- SW-MPL-Series
- SW-HPL-Series
- SW-FHPL-Series

Models will be segmented into 4 product families due to the wide dynamic range of power levels from the various laser diodes available. This is only for marketing. From the engineering perspective, there are really 3 platforms: 1 LD, up to 4 LDs and 8 LDs. For many of the NIR units, we will just be integrating a standard fiber-coupled OEM laser module.

- Base price: TBD
- Lead time:
 - 4 – 5 weeks for 1LD and 4LD platforms, which are bolded below. (We've already been building similar products for a while in various configurations; we're just now standardizing the product line.) Orders are accepted currently.
 - 6 – 7 weeks for configurations of 8LD platforms, which are the ones not bolded below. Orders will be accepted before the end of the year.
- Stock: Most likely units will be made build-to-order unless one configuration is more popular.
- Aligned for 400 um / 0.22 NA fiber (standard).
- ****No other company offers the higher power levels for visible light to the best of our knowledge.****

Specifications:

Wavelength ¹	Power ¹			
	LPL-Series	MPL-Series	HPL-Series	FHPL-Series
405 nm	0.2 / 0.8 W	3 W	6 W	-
445 nm	2 W	4 / 8 W	16 W	> 30 W
465 nm	1.5 W	3 / 6 W	12 W	> 20 W
520 nm	0.9 W	3 W	6.5 W	-
638 nm	0.6 / 1 W	3.6 W	7 W	-
NIR ²	2 W	8 W	16 W	> 30W

3. Customization of power and wavelength are possible. Contact us for details.

4. Various NIR wavelengths such as 780, 808, 940, 980 and 1064nm are available. Contact us for details.

Configurations

Two main configurations for all product families are offered.

Touch Panel System

Features:

- Power settings for each channel/wavelength controlled via touch screen interface (standard option)
- Communication via RS-232/UART (standard option)
- > 20 kHz Modulation BW (> 100 kHz option available)
- SMA Optical Fiber Output (system aligned for 400 μm / 0.22 NA, others on request)
- TEC-controlled with integrated heat sink (air cooling)
- Integrated LD driver and PSU (110 – 240V, 50 / 60 Hz)

Options and Accessories:

- Analog and TTL inputs for each channel
- Power adjustment of each channel via potentiometer
- Safety Package, Installed: "laser on" LED, interlock (1 m cable), key lock, emergency off button
- Optical Fiber Cable with high power SMA connector, metal jacket and 400 μm / 0.22 NA (others available)
- Fiber collimator/focuser
- 19" rack mountable



OEM / "Evaluation Kit":

Features:

- Analog and TTL inputs for each channel (standard option)
- Communication via RS-232/UART
- > 20 kHz Modulation BW (> 100 kHz option available)
- Integrated LD driver, TEC controller
- Integrated TEC + heat spreader (base)
- SMA Optical Power Output (aligned for 400 μm /0.22NA, others on request)

Options and Accessories:

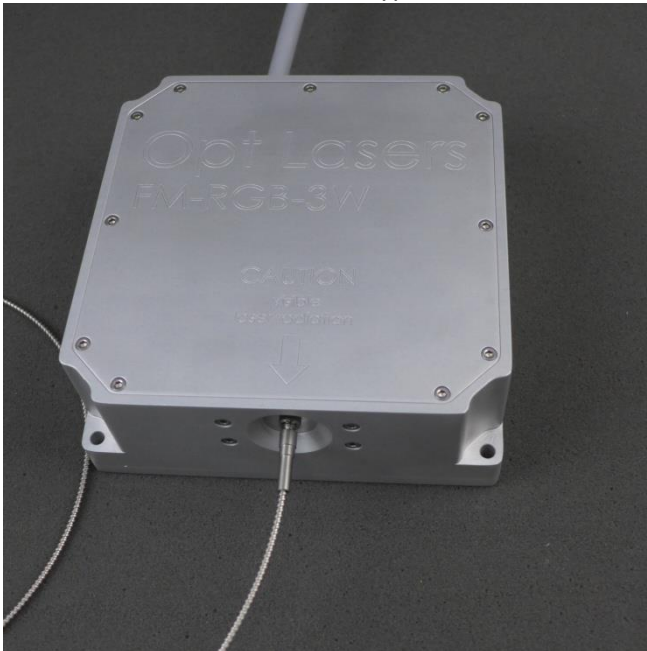
- Power adjustment of each channel via potentiometer
- Safety Package, Installed: "laser on" LED, interlock (1 m cable), key lock, emergency off button
- Heat sink, Installed (air cooling)
- PSU (110 – 240V, 50 / 60 Hz)
- Optical Fiber Cable with high power SMA connector, metal jacket and 400 μm /0.22 NA (others available).
- Fiber collimator/focuser

Product Examples

IRGBV-Series OEM Type:



IRGBV-Series / SW-Series OEM Type:



IRGBV-Series with Touch Panel:



SW-LPL Series OEM Type:

