



#### **Boost Your Energy**

The neoVAN series is an OEM type solid-state laser amplifier system to boost the pulse energy or average output power for various applications. The flexible system design allows a selection of different power and energy levels based on high reliable and long lifetime gain modules. The ultra-compact and nearly monolithic modules allow easy integration and cost effective upgrading of laser application machines, scientific lasers or low power oscillators.

#### No Matter What!

Whether high peak power short pulse picosecond lasers for micromachining applications or single frequency radiation for gravitational wave detection the neoVAN amplifier modules will boost your application. While the fiber coupled, high gain module allows direct amplification of mode-locked oscillators, gain switched or narrow linewidth diodes, the standard free-space module scales microchip lasers either to high average power or high energy levels.

#### **Key Features**

- Output power
- Pulse energy up to 5mJ
- Mode of operation
- Beam quality

cw to ps-pulses

5 to 100 W

- TEM0,0 / M<sup>2</sup><1.3
- Amplification factor up to 40 dB



# Advantages

- Easy and compact energy or power boosting
- Highly flexible and scalable amplifier units
- Proven long term stability and industrial reliability



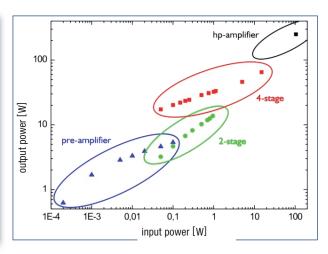
OPTICAL TECHNOLOGIES

# System specifications

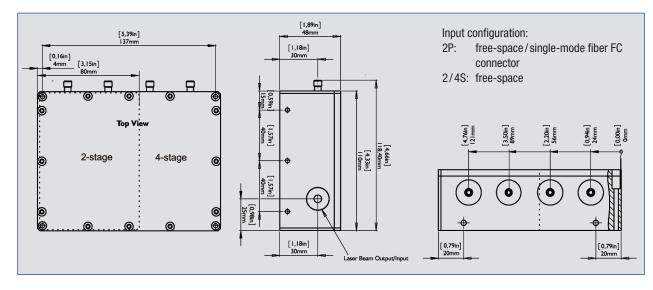
Amplifier module	2P	2\$	4S
Typical input power	1 – 100 mW	1 – 10 W	
Typical output power	1 – 10 W	10 – 25 W	25 – 50 W
Wavelength	1064 nm		
Beam quality	$TEM_{0,0} / M^2 < 1.3$		
Supported Pulse Dur.*	< 1 % RMS		
Jitter	> 100:1		
Polarzation ratio	Continuous wave to ps pulses		
Pulsed Energy	90 – 240 VAC		
Dimensions (W×H×D)	max. 350 W / gain module		
Ambient temp.	15 – 35 °C		
Laser controller	19" rackmount 4U height		
Cooling	water cooled		
Options	Fiber coupled input, air cooling		

The shown parameters are examples of standard system combinations, other parameters can be offered on request. Visit the neoLASE laser matrix on www.neolase.com for tested amplifier combinations.

## Typical Output versus Input Power



## **Dimensions Amplifier Heads**



#### Notes:

- 1. Due to neoLASE continuous product improvement, all specifications are subject to change without notice.
- 2. Laser light emitted from this system is invisible and will be harmful to the human eye. Proper laser safety eyewear must be worn during operation. Safety eyewear must be worn during operation.



# enabling your ideas.

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