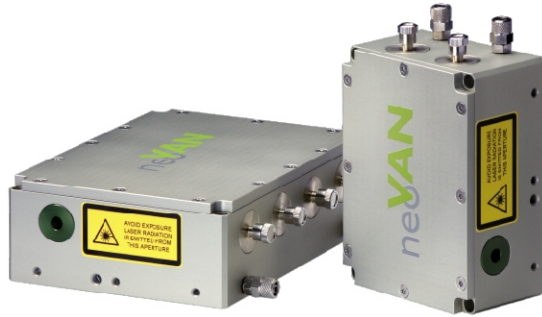


Optical Amplifier



neoVAN

Boost Your Energy

The neoVAN series is an OEM type solid-state optical amplifier system to boost the pulse energy or average output power for a couple of 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 modules scales microchip lasers either into high average power or high energy levels.

neoVAN Optical Amplifier

Key features

Output power	5 to 100 W
Pulse energy	up to 5mJ
Mode of operation	cw to ps-pulses
Beam quality	$TEM_{0,0} / M^2 < 1.3$
Amplification factor	up to 40dB

Advantages

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

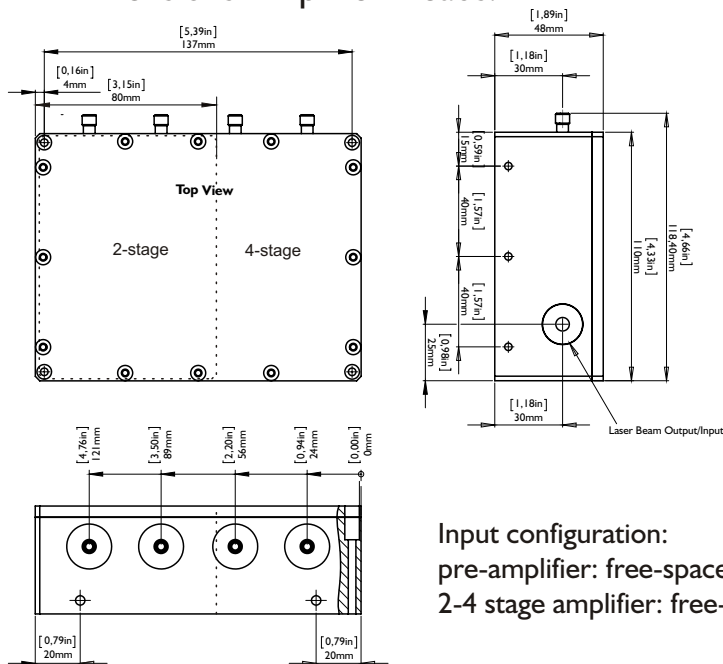
Amplifier System Specifications

Typical parameter of neoLASE Amplifier Systems

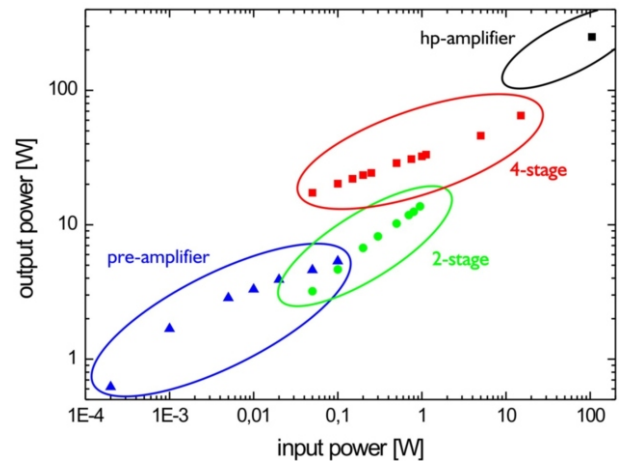
Amplifier Module	pre-amp	2-stage	4-stage
Typical input power	1-100 mW	1-10 W	
Typical output power	1-10 W	10-25 W	25-50 W
Wavelength	1064 nm		
Beam quality	TEM _{0,0} / M ² < 1,3		
Power noise	< 1 % RMS		
Polarization ratio	> 100:1		
Operating regime	continuous wave to ps pulses		
Operating voltage	90-240 VAC		
Power consumption	approx. 350W / gain module / water cooled		
Ambient temp.	15-35 °C		
Laser controller	19" Rackmount 4HU		
Options	fiber coupled input		

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 further MOPA system combinations.

Dimensions Amplifier Heads:



Typical Output versus Input Power:



Input configuration:

pre-amplifier: free-space or FC connector
2-4 stage amplifier: free-space

- 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.

