

## OEM Laser Amplifier Module



neoVAN

### 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 your 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!

neoLASE developed a customized amplifier solution with integrated pump diodes for OEM customers. The lasers down or service time is dramatically reduced due to a module type technology which can easily be exchanged and therefore guarantees a high system up time and duty cycle. Both will reduce operating and investment costs for high volume production areas.

### neoVAN Laser Amplifier

#### Key features

Output power	5 to > 100 W
Pulse energy	up to 5mj
Mode of operation	cw to ps-pulses
Beam quality	TEM <sub>0,0</sub> / M <sup>2</sup> < 1.3
Amplification factor	up to 40 dB

#### Advantages

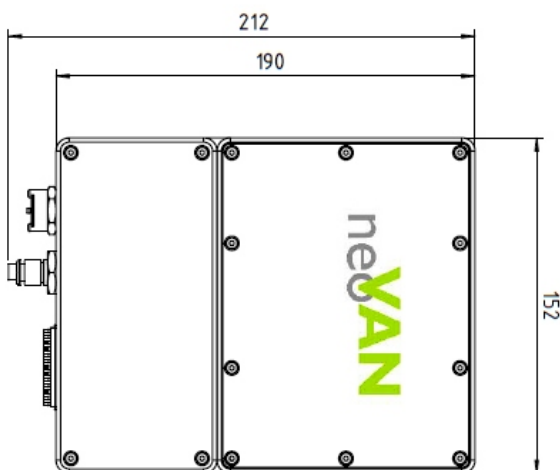
- Easy and compact energy or power boosting
- Highly flexible and scalable amplifier units
- Proven long term stability and industrial reliability

# System Specifications

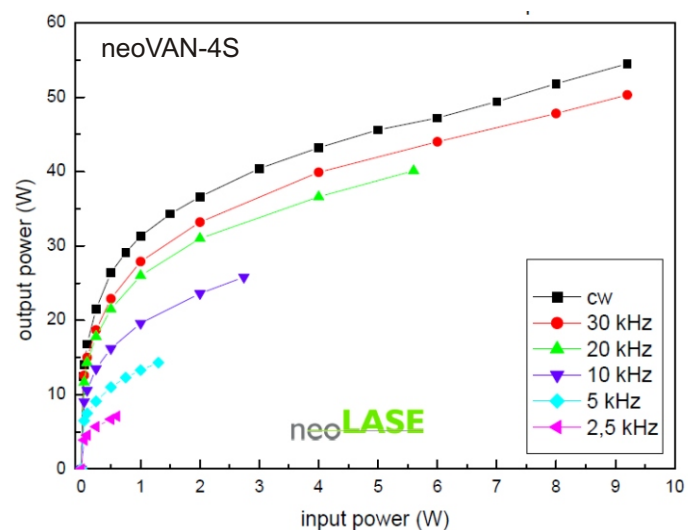
Amplifier module	2P	2S	4S	4S-HP
Typical input power	1 - 100 mW	1 - 10 W		> 10 W
Typical output power	1 - 10 W	10 - 25 W	25 - 50 W	70 - 120 W
Wavelength	1064 nm			
Beam quality	TEM <sub>0,0</sub> / M <sup>2</sup> < 1.3			
Power noise	< 1 % RMS			
Polarization ratio	> 100:1			
Operating regime	Continuous wave to ps pulses			
Operating voltage	90 - 240 VAC			
Power consumption	max. 350 W / gain module			
Ampient temp.	15 - 35 °C			
Laser controller	19" Rackmount 4 U 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](http://www.neolase.com) for tested amplifier combinations.

## Dimensions Amplifier Head



## Typical Output versus Input Power



- 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.

