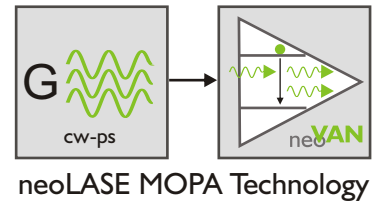


Customized MOPA Systems

neoMOS



Compact and Powerful

The neoMOS laser series combines the reliability and low maintenance of state of the art oscillators with a solid-state amplifier. Customized combinations are integrated into ultra-compact laser heads enabling easy system integration. High stability and long lifetime are provided by the neoLASE amplifier design for 24/7 industrial use.

No Matter What!

From short pulse pico- or nanosecond lasers up to single frequency laser radiation the customized MOPA systems will enable new applications. The flexible MOPA platform allows direct amplification of mode-locked oscillators, gain switched or narrow linewidth diodes and further scaling either into high average power or high energy levels.

neoMOS customized MOPA-Systems

Key features

Output power	5 to 50 W
Pulse duration	50 ns - 10 ps / cw / single-frequency
Pulse energy	up to 3 mJ
Mode of operation	single shot to MHz repetition rates
Beam quality	TEM _{0,0} / M ² < 1.3

Advantages

- Customized pulse duration and output power
- Ultra-compact laser head design
- Proven long term stability and industrial reliability

System Specifications

Seed Laser	DPSS	Microchip	DPSS	Fiber Oscillator
Pulse duration	cw / sf	< 1 ns	10 - 15 ns	8 ps
Average power	5 - 50 W			
Repetition rate	Single shot to MHz			
Max. pulse energy	> 3 mJ			
Wavelength	1064 nm / SHG optional			
Beam quality	TEM _{0,0} / M ² < 1.3			
Power noise	< 1 % RMS			
Polarization ratio	> 100:1			
Warm-up time	90 - 240 VAC			
Laser controller	19" Rackmount 6 U height			

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.

Examples of fiber coupled plug and play configurations

Diode Laser

Pulse duration: 50 ps

Amplifier:

2p-faser

Repetition rate: single-shot to 80 MHz

Pulse Energy: 12 μJ

Output Power: 12 W

Microchip Laser

Pulse duration: 400 ps

Amplifier:

2p-faser-qcw

Repetition rate: 1 kHz

Pulse Energy: 2 mJ

Peak Power: 5 MW

Amplifier:

2p-faser

Repetition rate: 2 kHz

Pulse Energy: 625 μJ

Peak Power: 1.5 MW



DPSS Laser

Pulse duration: cw / single-frequency

Amplifier:

2p-faser

Output Power: > 6 W

Visit www.neolase.com or email info@neolase.com for further information.

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.

