



A company geared to innovation



SpitLight EVO

MAGNA

DPSS DRY

InnoLas Lasers

The InnoLas SpitLight series of solid state lasers is a product family of Nd:YAG lasers for a wide range of applications. SpitLight lasers combine the latest laser technology, high performance and reliability to make a powerful tool for your laser application. The monolithic design of the laser head provides the highest thermal and mechanical stability available.

OPOs

VIS & NIR emitting OPOs from 1 mJ to 150 mJ

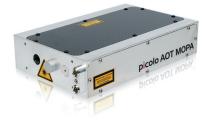
All InnoLas OPOs consist of an integrated robust Nd:YAG pumplaser with stable resonator structures and a maintenance free pumping chamber. BBO based nanosecond OPOs are especially appropriate for applications with the demand for high pulse energies in the VIS and NIR spectrum.



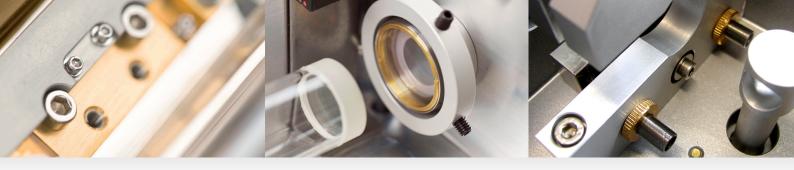
Model	Max. Pulse Energy	Max. Rep.	Max. Tuning Range
Diode Pumped OPOs			
EVO S OPO	> 25 mJ	200 Hz	410-2500
EVO I OPO	> 35 mJ	200 Hz	410-2500
Lamp Pumped OPOs			
Compact 200 OPO	> 40 mJ	20 Hz	410-2500
Compact 400 OPO	> 60 mJ	20 Hz	410-2500
SpitLight 600 OPO	> 100 mJ	30 Hz	410-2500
SpitLight 1000 OPO	on request	30 Hz	410-2500

Sub-ns Lasers

Active Q-Switch sub-nanosecond pulses with up to 2 J pulse energy The patented resonator design of the picolo family enables subnanosecond pulse width generation down to 500 picoseconds. Both high repetition rate up to 100 kHz and high energy up to 2 Joule pulse energy are available.



Model	Max. Pulse Energy	Max. Rep.	Pulse Width
picolo	lu 08	100 kHz	< 800 ps
picolo-MOPA	160 µJ	100 kHz	< 800 ps
MAGNA	2000 mJ	20 Hz	< 600 ps
MAGNA EVO	250 mJ	1000 Hz	< 600 ps



MAGNA EVO picolo **OPO**

EVO OPO

Fully Diode Pumped Lasers

DPSS Lasers with average power more than 100 W

InnoLas DPSS lasers offer excellent cost-performance-ratio, high availability, simple handling and straight forward design. State of the art technology with optimum performance - perfect for all applications demanding high average power or long lifetime operation.



Model	Max. Energy 1064 nm	Max. Energy 532 nm	Max. Energy 355 nm	Max. Repetition Rate
EVO I (Compact)	180 mJ	90 mJ	50 mJ	1000 Hz
EVO II	350 mJ	200 mJ	120 mJ	1000 Hz
EVO III	600 mJ	300 mJ	220 mJ	1000 Hz
EVO IV	1000 mJ	500 mJ	280 mJ	1000 Hz
DPSS 250	250 mJ	125 mJ	70 mJ	1000 Hz
Dry*	150 mJ	80 mJ	50 mJ	20 Hz

* Laser without any water cooling

Flash Lamp Pumped Lasers

Flash lamp-pumped ns Nd:YAG lasers from 100mJ to 2.5J

Flash lamp-pumped laser sources are especially appropriate for applications with a demand for higher energies. All InnoLas Flash lamppumped Nd:YAG Lasers feature compact laser heads and small-sized power supplies. They offer robust and stable resonator structures.



Model	Max. Energy 1064 nm	Max. Energy 532 nm	Max. Energy 355 nm	Max. Repetition Rate
Compact	400 mJ	240 mJ	120 mJ	20 Hz
Standard	1000 mJ	600 mJ	320 mJ	100 Hz
High Power	2500 mJ	1400 mJ	700 mJ	50 Hz
Hybrid *	800 mJ	350 mJ	250 mJ	100 Hz

* Diode pumped Osziallator Flash lamp pumped Amplifier

PIV (double head) lasers

SpitLight PIV lasers are a combination of two identical base model lasers. Each can be triggered individually. Standard lasers with one monolithic block (Higher performance available please ask).



Model	Compact Head
Flash lamp pumped	180 mJ @ 2 x 10 Hz
Diode Pumped lasers	50 mJ @ 2 x 100 Hz

500 mJ @ 2 x 10 Hz 120 mJ @ 2 x 100Hz

Applications

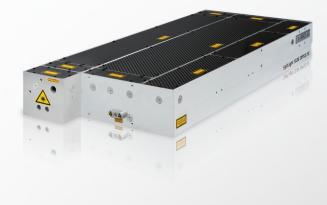
- Spectroscopy
- ✤ Particle image velocimetry (PIV)
- * Laser-induced fluorescence (LIF)
- Laser-induced breakdown spectroscopy (LIBS)
- Laser ablation
- * Pumping OPOs (optical parametric oscillator)
- Dye Lasers
- * Light detection and ranging (LIDAR)
- Holography

Customization

Since today's demanding applications deserve optimized laser parameters, we do not only sell off-the-shelf products. We can tailor our laser design, hard- or software to perfectly fit your individual application needs. Umbilical lengths up to 20 m, quick disconnectors, seeding, customized amplifiers, motorization, beam profile optimization and many more – the SpitLight series offers a variety of solutions for your application.

Features

- Compact laser head and power supply with small footprint
- * Robust and stable resonator structure
- ✤ Quick and easy change of flashlamps
- Maintenance-free pumping chamber with ceramic reflector
- * Excellent beam quality and pointing stability
- * Long flashlamp lifetime
- * Double pulse option available
- * System can be injection seeded (SLM-Option)





InnoLas Laser GmbH | Justus-von-Liebig-Ring 8 | 82152 Krailling | Germany Phone: +49 (89) 899 360 - 1400 | Fax: +49 (89) 899 360 - 1499 E-mail: info@innolas-laser.com | Homepage: www.innolas-laser.com

