

## SpitLight-600 . Lasersystem

S P I T L I G H T



300/600



The InnoLas SpitLight Series of solid state lasers is a newly developed product family of Nd:YAG Lasers for a wide range of applications. It offers excellent value for money, high reliability, ease of use, solid construction and excellent beam quality.

Attractive system price together with the newest technology and latest innovations offer a compelling reason to buy this laser.

InnoLas Spitlight Lasers are available with a pulse energy up to 750 mJ. Typical applications include Spectroscopy, PIV, LIF, LIBS, Laser Ablation and pumping OPOs and Dye Lasers.

### INNOLAS Lasertechnologie



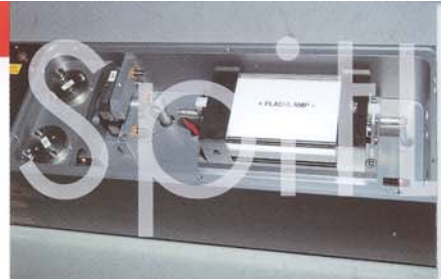
## Laser head and resonator

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Laser head and resonator are the heart of any laser. InnoLas SpitLight lasers are designed using the Finite-Element-Method in order to achieve good mechanical and thermal behaviour.

### 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)



Technical ch

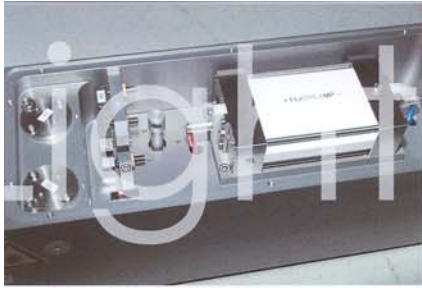


## Power Supply

P

The power supply of the SpitLight laser system uses the latest high power semiconductor technology. Its key features are high efficiency and excellent reliability. All modules are built into one cabinet for good accessibility and ease of servicing. Power supply parameters are programmable using an external PC. Double pulse operation is available as an option.





C

## Cooling System

A thermostatically controlled closed circuit cooling system is integrated into the power supply to provide precise temperature stability. The cooling medium is deionised water. For Pulse frequency up to 10 Hz no secondary cooling is needed. For 20 and 50 Hz operation a heat exchanger using mains water is required.

Characteristics



## Control and Interface

Laser functions are controlled by Software compatible with any PC running Windows 95/98/2000/NT/XP. Functions include: Charge voltage, delay, balance and coolant temperature. BNC connectors are provided for trigger input and output.



## Specifications

## SpitLight-300

## SpitLight-600

<b>Wavelength</b>	1064, 532, 355, 266 nm	1064, 532, 355, 266 nm
<b>Pulselength</b>	ca. 7 nsec	ca. 7 nsec
<b>Repetition rate</b>	10 Hz (optional 20, 30 or 50 Hz)	10 Hz (optional 20, 30 or 50 Hz)
<b>Pulse energy</b>	> 320 mJ at 1064 nm	> 750 mJ at 1064 nm
	> 180 mJ at 532 nm	> 400 mJ at 532 nm
	> 100 mJ at 355 nm	> 200 mJ at 355 nm
	> 40 mJ at 266 nm	> 90 mJ at 266 nm
<b>Linewidth (cm<sup>-1</sup>)</b>	1/0.003 (unseeded/seeded)	(unseeded/seeded) 1/0.003
<b>Jitter</b>	<1 nsec	<1 nsec
<b>Divergence</b>	<0.5 mrad (Gaussian profile at far field)	<0.5 mrad (Gaussian profile at far field)
<b>Energy stability</b>	< ± 2.5% shot-to-shot for 99.9% of pulses	< ± 2.5% shot-to-shot for 99.9% of pulses
<b>Beam diameter</b>	6.5 mm	6.5 mm
<b>Lamp lifetime</b>	>20,000,000 pulses	>20,000,000 pulses
<b>Electrical</b>	230VAC/ 50 Hz 2.5 KW	230VAC/ 50 Hz 2.5 KW
<b>Water</b>	max. 8 litres/min, 2-6 bar	max. 8 litres/min, 2-6 bar
<b>Dimensions laser head</b>	665 (L) x 147 (W) x 125 (H)	665 (L) x 147 (W) x 125 (H)
<b>Dimensions power supply</b>	300 (L) x 450 (W) x 450 (H)	300 (L) x 450 (W) x 450 (H)
<b>Weight laser head</b>	15 kg	15 kg
<b>Weight power supply</b>	50 kg	50 kg

All specifications are subject to change without notice.



Laser Class 4

## INNOLAS

### A Company geared to Innovation

The core areas of our business activities are development, production and the sales of laser-based machines for industrial materials processing. This concerns, in particular, the applications such as writing and marking, cutting and welding, drilling, scribing and perforating.

However, our activities are not only focussed on the processing of metallic materials. Even unconventional materials difficult to process may be well separated, assembled and marked with the laser. These materials cover high-strength steels and hard metals, many compounds and synthetic materials, ceramic materials and sintered material as well as glass and silicon-based building components.

Our corporate philosophy is coined by comprehensive client consultation.



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