



**Lambda**

[www.lambdaphoto.co.uk](http://www.lambdaphoto.co.uk)

**LASOS**

For worldwide photonics

# Laser systems

Multi-wavelength laser systems and beam combiner



- ⦿ Different designs for compact and flexible solutions
- ⦿ Benchtop devices and fully installable sub-systems
- ⦿ Free beam or fiber output
- ⦿ Different options for beam collimating and combining



[lasos.com](http://lasos.com)

# Multi-wavelength Laser systems and beam combiner

## LASOS® laser system series

LASOS offers a variety of customer tailored multi-color systems (MCS). These systems are equipped with custom defined mechanical and optical interfaces, control electronics and software.

The MCS 6F is our first system for universal use offering the highest flexibility for applications in laboratory or industry. It can be equipped with every laser out of the LASOS LDM-XT and DPSSL-XP laser series providing a wide range of wavelengths from blue to infrared and output powers up to 150 mW per laser line.

The lasers are individually connected to an internal beam combining unit. Alternatively, two laser lines can be led out of the housing by separate fibers. Thus, the setup which suits best to the application can be chosen. Due to the use of the LASOS proprietary Precision Fiber Coupling (PFC) lasers can be individually installed, re-moved, or replaced without the need of adjustment. This ensures that the system is up-to-date even if the requirements change. The down time due to a defect of one of the lasers is minimized. All lasers can individually be modulated. The system supports three slots where lasers are combined with an acousto-optical modulator allowing modulation of lasers that cannot directly been modulated like diode-pumped solid-state lasers.

## Specifications

Wavelengths	375, 395, 405, 415, 425, 445, 457, 473, 488, 505, 515, 520, 532, 543, 556, 561, 594, 607, 633, 638, 640, 660, 685, 705, 730, 785, 808, 830, 980  <b>Special feature:</b> Optional 488 and 514 nm narrow wavelength for full Ar-ion laser replacement
Maximum number of lasers	6, selection of wavelengths depends on configuration
Output power	Up to 150 mW each line depending on wavelength
Output power stability over 8 h	< ±2.0 %
Noise 10 Hz ... 20 MHz	< 0.5 % rms <sup>1</sup>
Fiber	Single mode, polarization
Fiber output 1	Broadband 405-640 nm
Fiber output 1 optional	Broadband 445-640 nm
Fiber output 2 and 3	Single wavelengths
Fiber termination	FC, optional collimator or LASOS PFC
Operating voltage	230 / 115 V
Modulation	Digital, max level tunable by software
Rise / Fall time	< 1 µs
Max. Bandwidth / Mod. depth	1 MHz / 1:100

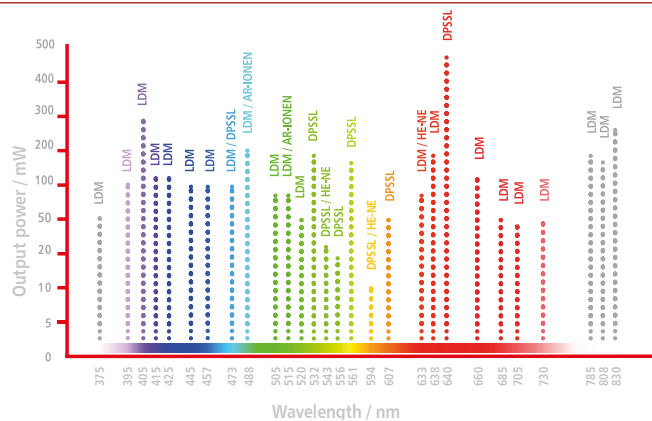
<sup>1</sup> 594, 607, 640 nm <2 %

## Areas of application:

- ⊙ Microscopy
- ⊙ Flow cytometry
- ⊙ Bioanalytical research
- ⊙ Testing
- ⊙ Industrial measurements
- ⊙ Science and education

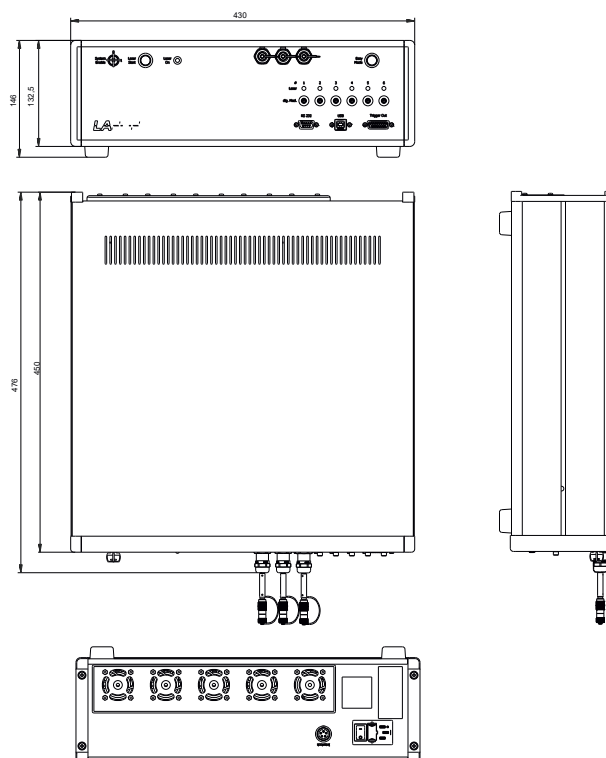
## Wavelengths

### Laser system series

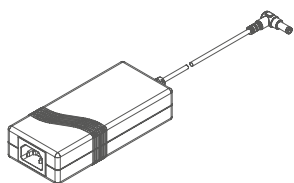


## Drawings

### MCS 6 series



## Accessories



### Power supply 24 V / 3 A

- ⦿ Operating voltage: 100-240 V AC
- ⦿ Operating current: 1.5 A
- ⦿ Available for MCS 4 series

Distribution in the UK & Ireland



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