

# System series

Multi Color System fiber coupled



## MCS 6F

- Large variety of wavelengths out of the LASOS LDM-XT and DPSSL-XP laser series product range from 375 nm to 980 nm
- Combines up to six single laser modules
- Up to three fiber outputs, broad band, or single wavelength
- Extraordinary long-term stability due to internal fiber coupling and beam combining
- Customer serviceable, exchange of single laser lines without any adjustment
- Allows upgrade or exchange of laser lines
- Fast modulation of each laser line separately
- Capable of 19" rack integration
- Compact design
- Free beam and fiber coupled version available
- Full software control
- Software control
- Firmware integration possible
- Customization on request

# Multi Color System fiber coupled MCS 6F

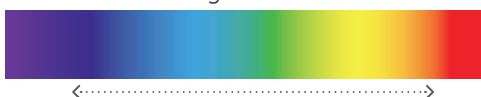
## LASOS System series

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, removed, 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 be modulated like diode-pumped solid-state lasers.

### The MCS 6F is the best choice for

- Microscopy
- Flow Cytometry
- Bioanalytical Research
- Industrial Measurement
- Testing
- Science and Education

Available wavelengths:



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## General 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

**Special feature:** 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 %

## Dimensions

