

flexible.

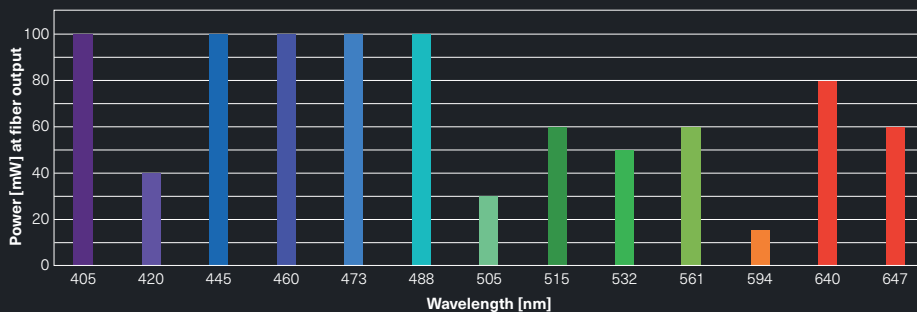
Flexible Multi-Color Laser Combiner for Microscopy

iChrome FLE

Up to 7 Laser Lines
from 405 to 785 nm



- COOL^{AC} automatic alignment, never again waste time for alignment
- Tailored to your light source requirements with one or two fiber outputs
- Best image contrast and lifetime by AOM/AOTF-free all diode design
- Two different applications with one laser engine – fiber switch / fiber splitter



learn more...



www.toptica.com/flexible

iChrome FLE



DANGER – VISIBLE AND INVISIBLE LASER RADIATION, AVOID EYE OR SKIN EXPOSURE TO DIRECT OR SCATTERED RADIATION, CLASS 4 LASER PRODUCT, EN60825-1:2014

Optical Specification													
Wavelengths (nm)	405	420	445	460	473	488	505	515	532	561	594	640	647
Max No. of wavelengths	7, max. 2x FDDL												
Laser type	Diode							FDDL			Diode		
Center Wavelength Range (nm)	± 4	± 5	± 5	± 5	± 5	± 4	± 5	± 5	± 2	± 2	± 2	+3 -5	+4 -2
Fiber Coupled cw Output Power (mW)	50/100	40	50/100	40/100	100	40/100	30	30/60	50	60	15	80	60
Power Stability	± 2 % (drift over 8h @ room temperature +/- 3 °C)												
RMS Noise (10 Hz - 10 MHz)	< 0.5 %							< 1 %		< 1,5 %	< 0.5 %		
M ²	< 1.1												
Ellipticity	< 10 %												
Polarization	linear (> 60:1, typ.)												
Polarization Orientation Tolerance	linear, ± 3° (slow axis aligned to index key)												
Fiber Specification													
No. of Fiber Outputs	1 or 2												
Fiber Output Switching Time	350 ms												
Fiber Output Power Ratio	variable from 95:5 to 5:95												
Fiber Output Connector	FC/AFC (8° angled) as standard, others like FC/PC, FC/APC, FCP8 or SC on request												
Fiber Cable Length	2 m (max.)												
Fiber Type	Single-mode, Polarization Maintaining, 3 mm Stainless Steel Reinforced												
Fiber Numerical Aperture (5 %) (typ.)	0.080	0.080	0.078	0.077	0.077	0.076	0.075	0.074	0.073	0.071	0.069	0.066	0.066
Digital/Analog Modulation													
Supported Signal Levels	TTL (digital), 0-5 V (analog)												
Max. Modulation Frequency	1000 kHz												
Rise/Fall Time	< 0.5 μs (10 % - 90 %, typ.)												
Digital Modulation Extinction Ratio	∞												
General and Environmental Specification													
Laser class	3b or 4 (depending on wavelength configuration)												
Digital Communication Interface	RS 232 (≤ 115.200 baud), Ethernet												
Power Consumption	< 80 W												
Operating Ambient Temperature Range	15 .. 35 °C												
Dimensions Laser Head	131 x 400 x 488 mm ³ (H x W x D)												
Weight	17 kg												