

flexible.

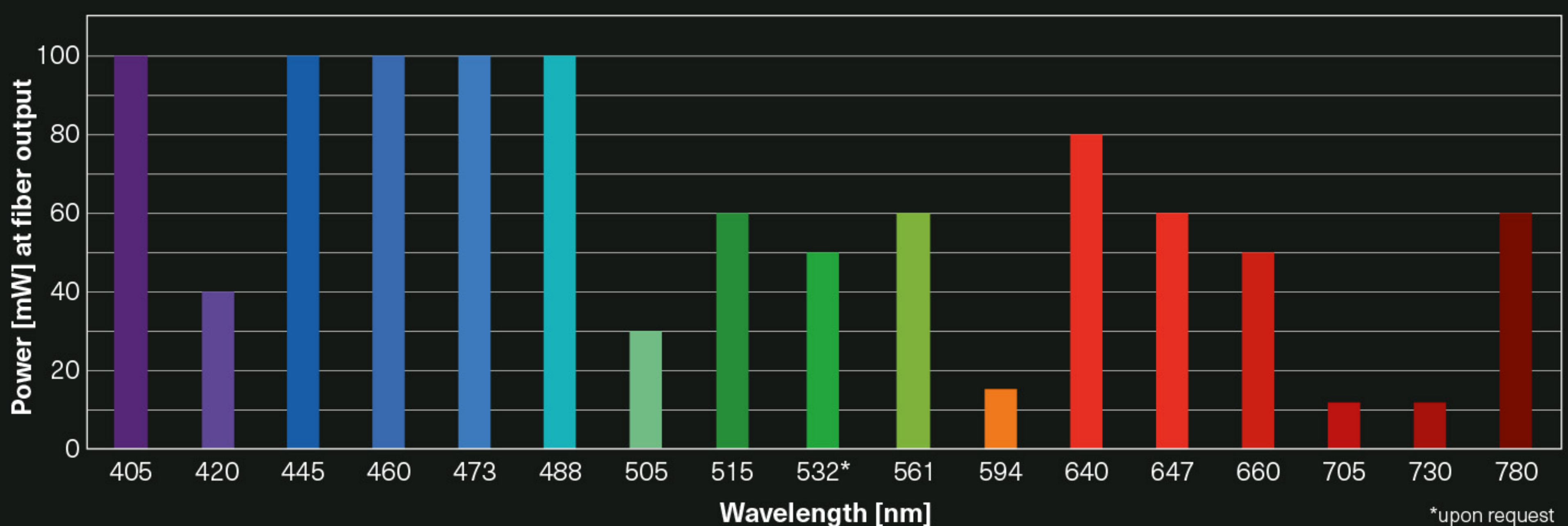
Flexible Multi-Color Laser Combiner for Microscopy

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	660	705	730	780
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	± 5	± 5	± 5	± 5
Fiber Coupled cw Output Power (mW)	50/ 100	40	50/ 100	40/ 100	40/ 100	40/ 100	30	30/ 60	50	20/ 60	15	80	60	50	12	12	60
Power Stability	± 2 % (drift over 8h @ room temperature +/- 3 °C)																
RMS Noise (10 Hz - 10 MHz)	< 0.5 %								< 1 %		< 1,5 %	< 0.5 %					< 1 %
M²	< 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, 3mm 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	n/a	n/a	n/a	n/a
Fiber Type	Single-mode, Polarization Maintaining PCF, 3mm Stainless Steel Reinforced																
Fiber Numerical Aperture (5 %) (typ.)	0.063	0.065	0.069	0.072	0.074	0.076	0.077	0.080	0.082	0.086	0.093	0.100	0.100	0.110	0.110	0.114	0.120
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																
Size /Weight	Dimensions Laser Head :131 x 400 x 488 mm³ (H x W x D) / Weight: 17 kg																

*upon request

27.03.25