

SPECIFICATIONS



Custom Multimode Square Core Fiber Output

	ALBEDO LF	ALBEDO MF	ALBEDO HF
Input Numerical Aperture	0.22	0.14	0.11
Output Numerical aperture	0.22	0.14	0.14
Input Core dimensions, μm	200x200	200x200	50x50
Output core dimensions, μm	200x200	200x200	200x200
Fiber Length, m	3	5	3
Max % Transmission	85	80	70
Spectral Bandwidth, nm	350-2 200	350-2 200	350-750
Polarization	Random	Random	Random
Max Optical power	12 W	12W	12W
Despeckle Frequency	300 Hz	300 kHz	800 kHz
Suitable Camera Frame Rate	$\leq 60\text{Hz}$	$\leq 1\text{kHz}$	$\leq 10\text{ kHz}$

Laser Combiner

Laser Diode	Titan	Hydre	Triton	Eléra
Center Wavelength nm	405	473	532	640
Output Power mW	200	1 000	1 000	400
Center Tolerance +/- nm	5	5	1	0.5
Beam diameter $1/e^2$, mm	4	4x4	2.0	2.8
Beam structure	TEM 00	Multimode	TEM 00	TEM 00
Beam Divergence half angle, mrad	0.2	0.5x0.2	0.75	0.17
Linear Polarization	Yes	Yes	Yes	Yes
M2	≤ 1.1	-	≤ 1.2	≤ 1.1
Modulation frequency kHz	10	10	10	10

ALBEDO Features and Benefits

- Top hat beam profile
- Infinity focus
- High speed modulation
- Spectral range: 350-2500 nm
- 80% of coupling efficiency
- Long-term stability of coupling
- 1 μs phase randomizer
- Speckle free

OPTIONAL LASERS COMBINER

Microscopy Wide field Lighting
Total Internal Reflexion Fluorescence/TIRF
Total Internal Reflexion Macroscopy/TIRM
PALM / STORM
Retrofit Spinning Disk
Optogenetics for DLP
Photo activation/ Photo conversion
DLP Illumination

APPLICATIONS