

LIQUID LIGHT GUIDES FOR UV AND VISIBLE LIGHT APPLICATIONS.

LIQUID LIGHT GUIDES IN
3MM OR 5MM FOR THE
OPTIMAL LIGHT ENERGY
TRANSFER

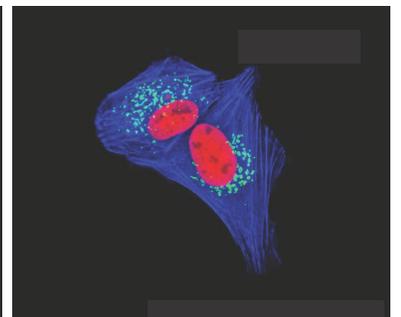
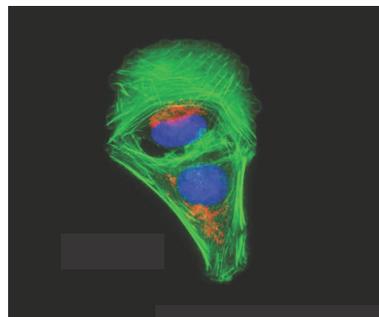
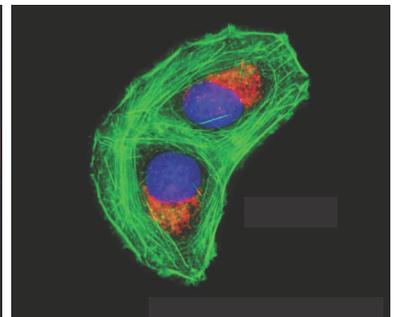
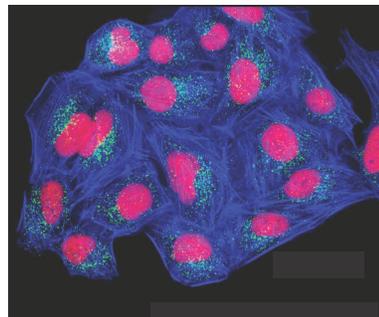


LIQUID LIGHT GUIDES

Liquid Light Guides employ a sealed liquid core to carry light in a manner similar to fiber optics cable or bundles. The use of proprietary liquid light transmitting media results in higher uniformity and optical transmission characteristics compared to traditional fiber bundles, especially in the UV range. This fact makes LLGs ideal for UV curing, fluorescence microscopy and forensics illumination applications.

LLGs transmit light better than quartz or glass fiber bundles primarily because LLGs suffer no packing losses. Additionally, with a approximately 2x greater numerical aperture (NA), LLGs gather more coupled input light than either glass or quartz fiber bundles.

LLGs generate very uniform illumination and are not subject to problems associated with fiber breakage, resulting in dead spots in the output of a fiber bundle. LLG output light has the additional advantage of minimal heat transmission due to the intrinsic IR-blocking properties of the liquid medium.



Images courtesy of Omega Optical

LIQUID LIGHT GUIDE SPECIFICATIONS

Cable Length	See Options
Spectral Transmission	300nm - 700nm
Light Carrying Medium	Proprietary UV-resistant liquid
Core Refractive Index	1.433
Cladding Refractive Index	1.338
Numerical Aperature	0.513
Transmission (1m length)	Typ > 80% at 365nm
Operating Temperature	10°C ≈ 60°C
Acceptance Angle (2α)	61.7°
Min. Bend Radius (3mm)	40mm (3mm core)
Min. Bend Radius (5mm)	60mm (5mm core)

Liquid Light Guide Options			
205-500-002	3mm core x 1.0 meter length	205-500-005	5mm core x 1.0 meter length
205-500-003	3mm core x 1.5 meter length	205-500-006	5mm core x 1.5 meter length
205-500-004	3mm core x 2.0 meter length	205-500-007	5mm core x 2.0 meter length

