

SugarCUBE™ Light Sources

High Intensity LED Fiber Optic Illumination

Designed for a Wide Range of Applications

High Speed Motion Capture

Automated Inspection and Measurement

Photovoltaic Characterization

Microscope Illumination



Overview



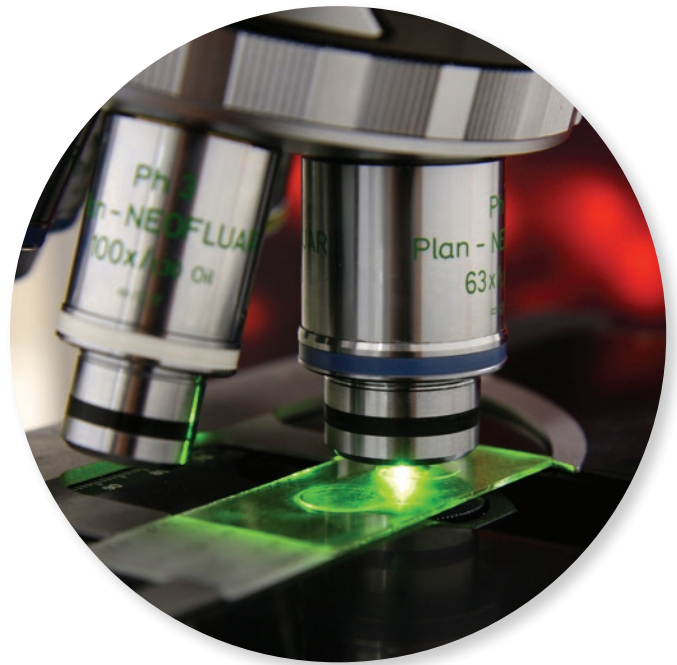
Our SugarCUBE™ light sources are extremely bright fiber optic illuminators that deliver up to 20-55 lumens per watt. We start with the brightest sources available to deliver maximum light output and then drive them with circuitry designed to extract even more light when coupled with fiber optics.

All SugarCUBEs offer unmatched light stability, <0.5% for mission critical applications.

SugarCUBE comes in various standard colors designed to match the sensitivity of cameras, optimize image contrast, improve fluorescence imaging and maximize overall quality.

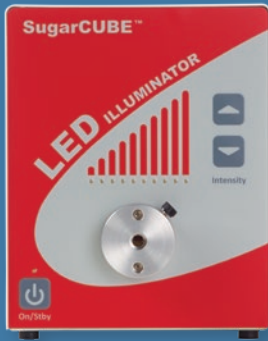
SugarCUBE Features

- Complete system with LED, drivers, and power supply
- Cool LED light reduces melting and burn out of valuable fiber bundles¹
- Adapters are available for liquid light guides and fiber bundles
- Efficiently matches light output to the applications without costly filters
- Dual remote interfaces: remote on/off and remote programmable RS232 interface
- Solid state, no hassle implementation, safety certified, universal power input
- Input for analog DC voltage control down to zero light output



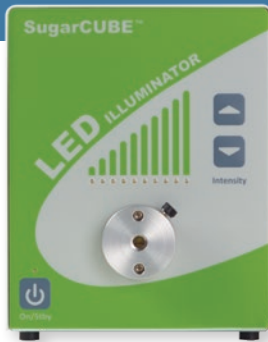
Applications

- High speed motion capture (no flicker)
- Automated inspection and measurement
- Photovoltaic characterization
- Microscope illumination



SugarCUBE Red Technical Specifications

Light Output ²	825 lm
Spectral Response	5.5W (peak @ 613nm); FWHM = 19nm (nominal)
Electrical Power Input	100 - 240V @ 2-5A, 50/60 Hz
Enclosure	All metal ventilated housing
Operating Conditions	10-40C, 30%-95% RH non-condensing
Mounting and Weight	Benchtop mount; 3.2 kg / 7.1 lbs
Dimensions (WHD)	16.3 x 20.3 x 20.3 cm; 6.4 x 8 x 8 inches
LED Life ³	60,000 hours



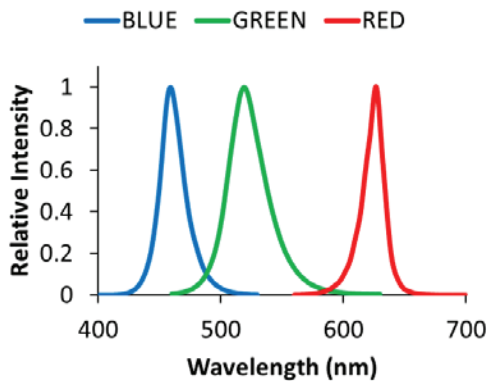
SugarCUBE Green Technical Specifications

Light Output ²	2100 lm
Spectral Response	4.1W (peak @ 523nm); FWHM = 39nm (nominal)
Electrical Power Input	100 - 240V @ 2-5A, 50/60 Hz
Enclosure	All metal ventilated housing
Operating Conditions	10-40C, 30%-95% RH non-condensing
Mounting and Weight	Benchtop mount; 3.2 kg / 7.1 lbs
Dimensions (WHD)	16.3 x 20.3 x 20.3 cm; 6.4 x 8 x 8 inches
LED Life ³	60,000 hours



SugarCUBE Blue Technical Specifications

Light Output ²	400 lm
Spectral Response	7.2W (peak @ 463nm); FWHM = 25nm (nominal)
Electrical Power Input	100 - 240V @ 2-5A, 50/60 Hz
Enclosure	All metal ventilated housing
Operating Conditions	10-40C, 30%-95% RH non-condensing
Mounting and Weight	Benchtop mount; 3.2 kg / 7.1 lbs
Dimensions (WHD)	16.3 x 20.3 x 20.3 cm; 6.4 x 8 x 8 inches
LED Life ³	60,000 hours



Quality Mgmt
System Registered
ISO13485:2016
SAI Global



ETL CLASSIFIED





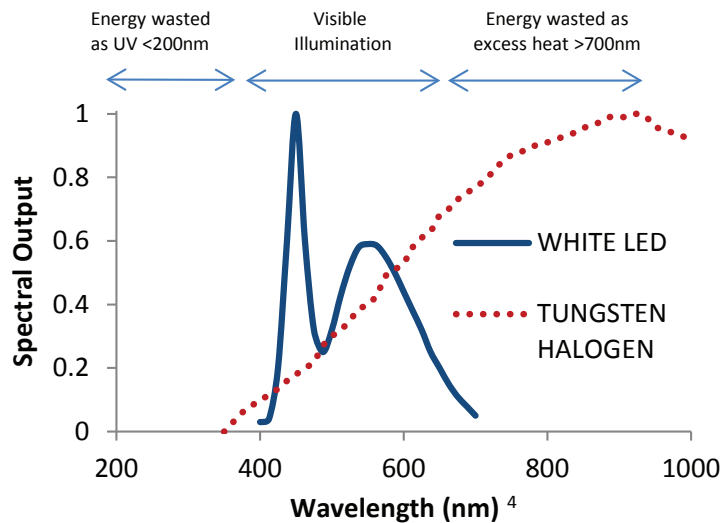
SugarCUBE White Technical Specifications

Light Output ²	1710 lm	5.4W, 6500K / CRI = 72 +/- 2 (92CRI available, contact us for details)
Electrical Power Input	100 - 240V @ 2-5A, 50/60 Hz	
Enclosure	All metal ventilated housing	
Operating Conditions	10-40C, 30%-95% RH non-condensing	
Mounting and Weight	Benchtop mount; 3.2 kg / 7.1 lbs	
Dimensions (WHD)	16.3 x 20.3 x 20.3 cm; 6.4 x 8 x 8 inches	
LED Life ³	60,000 hours	



SugarCUBE Ultra Technical Specifications

Light Output ²	3955 lm	13.1W, 6500K / CRI = 72 +/- 2 (92CRI available, contact us for details)
Electrical Power Input	100 - 240V @ 2-5A, 50/60 Hz	
Enclosure	All metal ventilated housing	
Operating Conditions	10-40C, 30%-95% RH non-condensing	
Mounting and Weight	Benchtop mount; 3.2 kg / 7.1 lbs	
Dimensions (WHD)	16.3x20.3x20.3 cm; 6.4x8x8 inches	
LED Life ³	60,000 hours	



~75% of output from tungsten halogen lamps is wasted as heat and UV compared to LED sources.

PHOTO CREDIT – Front cover, 1st circular image with approved permission from Tech Imaging.

Designed and tested in accordance with ANSI/UL 61010-1, Can/CSA C22.2 Number 61010-1, CenELEC EN 61326-1:2006 and FCC Part 15 Subpart B, Class B. Complies with Risk Group 1—Low Risk Category IEC 62471 Photobiological Safety of Lamp Systems Tables 5.4 and 5.5.

¹ Light energy is high; damage may still occur under certain conditions

² Light output is for the LED; collected illumination may be different

³ >70% lumen maintenance

⁴ Typical white spectrum—request actual spectrum from factory

All specifications subject to change without notice.

