X-Cite® LED Systems Overview

Fluorescence Illumination • In Control













	X-Cite mini+®	X-Cite XYLIS™	X-Cite 110LED	X-Cite NOVEM™	X-Cite TURBO®	X-Cite XLED1
LED Type	Broadband	Broadband	Broadband	9 switchable wavelengths	6 switchable wavelengths	4 switchable wavelengths
Wavelength Range	360-690 nm	360-770 nm	375-660 nm	340-800 nm	375-660 nm	10 LED options (360-750 nm)
LED Warranty	20,000 hours	25,000 hours	25,000 hours	25,000 hours	15,000 hours	20,000 hours
Mercury Content	None	None	None	None	None	None
Intensity Control	1% increments	1% increments	1% increments	1% increments	1% increments	0.1% increments
Analog Intensity Control	No	No	No	Yes	Yes	No
speedDIAL	Yes	Yes	Yes	Yes	Yes	No (optional XLED controller)
Foot Pedal	Optional[1]	Optional[1]	No	No	No	No
Shutter Speed	1 ms USB 100 µs TTL	1 ms USB 100 µs TTL	1 ms USB 100 µs TTL	1 ms USB 100 µs TTL	1 ms USB 100 µs TTL	500 µs USB 10 µs TTL
PC Control	Yes	Yes	Yes	Yes	Yes	Yes
Consumables	None	Liquid light guide	Liquid light guide	Liquid light guide	Liquid light guide	Liquid light guide
Coupling	Direct coupling	Light guide	Light guide	Light guide	Light guide	Light guide
Applications	• DAPI to Cy5 • Low cost white light LED option for HBO / arc lamp upgrades	• DAPI to Cy7 • Brightest / broadest white light LED spectrum • Live cell and large format scanning • F.I.S.H. • Stereomicroscopes, macroscopes • Short camera exposures	• DAPI, FITC / GFP, Cy5 • Low cost white light LED option for HBO / arc lamp upgrades requiring LLG • Rabies research • DAPI or GFP dedicated applications	• Fura-2 to IR800 • 9-channel wavelength fast-switching LED • Eliminates need for separate excitation filter wheel and shutter • Live cell imaging • F.I.S.H.	• DAPI to Cy5 • 6-channel wavelength fast-switching LED • Live cell imaging • Eliminates need for separate excitation filter wheel and shutter	• DAPI / FITC / TRITC / Cy5 • DAPI / CFP / RFP / YFP • 4-channel wavelength fast-switching LED • Optogenetics (Channel Rhodopsin / HaloRhodopsin) • Live cell imaging
Additional Features	• UV off mode • "Favorite" intensity preset feature	• LaserLED Hybrid Drive® for extremely bright red emission • UV off mode • "Favorite" intensity preset feature	• Compact footprint • External power supply	• LaserLED Hybrid Drive • 4-position motorized filter changer (500ms) • Preinstalled clean up filters (optional) • Whisper quiet operation	• LaserLED Hybrid Drive • Clean-up filter holders included • Set of 7 filters installed (optional) • External power supply	• Clean-up filter holders included • Field-replaceable, modular LED design

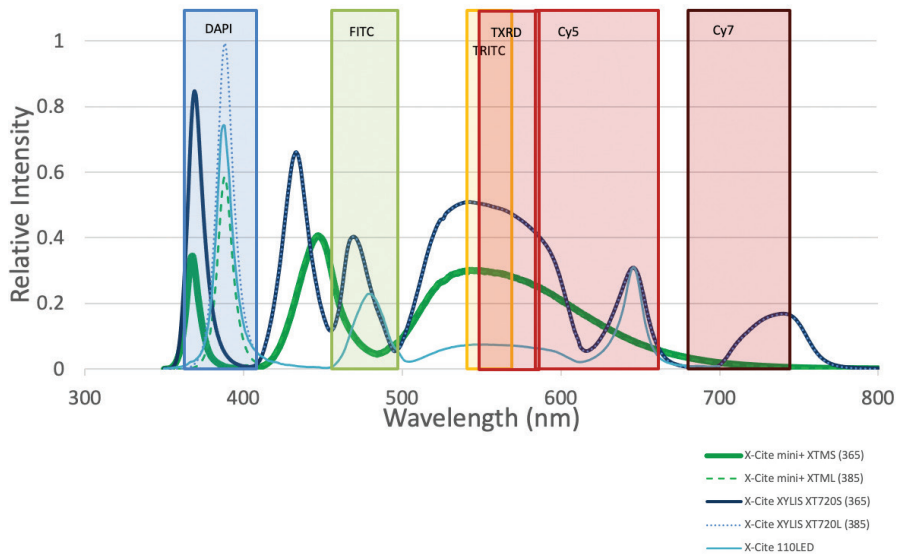
[1] Foot pedal input port is included in this model. Foot pedal device is sold separately.

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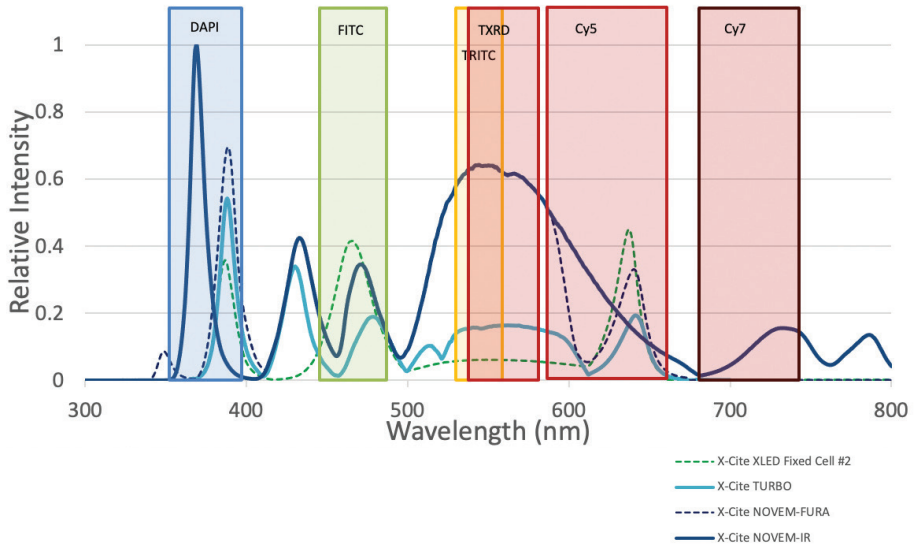
X-Cite® Spectral Comparison

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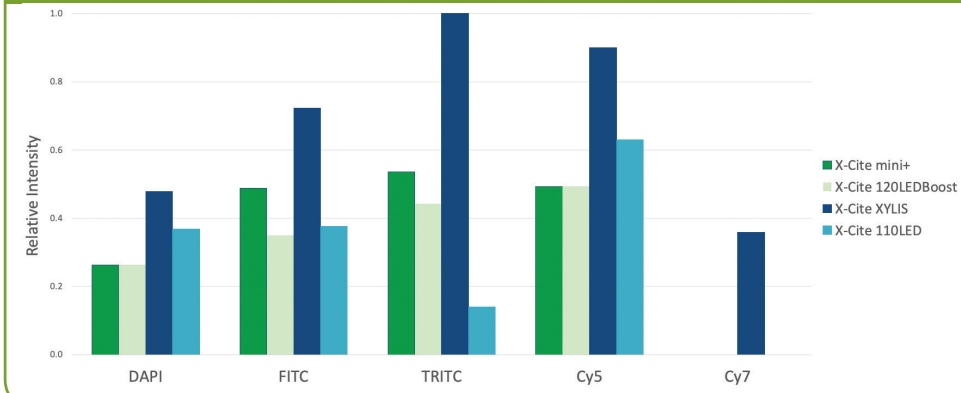
Broadband Systems



Wavelength Switchable Systems



Objective Plane Power



- For LLG coupled systems, measurements were obtained with a 3mm x 1.5m Liquid Light Guide.
- For direct coupled systems, measurements were scaled for realistic comparisons to LLG coupled systems.
- In all cases, light coupling efficiency depends on the microscope optics, filters, dichroics, etc.
- Data represents typical output levels. Output will vary between individual units.
- Filter bands shown: 377/50, 470/40, 545/25, 560/40, 620/60, 710/70.

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