X-Cite®

X-Cite NOVEM™

More Power.
More Wavelengths.
More X-Cite.



- Full spectral coverage from Fura-2 to IR800
- Fast-switching, 9-channel wavelengths
- LaserLED Hybrid Drive® with 4-position motorized filter changer
- Pre-installed clean-up filters
- Control via speedDIAL, USB, TTL, analog
- Whisper quiet operation

excelitas®

excelitas® | X-Cite®

High power performance that's impossible to miss... but when it runs this quietly, you just might.

The X-Cite NOVEM™ has it all. With high power output, a wide spectral range and convenient design features, this fast-switching 9-channel LED illuminator does everything but compromise.

X-Cite NOVEM incorporates Excelitas' patented and award-winning LaserLED Hybrid Drive® technology, utilizing high efficiency laser diodes to excite a phosphor layer and generate light from 500 nm to 600 nm. The resulting intense, broad peak ensures plenty of power in this critical part of the spectrum.

Individually controllable and powerful, X-Cite NOVEM's nine channels are fast switching and powerful enough to rival arc lamps in microscopy applications. Reduced sample exposure and scanning times will translate to improved image quality and productivity in most applications. Each channel can be set to its own intensity, in 1% increments, giving you full control and flexibility.

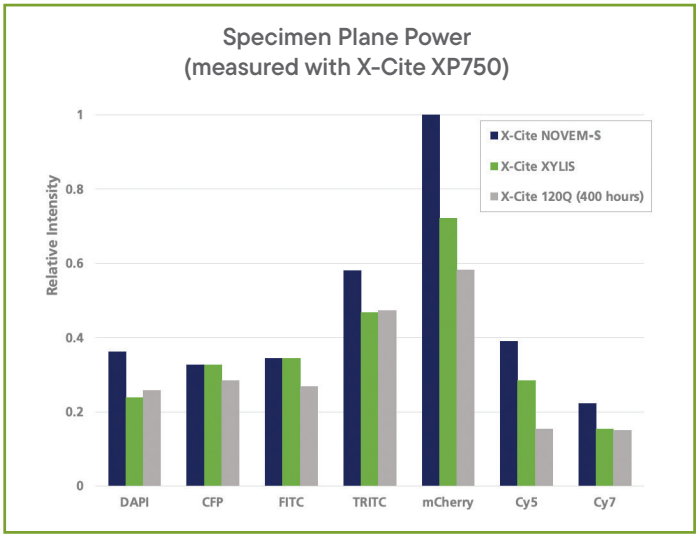
Extended Spectral Coverage from UV-IR

Spectral coverage in X-Cite NOVEM extends further than in any previous X-Cite system.

With five independent LEDs and the LaserLED Hybrid Drive powering four additional channels, X-Cite NOVEM is the most versatile X-Cite platform.

Spectral highlights include:

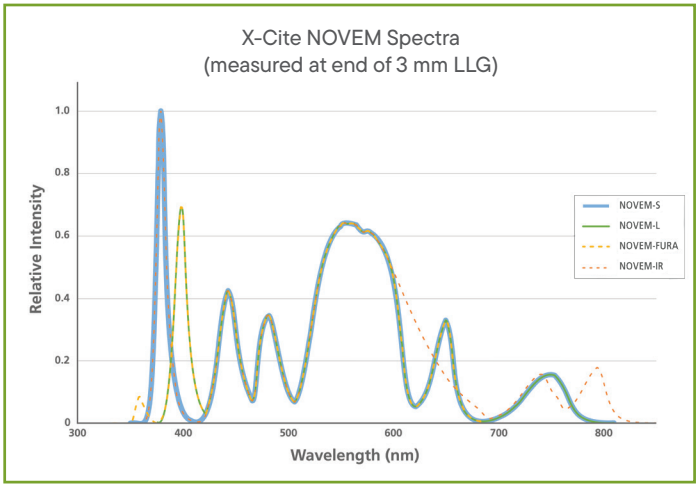
- Fura-2 – Why purchase a light source that is only useful for one application? Available with a combination of 340/385 nm LEDs, X-Cite NOVEM is ready for ratiometric calcium imaging as well as traditional widefield dynamic ratio fluorescence.
- YFP/TRITC/mCherry – An enhanced LaserLED Hybrid Drive provides increased excitation in the 500-600 nm range. In this region, a four-position motorized filter changer automatically isolates spectral bands. There is no need to manually switch between clean up filters. No more having to choose between TRITC or mCherry for experiments... with the X-Cite NOVEM you can do both!
- Cy7 – Imaging labs can keep their spectral options open with X-Cite NOVEM's improved 735nm LED for Cy7.
- IR800 – X-Cite NOVEM includes a 785 nm peak for IR800 imaging and other emerging far-red applications.



Clean-up Filters Made Easy and Smart

Each of X-Cite NOVEM's five independent LEDs has a pre-installed clean-up filter in an individual holder. Mounted on dowel pins, these single filters simply slide out when not required.

In the 500-600 nm region, powered by the LaserLED Hybrid Drive, our unique four-position filter changer automatically moves the appropriate clean-up filter into place when channels 4 to 7 are selected. It doesn't get more convenient than this!



Imaging Software Compatibility

Windows drivers that automatically download, and compatibility with common imaging software platforms make X-Cite NOVEM simple to integrate, right out of the box! Take full advantage of LED instant ON/OFF capability with PC control or TTL triggering. All X-Cite NOVEM models have USB, TTL, and analog inputs for automated applications.

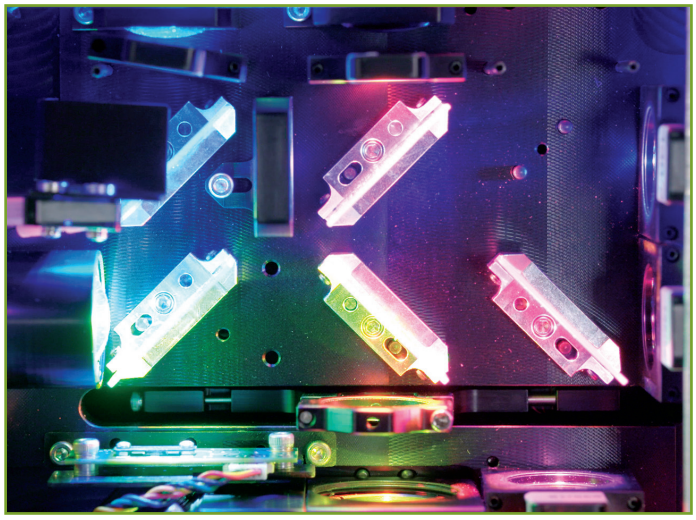
The free downloadable X-Cite Control Panel GUI has been expanded to nine channels, making it easy to troubleshoot connections, create LED groups, and configure ring buffers for single-input triggering.

For manual control, X-Cite NOVEM has an updated speedDIAL. Use the intuitive main dial to turn LEDs on/off and adjust intensity, and the smaller side buttons to conveniently scroll through the nine channels. The compact display layout provides information on channel number, peak wavelength, LED status and intensity.



Whisper Quiet Operation

Everyone in the lab will appreciate X-Cite NOVEM's super quiet operation, thanks to the ultra-efficient design for thermal management.



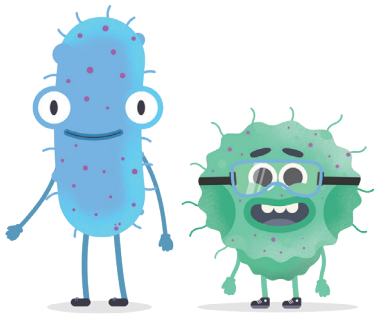
Fluorophore	Wavelength (nm)	Filter*	Wavelengths Available			
			X-Cite NOVEM-S	X-Cite NOVEM-L	X-Cite NOVEM-FURA	X-Cite NOVEM-IR
FURA-2	340				•	
DAPI	365	378/52	•			•
DAPI	385	378/52		•	•	
CFP	435	438/24	•	•	•	•
FITC	475	474/27	•	•	•	•
Blank Filter	500-600		•	•	•	
YFP	510	509/22	•	•	•	•
TRITC	555	554/23	•	•	•	•
mCherry	580	578/21	•	•	•	•
Cy5	635	635/18	•	•	•	•
Cy7	735	735/28	•	•		•
IR800	785	775/46				•

Powered by LaserLED Hybrid Drive and rotary filter changer.

*Filter holders and rotary filter changer are populated in "-F" models only.

Whatever the application, from slide scanning to FISH, Fura-2 to IR800... X-Cite NOVEM has it covered.

Technical Specifications	
Wavelength Ranges	X-Cite NOVEM-S: 360-770 nm X-Cite NOVEM-L: 380-770 nm X-Cite NOVEM-FURA: 340-660 nm X-Cite NOVEM-IR: 360-800 nm
Input Power Supply	Universal input 100-240 VAC, 50/60 Hz
Current	4.5A max/100 V, 1.9A max/240 V
Response Times	LED ON/OFF: 100 µs TTL / 1 ms USB Rotary Filter Changer: 500 ms / ≤2s minimum duty cycle
Control Options	speedDIAL ON/OFF - TTL compatible Intensity - Analog RS-232 commands (SDK available), USB
I/O Connections	Mini DIN plug, 9 pos (speedDIAL) USB (B-type) DB15 x 9 BNC (TTL) DB15 x 6 BNC (Analog)
Dimensions (WxHxD)	205 mm x 265 mm x 270 mm (8.1” x 10.8” x 10.6”)
Weight	9 kg (19.8 lbs)
Shipping Dimensions (WxHxD)	440 mm x 400 mm x 555 mm (17.3” x 15.7” x 21.8”)
Shipping Weight	11.8 kg (26 lbs)
Certifications	CE, UKCA, RoHS, KC
Warranty	LEDs – 25,000 hours or 3 years All other X-Cite NOVEM components - 1 year, parts and labor (excluding LLG)
Patents	X-Cite NOVEM incorporates technology protected by patent US#9,239,133 and US#10,788,678



excelitas Enabling the future

Telephone:
+1 905 821-2600

Toll Free (USA and CAN):
+1 800 668-8752

2260 Argentia Road
Mississauga, Ontario
L5N 6H7 CANADA

excelitas.com
x-cite@excelitas.com

For a complete listing of our global offices, visit www.excelitas.com/locations

© 2026 Excelitas Canada Inc. X-Cite® and LaserLED Hybrid Drive® are registered trademarks of Excelitas Canada Inc. The Excelitas logo and design are registered trademarks of Excelitas Technologies Corp. All other trademarks not owned by Excelitas Technologies or its subsidiaries that are depicted herein are the property of their respective owners. Excelitas Canada Inc. reserves the right to change this document at any time without notice and disclaims liability for editorial, pictorial or typographical errors.

NOVEM 4-pg Brochure_2026.07