



3Z OPTICS

IRIX-CKX53 Epi-illuminator



Unlock new possibilities in
basic microscopy!

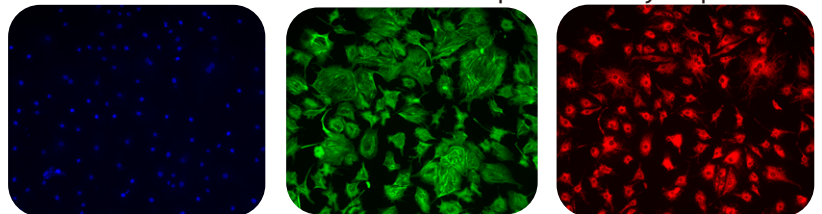
The IRIX-CKX53 epi-illuminator is specially designed for the Evident CKX53 inverted microscope. In standard version, it adopts a tri-color four-channel architecture, integrating three fluorescence channels and one brightfield channel. Utilizing electronic control system, it enables rapid channel switching and brightness control. Its compact optical design integrates excitation light sources, dichroic mirrors, and emission filters, allowing immediate use once installed.

Native Integration | Motorized Switching

High-Power Illumination for Clearer Images

Three-color LED excitation delivers bright, uniform fluorescence across DAPI, GFP, and Cy3 channels. Users can freely configure wavelength combinations to match common stains or specific assay requirements.

- Standard excitation:
385 nm / 470 nm / 550 nm



Smart Control • Instant Feedback

A 2.4-inch color display shows the active channel, and intensity in real time. One can switch between fluorescence and brightfield instantly while maintaining precise intensity control. Brightness settings are automatically stored and recalled for each channel.



◀ Control Pod

Instant-On Operation

No warm-up, no delay — power on and start imaging.

Expandable and Compatible

The standard three-channel fluorescent design can be upgraded to a four-channel configuration. And its universal mechanical interfaces ensure seamless integration with multiple microscope platforms.

Technical Specifications

Illumination Mode	Brightfield / Fluorescence		
Wavelengths	Up to 4 fluorescent channels		
Standard Excitation Channels	UV channel	Blue channel	Green channel
	EX: 385/20nm	EX: 470/30nm	EX: 550/50nm
	DM: 400nm	DM: 500nm	DM: 600nm
	EM: 460/50nm	EM: 535/50nm	EM: 630/70nm
Optical Power ^[1]	UV ≥ 280mW	B ≥ 600mW	G ≥ 500mW
Optional Channels	EX: 435/20nm, DM: 460nm, EM: 495/25nm EX: 530/30nm, DM: 560nm, EM: 605/70nm EX: 630/30nm, DM: 660nm, EM: 700/75nm Customization available		
Optical Stability ^[2]	≥98%		
Channel Switching	Motorized switching		
Control	Rotary dial + Buttons + 2.4-inch color display		
Intensity	1-100% linear dimming in increments of 1%		
Brightness Memory	Automatically saves and recalls brightness settings when		
Input	DC 12V / 3A		
Power Consumption	15W		
LED Driver	Constant current		
Dimensions (WxLxH)	Illuminator: 195mm × 132mm × 45mm		
	Control pod: 80mm x 105mm x 45mm		
Weight	Illuminator: 1.5kg		
	Control pod: 0.25kg		
Noise Level ^[3]	≤47dB		
Working Environment (only indoors)	Temperature: 0-40°C Humidity: 20-80% RH (non-condensing)		
Storage Environment	Temperature: -15-60°C Humidity: 20-85% RH (non-condensing)		
Cooling	Air-cooling		
Lifetime	30000 hours		
Warranty	24 months		
Note:			
[1] Measured at the output port with optical power meter.			
[2] Continuous monitoring of output power in 4 hours under room temperature 26°C, Humidity 65%±10%.			
[3] Measured under 38dB of ambient noise, 50cm away from the light source.			

