



IRIS-400 SERIES

4-channel LED Light Source

High power ♦ Four individually-controlled LEDs
Fast response ♦ OEM customization available

FEATURES



Individual control with precision

IRIS-400 has four LED channels that can be controlled individually according to your needs. Moreover, the intensity can be adjusted from 0-100% with precisely 1% step size.

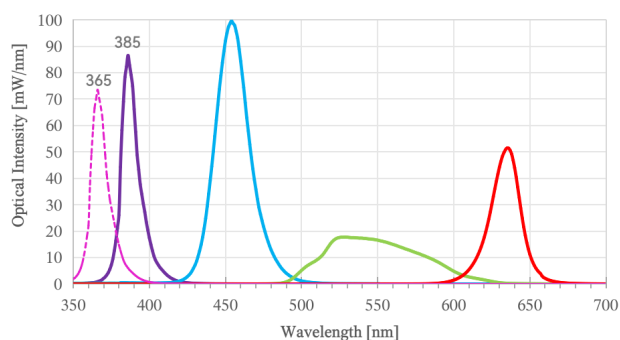


Compact design with flexibility

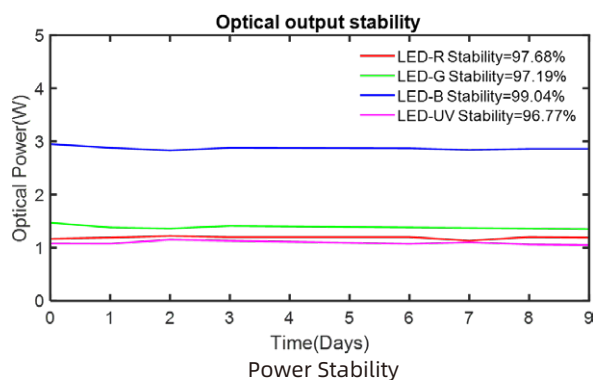
The IRIS-400 can be directly coupled to almost any microscopes. Optional Liquid light guide coupling is also available. You can also enjoy a seamless control of channels, intensity, and internal triggering manually and electronically.

High-Power Stable Output LED Source with On-Demand Spectral Control

The IRIS-400 delivers a direct output power of 7W, while outputs 3.1W with LLG coupling, sufficient for a number of fluorescent experiments. Its output spectrum is equally outstanding, with filter slots configuration available that brings more flexibility on demand.



IRIS-400 Output Spectrum



Power Stability

*Room Temperature (Temp 26°C, Humidity 65%±10%)

By monitoring the power variance as light source works at full power.

CONFIGURATION



LLG Output + (custom) collimation



For those who have custom collimation for LLG to microscope

Plug&play, no maintenance and warm-up

IRIS-400 provide direct coupling as standard delivery, and LLG coupling as optional.

- Fit for almost all microscopes, barring special light paths.
- Individual controller provided (rotary dial and buttons).

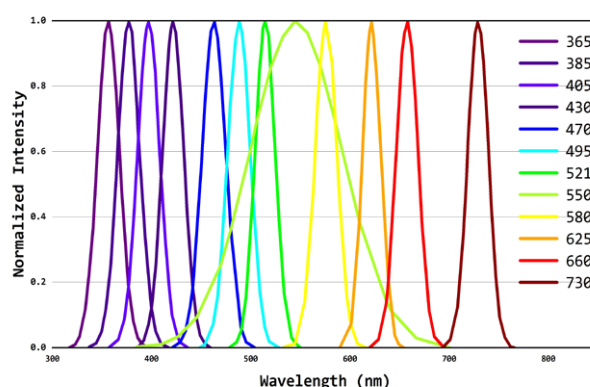
Adjustable focus

The IRIS-400 equips with an exclusive optical lens module where focus can be adjusted to the best performance for your applications, simply by turning the zoom ring.



Highly customizable

IRIS-400 can be customized with different wavelengths, bandwidths according to your needs. You can also set up your own OEM solutions. Please inquire for more if needed.





IRIS-400

Standard 4-LEDs engine & Independent control

产品特点	IRIS-400	IRIS-400N
Four high power LEDs	✓	✓
Independent control	✓	✓
Global output	✓	✓
Optimized optical output	✓	✓
Serial communication	✓	✓
OEM customization	✓	✓
Response speed < 10μs		✓
Magnetic filter holders		✓
Self-adaptive spectrum		✓

Beyond Conventional, Sparking Inspiration!

We believe exceptional lab instruments should adapt to experiments, not the other way around. Every detail of our new magnetic-slot four-color LED light source is designed around researchers' real needs.

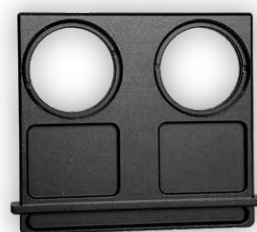
Pre-installed narrowband filters deliver unmatched precision, with each filter optically calibrated to ensure spectral purity and minimize crosstalk in multicolor imaging. The innovative magnetic-slot design offers unparalleled flexibility for customized configurations. Two approaches, one goal—optimal experimental support.

Choose the out-of-the-box narrowband solution for critical experiments, or freely swap filters to explore new possibilities. Breaking the limits of traditional light sources, we unite precision and flexibility to empower your research. Every wavelength change extends scientific thinking; every spectral choice unlocks discovery.



IRIS-400N

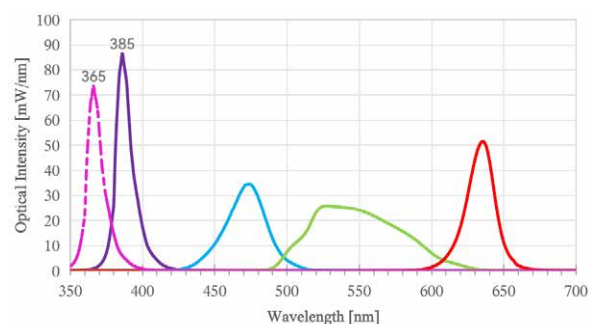
Magnetic filter holders & Fast response



Magnetic filter holder (≤25mm dia.)



Side view



IRIS-400N Output Spectrum

Fluorescent Dye References

Channel	Recommended Dye
UV	DAPI, Hoechst 33528, Hoechst 33342, BFP, Alexa Fluor 350, Alexa Fluor 405, Pacific Blue,
B	GFP, Cy2, FITC, Alexa Fluor 488, SYBR Green, Alexa Fluor 55, BODIPY -1-DNA, LysoSensor
G	Cy3, TRITC, Texas Red, Cy3.5, mRFP, Alexa Fluor 647, Propidium Iodide (PI), YFP,
R	Cy5, mCherry, ToTo-3, Alexa Fluor 633, Alexa Fluor 647, MitoTracker DeepRed FM

Technical Specifications

Model Name	IRIS-400		IRIS-400N
Wavelength Channels	4		
Spectral Range	360-660nm		
Peak Wavelengths	365/385nm, 455nm, 525nm, 635nm		365/385nm, 470nm, 525nm, 635nm
Output Power ^[1]	Direct output ≥ 6.5W		Direct output ≥ 5.5W
	φ3mm LLG output ≥ 3.2W		φ3mm LLG output ≥ 2.56W
Excitation Filter Slot	/		4 magnetic excitation filter slot, compatible with 25 mm diameter filters, thickness ≤ 3.5 mm
Light Delivery	Direct-coupled or liquid light guide		
LLG (optional)	● φ3mm, NA=0.59, length 1.2m; optional: φ5mm LLG ● φ3mm, NA≥0.5, length 1.5m; optional: φ5mm LLG		
Power Stability ^[2]	≥98%		
Control	Control pod, TTL triggering, serial communication		
Control pod	Buttons + rotary dial + 3.5-inch display		
Operating Mode	Independent, global, TTL, sequence		
Intensity	0-100% linear dimming in increments of 1%		
TTL	4 TTL input(DB9to4*BNC)		
	response time ^[3] <500 μs		response time ^[3] <5 μs
Interface	USB (protocol provided)		
Power Requirements	AC100-240V(±10%),50/60Hz		
Power Consumption	80W		85W
LED Driver	Constant current		
Noise Level ^[4]	≤ 48dB		
Dimensions (WLH)	Lights Source: 77mm x 210mm x 174mm		Lights Source: 84mm x 210mm x 174mm
	Control pod: 135mm x 110mm x 75mm		
Weight	Light source: 2.1kg		Light source: 1.85kg
	Control pod: 0.55kg		
Working Environment (Only Indoors)	Temperature: 0 to 40°C Humidity: 20-80% RH (non-condensing)		
Storage Environment	Temperature: -15 to 60°C, Humidity: 20-85% RH (non-condensing)		
Cooling	Air cooling		
Lifetime	30000 hours		
Warranty	24 months(LLG excluded)		
Standard Package	Light Source, control pod, microscope adapter, filter holders(400N), power supply and power cord, USB cable, user manual		
Optional Accessories	LLG collimation optics, BNC cable, excitation filter		
Note :			
[1] Measured with optical power meter in the output port/distal end of LLG with full output.			
[2] Continuous monitoring of output power in 24 hours under room Temperature 26°C, Humidity 65%±10%.			
[3] Triggering frequency: 1KHz.			
[4] Measured under 42dB of ambient noise, 50cm away from the light source.			



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