



# IRIS-200B

## High Power Broad-Spectrum LED Light Source

User-friendly ♦ Brilliance with broad spectral coverage  
Fast response ♦ Replacing traditional mercury-arc and metal halide lamp



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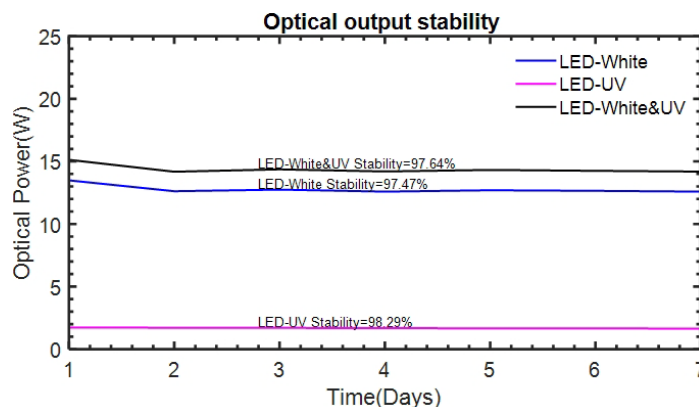
## Features

### A New-generation Ideal White Light

IRIS-200B is designed to replace traditional arc or mercury lamps, with a lifetime of 30000 hours. It is a plug&play lighting solution with no need for maintenance and warm-up. You can also control UV channel independently, providing more convenience to your applications.

### Compact System with Flexibility

IRIS-200B can be directly coupled to almost any microscope. LED channels, intensity can be adjusted manually, or controlled by both internal and external triggering if needed.



#### Power Stability

\* Room Temperature (Temp 26°C, Humidity 65%±10%)  
Monitoring the power variance as light source works at full power.

### High-speed Response

IRIS-200B has a global channel TTL inputs available, the system can be switched on and off in less than 10μs, sufficient for high-speed imaging.

## CONFIGURATION

### Plug&play System, no need for warm-up

#### Direct Coupling (standard)



#### Direct-coupled configuration

\*please contact us if you need special coupling.

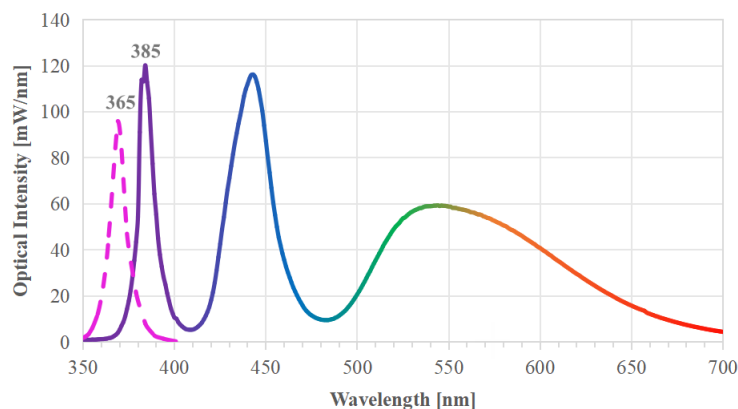
### Optional LED channel

- UV Channel: 365nm, 385nm, 405nm
- White Light is a standard set.

### High Power with Stability

IRIS-200B delivers a high-power direct output of  $\geq 13W$  with a broad spectral coverage, sufficient for routine fluorescent excitation needs.

- ☑ No fluorescent observation should be compromised by dim light, no matter how routine the application. IRIS-200B unlocks new potential.



## Technical Specifications

|                                                                                                                                                                                                                                                                                                               |                                                                                          |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| <b>Spectral Range</b>                                                                                                                                                                                                                                                                                         | 360-700nm                                                                                |
| <b>Output Power<sup>[1]</sup></b>                                                                                                                                                                                                                                                                             | ≥13W                                                                                     |
| <b>Light Delivery</b>                                                                                                                                                                                                                                                                                         | Direct coupling                                                                          |
| <b>Power Stability<sup>[2]</sup></b>                                                                                                                                                                                                                                                                          | ≥97%                                                                                     |
| <b>Control</b>                                                                                                                                                                                                                                                                                                | Control pod, TTL triggering, serial communication                                        |
| <b>Operating Mode</b>                                                                                                                                                                                                                                                                                         | Independent, global, TTL, sequence                                                       |
| <b>Intensity</b>                                                                                                                                                                                                                                                                                              | 0-100% Linear Dimming in increments of 1%                                                |
| <b>TTL</b>                                                                                                                                                                                                                                                                                                    | 1 global TTL input, response time <sup>[3]</sup> <5 μs                                   |
| <b>Connectivity</b>                                                                                                                                                                                                                                                                                           | USB (protocol provided)                                                                  |
| <b>Power Requirement</b>                                                                                                                                                                                                                                                                                      | AC100-240V(±10%), 50/60Hz                                                                |
| <b>Power Consumption</b>                                                                                                                                                                                                                                                                                      | 95W                                                                                      |
| <b>LED Driver</b>                                                                                                                                                                                                                                                                                             | Constant current                                                                         |
| <b>Dimensions (WLH)</b>                                                                                                                                                                                                                                                                                       | Light Source: 106mm*110mm*143mm                                                          |
|                                                                                                                                                                                                                                                                                                               | Control Pod: 207*mm143mm*167mm                                                           |
| <b>Weight</b>                                                                                                                                                                                                                                                                                                 | Light Source: 1.5kg                                                                      |
|                                                                                                                                                                                                                                                                                                               | Control Pod: 2.2kg                                                                       |
| <b>Noise Level<sup>[4]</sup></b>                                                                                                                                                                                                                                                                              | ≤48dB                                                                                    |
| <b>Working Environment (Only Indoors)</b>                                                                                                                                                                                                                                                                     | Temperature: 0~40°C                                                                      |
|                                                                                                                                                                                                                                                                                                               | Humidity: 20~80% RH (non-condensing)                                                     |
| <b>Storage Environment</b>                                                                                                                                                                                                                                                                                    | Temperature: -15~60°C                                                                    |
|                                                                                                                                                                                                                                                                                                               | Humidity: 20~85% RH (non-condensing)                                                     |
| <b>Cooling</b>                                                                                                                                                                                                                                                                                                | Air cooling                                                                              |
| <b>Lifetime</b>                                                                                                                                                                                                                                                                                               | 30000 hours                                                                              |
| <b>Warranty</b>                                                                                                                                                                                                                                                                                               | 24 months                                                                                |
| <b>Standard Package</b>                                                                                                                                                                                                                                                                                       | LED head, controller, microscope adapter, USB cable, BNC cable, power cable, user manual |
| Note :<br>[1] Measured with optical power meter in the output port with full output.<br>[2] Continuous monitoring of output power in 24 hours under room Temperature 26°C, Humidity 65%±10%.<br>[3] Triggering frequency: 1KHz.<br>[4] Measured under 42dB of ambient noise, 50cm away from the light source. |                                                                                          |

## Fluorescent Dye References

|           |                                                                                                                 |
|-----------|-----------------------------------------------------------------------------------------------------------------|
| <b>UV</b> | DAPI, Hoechst 33528, Hoechst 33342, BFP, Alexa Fluor 350, Alexa Fluor 405, Pacific Blue, Indo-1, Cascade Yellow |
| <b>B</b>  | GFP, FM1-43, Cy2, FITC, Alexa Fluor 488, SYBR Green, BOBO-1-DNA, LysoSensor Green...                            |
| <b>G</b>  | Cy3, TRITC, Texas Red, Cy3.5, mRFP, Alexa Fluor 546, Alexa Fluor 555, Propidium Iodide (PI), MitoTracker Red    |
| <b>R</b>  | Cy5, mCherry, ToTo-3, Alexa Fluor 633, Alexa Fluor 647, MitoTracker DeepRed FM                                  |



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