

96-well LED array with
Lens Mat and Active Cooling Base



Lumidox II setup with 96-well LED
array, controller and Para-dox® reaction block

Lumidox® II LED Arrays (U.S. Patent No. 11,458,447)

Our patented LED arrays provide wavelength and power specific illumination to samples for photoredox catalysis applications.

- Up to 15 different color wavelengths are available*
- 5 output STAGES (customizeable) with calibration data stored on board**
- Available in two Surface Mat styles
- Three options for Base configurations

* Most LED arrays (excluding Discovery, page 69) are wavelength-specific - only one wavelength per device.
** Calibration data is stored onboard (not on the controller), allowing the use of different illuminators with one controller.
Controller can only operate 1 device at a time. STAGE settings are NOT user-adjustable and must be configured prior to shipping.

Surface Mat Styles

Array top surfaces are made of chemically inert silicone and come in two styles, **Lens Mat** and **Diffuse Mat**.



Lens Mat Surface

- Ultra-clear, molded to fit into the holes of a Para-dox® Reaction Block
- Captures nearly all light emitted by the array's LEDs and directs it into the vials in the reaction block



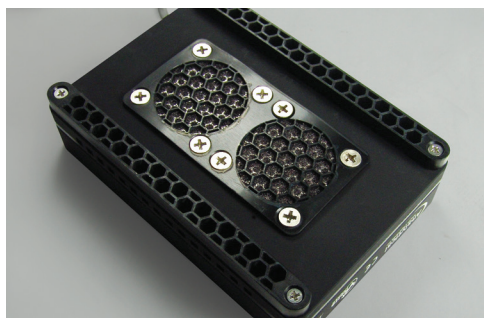
Diffuse Mat Surface

- Flat surface, making for easy pairing with SLAS footprint apparatus
- Can be used for niche applications such as illuminating cell culture flasks, reservoir plates, large scale containers, etc.

About Array Cooling and Base Options

Lumidox®II LED Arrays can generate a considerable amount of heat at any output stage and therefore need to be cooled. Both **Lens Mat** and **Diffuse Mat** style arrays are available with an **Active Cooling** base, **Solid** base or **Flow-Through** base. Each has its own specific way of cooling the LEDs in the array and can affect different application situations (see website). *Note: solid and flow-through base arrays are not self-cooling and require the use of a sufficient external chiller/cooling device (see website for more information).*

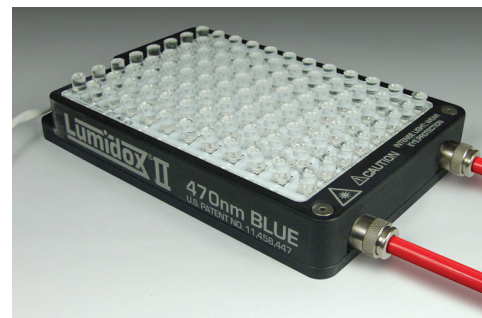
Active Cooling Base (underside shown)



Solid Base (shown with Thermal Transfer Deck)



Flow-Through Base (connects directly to chiller)



Lumidox II Controller

Controls the light output of the LED Arrays. Optical power levels are provided in easy to read, easy to calculate, whole numbers. An onboard illumination elapsed timer is provided, as well as a countdown to automatic shut off timer. Controllers and Arrays are manufactured in-house.

Catalog No.	Description
LUM2CON	Lumidox Gen2 LED Controller

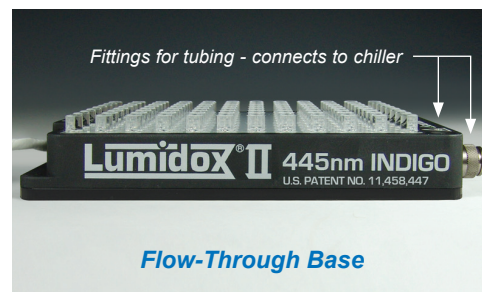
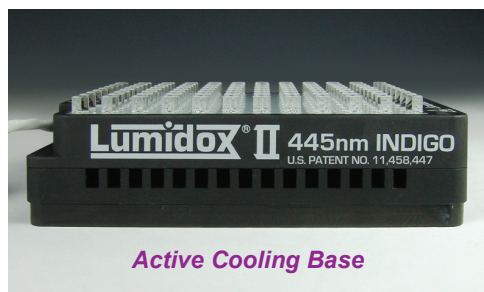


Includes one pair of UV goggles.
Additional goggles can be purchased.

UV Safety Goggles

Catalog No.	Description
UVGoggles	UV Safety Goggles

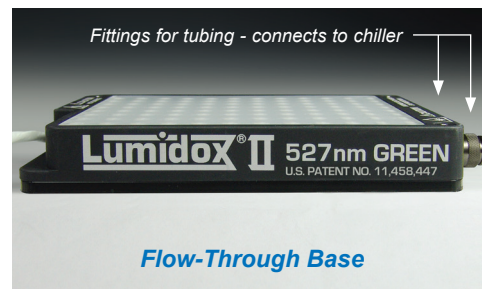
96-Position LED Arrays



96-Position LED Arrays with Lens Mat

Wavelength (nm)	Description	Active Cooling Base Catalog No.	Solid Base* Catalog No.	Flow-Through Base* Catalog No.
UV365	Lumidox II 96-Position LED Array with Lens Mat	LUM296LA365	LUM296LS365	LUM296LF365
UV375	Lumidox II 96-Position LED Array with Lens Mat	LUM296LA375	LUM296LS375	LUM296LF375
UV385	Lumidox II 96-Position LED Array with Lens Mat	LUM296LA385	LUM296LS385	LUM296LF385
UV395	Lumidox II 96-Position LED Array with Lens Mat	LUM296LA395	LUM296LS395	LUM296LF395
UV405	Lumidox II 96-Position LED Array with Lens Mat	LUM296LA405	LUM296LS405	LUM296LF405
420-VIOLET	Lumidox II 96-Position LED Array with Lens Mat	LUM296LA420	LUM296LS420	LUM296LF420
445-INDIGO	Lumidox II 96-Position LED Array with Lens Mat	LUM296LA445	LUM296LS445	LUM296LF445
470-BLUE	Lumidox II 96-Position LED Array with Lens Mat	LUM296LA470	LUM296LS470	LUM296LF470
505-CYAN	Lumidox II 96-Position LED Array with Lens Mat	LUM296LA505	LUM296LS505	LUM296LF505
527-GREEN	Lumidox II 96-Position LED Array with Lens Mat	LUM296LA527	LUM296LS527	LUM296LF527
590-AMBER	Lumidox II 96-Position LED Array with Lens Mat	LUM296LA590	LUM296LS590	LUM296LF590
630-RED	Lumidox II 96-Position LED Array with Lens Mat	LUM296LA630	LUM296LS630	LUM296LF630
660-DEEP RED	Lumidox II 96-Position LED Array with Lens Mat	LUM296LA660	LUM296LS660	LUM296LF660
730-IR	Lumidox II 96-Position LED Array with Lens Mat	LUM296LA730	LUM296LS730	LUM296LF730
WHITE	Lumidox II 96-Position LED Array with Lens Mat	LUM296LAWHT	LUM296LSWHT	LUM296LFWHT

* requires the use of a sufficient chiller/cooling device



96-Position LED Arrays with Diffuse Mat

Wavelength (nm)	Description	Active Cooling Base Catalog No.	Solid Base* Catalog No.	Flow-Through Base* Catalog No.
UV365	Lumidox II 96-Position LED Array with Diffuse Mat	LUM296DA365	LUM296DS365	LUM296DF365
UV375	Lumidox II 96-Position LED Array with Diffuse Mat	LUM296DA375	LUM296DS375	LUM296DF375
UV385	Lumidox II 96-Position LED Array with Diffuse Mat	LUM296DA385	LUM296DS385	LUM296DF385
UV395	Lumidox II 96-Position LED Array with Diffuse Mat	LUM296DA395	LUM296DS395	LUM296DF395
UV405	Lumidox II 96-Position LED Array with Diffuse Mat	LUM296DA405	LUM296DS405	LUM296DF405
420-VIOLET	Lumidox II 96-Position LED Array with Diffuse Mat	LUM296DA420	LUM296DS420	LUM296DF420
445-INDIGO	Lumidox II 96-Position LED Array with Diffuse Mat	LUM296DA445	LUM296DS445	LUM296DF445
470-BLUE	Lumidox II 96-Position LED Array with Diffuse Mat	LUM296DA470	LUM296DS470	LUM296DF470
505-CYAN	Lumidox II 96-Position LED Array with Diffuse Mat	LUM296DA505	LUM296DS505	LUM296DF505
527-GREEN	Lumidox II 96-Position LED Array with Diffuse Mat	LUM296DA527	LUM296DS527	LUM296DF527
590-AMBER	Lumidox II 96-Position LED Array with Diffuse Mat	LUM296DA590	LUM296DS590	LUM296DF590
630-RED	Lumidox II 96-Position LED Array with Diffuse Mat	LUM296DA630	LUM296DS630	LUM296DF630
660-DEEP RED	Lumidox II 96-Position LED Array with Diffuse Mat	LUM296DA660	LUM296DS660	LUM296DF660
730-IR	Lumidox II 96-Position LED Array with Diffuse Mat	LUM296DA730	LUM296DS730	LUM296DF730
WHITE	Lumidox II 96-Position LED Array with Diffuse Mat	LUM296DAWHT	LUM296DSWHT	LUM296DFWHT

* requires the use of a sufficient chiller/cooling device