



EvoluChem™ PhotoRedOx Box Photoreactors

- Multiple vial formats and configurations (from 0.3 to 700mL)
- Temperature controlled (0° to 80° C) with thermostatic fluid
- Independently controlled, interchangeable LED light modules (365 - 525 nm)
- Screen up to 4 wavelengths and/or light intensities simultaneously
- Pre-set your favorite experiments for quick repeatability

The LUCENT360's patent pending design provides the most flexibility for parallel, large batch and flow photochemistry. Reaction vials are immersed in a thermostatic bath controlled by an external heater / chiller unit, enabling temperature-controlled conditions. Light irradiation is provided by custom, interchangeable, light modules that surround the thermally insulated reaction chamber.

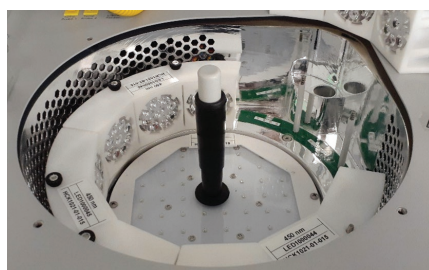
The photoreactor includes an internal water pump and high-performance heat exchanger. Vial holders include standard circulation ports. Connecting the photoreactor to a heater / chiller unit enables accurate temperature-controlled reaction conditions (0° to 80° C) that are insulated from the heat of light modules. A temperature probe (included) can also connect to each of the LUCENT360 vial holders, allowing for precise measurements. Fill and flow rates are controlled by manual valves.

Each of five, independently-controlled, light modules has multiple LEDs that operate at a specific wavelength. Light modules are interchangeable and, when using a divider in the reaction chamber, enable screening of multiple wavelengths or light intensities simultaneously. PFA tubing flow reactors enable scaling of photochemistry reactions by significantly increasing surface area.

Lucent360 Advanced Photoreactors and Photoreactor Packages

Part No.	Description	Price
CG-8005-01	Lucent360 Advanced Photoreactor Only	\$23,000.00 †
CG-8005-11	Photoreactor Starter Package	\$24,848.00 †
CG-8005-13	Photoreactor Intermediate Package	\$28,779.00 †
CG-8005-15	Photoreactor Expert Package	\$38,493.00 †

Reaction vials can be thermostatically controlled (0° to 80° C) via a standard heater / chiller unit.



Five light modules, four side and one bottom, surround the reaction chamber



Double glass walls of the reaction chamber keep reaction vials at the correct temperature.



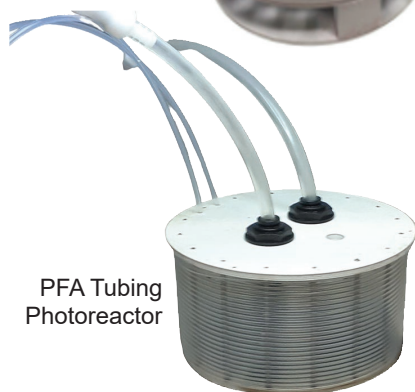
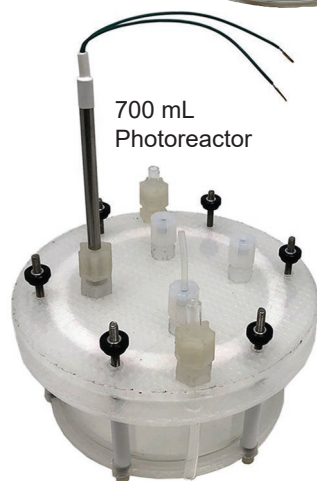
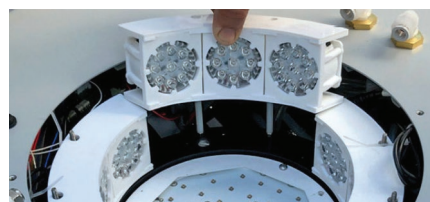
— — Photoreactor Packages — —

Components "X" Indicates Included in Package	Starter CG-8005-11	Intermediate CG-8005-13	Expert CG-8005-15
1 x Lucent 360 Advanced Photoreactor	X	X	X
1 x Holder 0.3 mL Vial	—	—	X
1 x Holder 2 mL Vial	—	—	X
1 x Holder 4 mL Vial	X	X	X
1 x Holder 8 mL Vial	—	—	X
1 x Holder 20 mL Vial	—	X	X
1 x 700 mL Photoreactor	—	—	X
1 x 20 mL Flow Cell	—	—	X
1 x 2 mL Screening Holder	—	—	X
1 x 4 mL Screening Holder	—	X	X
1 x 8 mL Screening Holder	—	—	X
1 x Set of 365nm Light Modules (5 total)	—	X	X
1 x Set of 380nm Light Modules (5 total)	—	—	X
1 x Set of 405nm Light Modules (5 total)	—	—	X
1 x Set of 450nm Light Modules (5 total)	X	X	X

† Reusable Glass/Plastics



Vial Holder

Vial
Screening
HolderPFA Tubing
Photoreactor700 mL
Photoreactor

Interchangeable Light Modules

Vial Holders

Reaction Vials are immersed in a thermostatic bath controlled by an external heater / chiller unit, enabling temperature-controlled conditions.

Part No.	Description	Size (mL)	Price
CG-8005-21	Holder	0.3	\$300.00 †
CG-8005-23	Holder	2	\$300.00 †
CG-8005-25	Holder	4	\$300.00 †
CG-8005-27	Holder	8	\$300.00 †
CG-8005-29	Holder	20	\$300.00 †
CG-8005-41	Screening Holder	2	\$600.00 †
CG-8005-43	Screening Holder	4	\$600.00 †
CG-8005-45	Screening Holder	8	\$600.00 †

Flow Reactor, PFA Tubing

Enables scaling of photochemistry reactions by significantly increasing surface area.

Part No.	Description	Size (mL)	Price
CG-8005-31	Flow Cell	20	\$750.00 †

Photoreactor, 700mL

Part No.	Description	Size (mL)	Price
CG-8005-33	Photoreactor	700	\$2,500.00 †

Interchangeable Light Modules

Part No.	Light Position	Wavelength (nm)	Price
CG-8005-365B	bottom	365	\$831.00 †
CG-8005-380B	bottom	380	\$679.00 †
CG-8005-405B	bottom	405	\$445.00 †
CG-8005-425B	bottom	425	\$445.00 †
CG-8005-450B	bottom	450	\$360.00 †
CG-8005-475B	bottom	475	\$445.00 †
CG-8005-525B	bottom	525	\$360.00 †
CG-8005-365S	side	365	\$550.00 †
CG-8005-380S	side	380	\$468.00 †
CG-8005-405S	side	405	\$342.00 †
CG-8005-425S	side	425	\$345.00 †
CG-8005-450S	side	450	\$297.00 †
CG-8005-475S	side	475	\$345.00 †
CG-8005-525S	side	525	\$297.00 †

† Reusable Glass/Plastics

EvoluChem™ PhotoRedOx Box Photoreactors

- designed to facilitate photochemical experimentation
- compatible with most vial formats - 0.3, 2, 4 and 20 mL
- compact size allows use with any stirring plate

Advances in photochemistry continue to arrive on a regular basis, enabling new and efficient pathways to key chemical synthesis reactions and techniques, including multiple C-C cross-coupling options, C-N cross-coupling, and otherwise difficult C-O cross-coupling. The EvoluChem™ PhotoRedOx Box device (US Patent #10,906,022) is designed to facilitate photochemical experimentation. This device is compatible with most vial formats (0.3 ml, 2 ml, 4 ml and 20 ml vials) and its compact design allows for use with any stirring plate. A built-in fan keeps the reaction conditions at room temperature.

To order, select the **PhotoRedOx Box** of your choice, then select the desired wavelength LEDs along with the vial holders or flow reactors.

The **PhotoRedOx Duo** uses the same patented concept as the original photoreactor but doubles the capacity and includes an additional reaction chamber. The Duo can hold double the capacity of the single box.

Based on the same design as the **PhotoRedOx Box**, the **TC version** with a standard chiller/heater unit (not included) makes it possible to perform photocatalytic reactions with temperatures controlled from 0° - 80°C.

PhotoRedOx Box Photoreactors and Starter Bundle

Part No.	Description	Price
CG-8003-01	PhotoRedOx Box	\$750.00 †
CG-8003-03	PhotoRedOx Duo	\$1,800.00 †
CG-8003-05	PhotoRedOx TC	\$2,200.00 †
CG-8003-11	PhotoRedOx Starter Bundle	\$1,995.00 †

Light Proofing Upgrades for PhotoRedOx Boxes

Part No.	Description	Price
CG-8003-45	Upgrade for PhotoRedOx Box and PhotoRedOx TC	\$326.25 †
CG-8003-47	Upgrade for PhotoRedOx Box Duo	\$442.97 †

See the Amber Hood Screen & Glasses on the back page ►

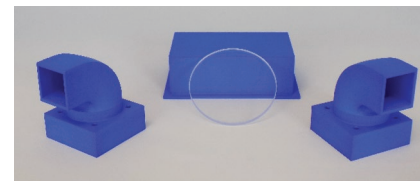
PhotoRedOx Box



PhotoRedOx Duo



PhotoRedOx TC



Light Proofing Upgrades

Choose The Starter Bundle For a Quick Startup - Part No. CG-8003-11

Includes everything needed in one convenient kit:

PhotoRedOx Box	1 ea.
EvoluChem™ 365PF & 450PF LEDs	1 ea.
4mL and 8mL Vial Holders	1 ea.
Sample Reactions	4 ea.
Safety Glasses	1 ea.

Also available for safety, *Light-Proofing Kits for the PhotoRedOx Boxes as well as Amber Hood Screens.*





Vial Holder
CG-8003-series



LED Spotlights
CG-8003-series

**Additional Spotlights
listed on our website:**

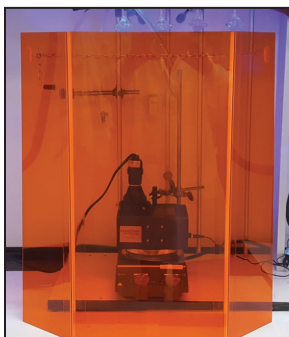
www.cglifesciences.com



Flow Reactor
CG-8003-31



Blue Light
Blocking
Glasses
CG-8003-41



Amber
Hood
Screen
CG-8003-43

Vial Holders for EvoluChem PhotoRedOx Box Photoreactors

Designed to facilitate photochemical experimentation. This device is compatible with most vial formats (0.3 ml, 2 ml, 4 ml and 20 ml vials) and its compact design allows for use with any stirring plate. (US Patent #10,906,022)

Photochemistry Vial Holders for PhotoRedOx Boxes

Part No.	Vial Size (mL)	No. of Vials	Price
CG-8003-21	0.3	32	\$240.00 †
CG-8003-23	2	8	\$70.00 †
CG-8003-25	4	8	\$70.00 †
CG-8003-27	8	8	\$70.00 †
CG-8003-29	20	2	\$70.00 †

PhotoRedOx Box LED Spotlights, EvoluChem™, Photoreactors

The EvoluChem™ LED spotlights are designed specifically for photo-catalytic chemistry applications. They fit the PhotoRedOx Box and designed to irradiate all samples with maximum efficiency. The LED chips are selected for specific wavelengths. Beam angles are 25 degrees for all LEDs listed.

EvoluChem Interchangeable LEDs (See additional Spotlights on our website.)

Part No.	Name	Watts x Wavelength	Volts AC	Price
CG-8003-365	365PF	18W x 365 nm	100-240	\$270.00 †
CG-8003-365X	365DX	30W x 365 nm (dimmable)	110 or 220	\$528.00 †
CG-8003-380	380PF	18W x 380 nm	100-240	\$240.00 †
CG-8003-405	405PF	18W x 405 nm	100-240	\$180.00 †
CG-8003-425	425PF	18W x 425 nm	100-240	\$180.00 †
CG-8003-450	450PF	18W x 450 nm	100-240	\$180.00 †
CG-8003-450X	450DX	30W x 450 nm (dimmable)	110 or 220	\$396.00 †
CG-8003-475	475PF	18W x 475 nm	100-240	\$180.00 †
CG-8003-525	525PF	18W x 525 nm	100-240	\$180.00 †
CG-8003-6200	6200PF	18W x 6200K (cold white)	100-240	\$180.00 †
CG-8003-650	650PF	18W x 650 nm	100-240	\$190.00 †
CG-8003-740	740PF	18W x 740 nm	100-240	\$190.00 †

Flow Reactor for PhotoRedOx Box

Part No.	Description	Price
CG-8003-31	With 1/16" Tubing	\$529.30 †

Blue Light Blocking Glasses and Hood Screen

Part No.	Description	Price
CG-8003-41	Glasses with SCT-Orange Lens (S1933X), Uvex Skyper	\$21.25 †
CG-8003-43	Hood Screen, Amber, 2 x 3 Ft	\$439.32 †



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† Reusable Glass/Plastics
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