

# Which Photoreactor is Right for You?



**EvoluChem™  
PhotoRedOx Box**  
HCK1006-01-016

## Screen easily with standardized format

Our original photoreactor's patented design is compatible with most vial formats (0.3 ml, 2 ml, 4 ml, 8 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

**The choice for...**  
the chemist who seeks to standardize laboratory photochemical setups economically. A flexible design allows interchangeable LED from 365 to 740 nm and a wide variety of vials



**EvoluChem™  
PhotoRedOx Duo**  
HCK1006-01-023

## Screen with double the workflow

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

**The choice for...**  
the chemist who seeks higher reaction capacity and increased light intensity than found in the PhotoRedOx box



**EvoluChem™  
PhotoRedOx TC**  
HCK1006-01-025

## Screen with Temperature Control

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 at controlled temperatures at 0 °C to 80 °C

**The choice for...**  
the chemist who wants control over the temperature of their reaction while keeping the flexibility and control of the PhotoRedOx Box



**Lucent360™**  
HCK1021-01-001

## Screen, batch, and flow

The next generation in photoreactors. The first reactor to allow screen to scale, batch and flow in one device with unparalleled control over wavelength, light intensity and temperature control

**The choice for...**  
the chemist serious about understanding all the factors necessary to take reaction from screen to scale in batch and flow. The most advanced photoreactor available anywhere



# Compare the Details:



**PhotoRedOx Box**  
HCK1006-01-016



**PhotoRedOx Duo**  
HCK1006-01-023



**PhotoRedOx TC**  
HCK1006-01-025



**Lucent360™**  
HCK1021-01-001

<b>Vial size</b>	0.3 ml to 20 ml	0.3 ml to 20 ml	0.3 ml to 20 ml	0.3 ml to 700 ml
<b>Samples/reaction</b>	32 max	64 max	32 max	48 max
<b>Flow</b>	2 ml Flow cell available	2 ml Flow cell available	2 ml Flow cell available	20 ml Flow cell available
<b>Suggested light source</b>	1x - EvoluChem™ LEDs SX or DX Format	2x - EvoluChem™ LEDs SX or DX Format	1x - EvoluChem™ LEDs SX or DX FormaC	4 Lucent360™ side light, 1 Lucent bottom module
<b>Compatible LEDs</b>	Compatible w most PAR20 (2.5 in diameter style LED) sources	Compatible w most PAR20 (2.5 in diameter style LED) sources	Compatible w most PAR20 (2.5 in diameter style LED) sources	Lucent360™ side and bottom LED modules
<b>Wavelengths available</b>	multiple options from 365 to 740 nm	multiple options from 365 to 740 nm	multiple options from 365 to 740 nm	365 nm, 380 nm, 425 nm, 405 nm, 450 nm, 530 nm
<b>Light intensity</b>	based on the attached LED source	based on the attached LED source	based on the attached LED source	controlled by instrument
<b>Dimmable</b>	based on the attached LED source	based on the attached LED source	based on the attached LED source	Yes
<b>Temperature Control</b>	Built in fans hold internal reactor temperature ~30 °C depending on light source	Built in fans hold internal reactor temperature ~30 °C depending on light source	External heater/chiller allows operation being 0 °C to 80 °C	External heater/chiller allows operation being 0 °C to 80 °C
<b>Chiller fittings</b>	N.A.	N.A.	3/8 inch ID tubing	3/8 inch OD tubing
<b>Suggested chiller</b>	N.A.	N.A.	Julabo Corio 200F	Julabo Corio 200F
<b>Stirring</b>	external stir plate required	external stir plate required	external stir plate required	built-in stir plate
<b>Dimensions L x H x D</b>	6.5" X 4.875" X 4.875"	10.75" X 4.875" X 7"	6.875" X 4.75" X 7.75"	21.7" X 15.5" X 20.5"
<b>Power requirements</b>	110V AC/ 12V DC (US/UK) or 220V AC/ 12V DC (EU)	110V AC/ 12V DC (US/UK) or 220V AC/ 12V DC (EU)	N.A.	120 V or 240 V
<b>Relative Price</b>	\$	\$\$	\$\$\$	\$\$\$\$
<b>Operating requirements</b>	external stir plate, light source, chemical fume hood (if applicable), protective eyewear, safety shield	external stir plate, light source, chemical fume hood (if applicable), protective eyewear, safety shield	chiller/heater unit, external stir plate, light source, chemical fume hood (if applicable), protective eyewear, safety shield	chiller/heater unit, chemical fume hood (if applicable)
<b>Related accessories</b>	Lights Holders Flow Cell Light proofing Upgrade EvoluChem™ kits Safety Accessories	Lights Holders Flow Cell Light proofing Upgrade EvoluChem™ kits Safety Accessories	Lights Holders Flow Cell EvoluChem™ kits Safety Accessories	Multi-light screener 700 ml Reactor 20 ml Flow cell
<b>Notes</b>	US Patent #10,906,022	US Patent #10,906,022	US Patent #10,906,022	Patent pending