

Screen, batch, and flow

The EvoluChem Lucent360™ Advanced Photoreactor is the photoreactor choice for chemists serious about understanding all the factors necessary to take reaction from screen to scale in batch and flow.



The most advanced photoreactor available anywhere. The Lucent360's patented design provides the most flexibility for parallel, batch and flow photochemistry with light intensity and temperature control in one device. Temperature control enabled by an external heater/ chiller unit. Light irradiation by custom, interchangeable light modules that surround the reaction chamber. The reaction chamber itself is comprised of 2 glass walls (Dewar) that thermally insulate light sources from the reaction vials.

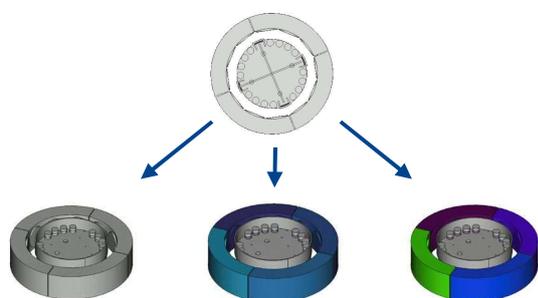
Features

- Multiple vial formats and configurations (from 0.3 ml to 700 ml)
- 20 ml or 50 ml flow cell available
- Temperature controlled (0° to 80° C) with thermostatic fluid
- Interchangeable LED light modules (254 nm through 808 nm)
- Heavy duty magnetic stirring
- Pre-set your favorite experiments for quick repeatability
- Time course experiments: parallel or in sequence

Benefits

- Unparalleled control of light wavelengths and intensities
- Investigate quantum yield with light irradiance screening
- Multiple reactor vessels enable parallel, batch, flow reaction, and light and wavelength screening

Screening capability



Reaction time

Intensity

Wavelength

| Specifications | HCK1021-01-001 |
|------------------------|--------------------------------------------------------------------------------------|
| Vial size | 0.3 ml to 700 ml |
| Samples/reaction | 48 max |
| Flow | 20 ml & 50 ml Flow Cells available |
| Suggested light source | 4x - Lucent360™ side lights 1x - Lucent bottom module |
| Compatible LEDs | Lucent360™ side and bottom LED modules |
| Wavelengths available | multiple options from 254nm to 808 nm |
| Light intensity | controlled by instrument |
| Dimmable | Yes |
| Temperature Control | External heater/chiller allows operating temperature between 0 °C to 80 °C |
| Chiller fittings | 3/8 inch OD tubing |
| Suggested chiller | Julabo Corio 200F or equivalent |
| Stirring | built-in magnetic stirring |
| Dimension | 21.7" X 15.5" X 20.5 " |
| Power requirements | 110 V or 220 V |
| Operating requirements | chiller/heater unit, chemical fume hood (if applicable) |
| Related accessories | Multi-light screener holders 700 ml Reactor 20 ml Flow cell 50 ml Flow cell |

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