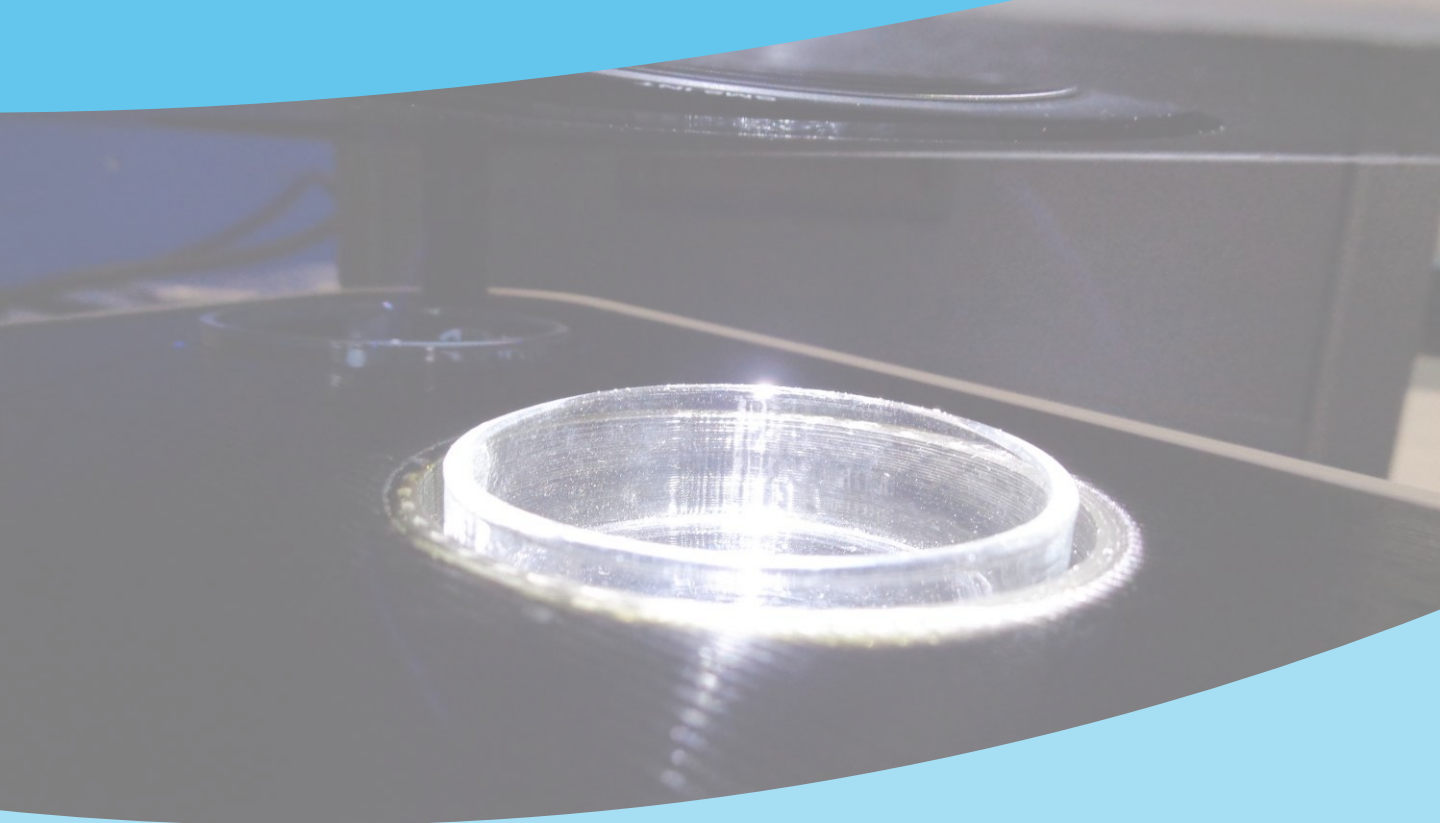


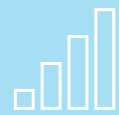
Collimated beam



Collimated beam



LED technology



Adjustable
radiation intensity

The equipment

Apria Systems has designed a series of flexible collimated beam photoreactors with **LED technology**. We offer a wide range of **tabletop** models to adapt the equipment to the needs of our clients.

Each photoreactor has **3 sources of light** with independent control and different wavelength. Thus, allowing the user to perform up to 3 experiments simultaneously.

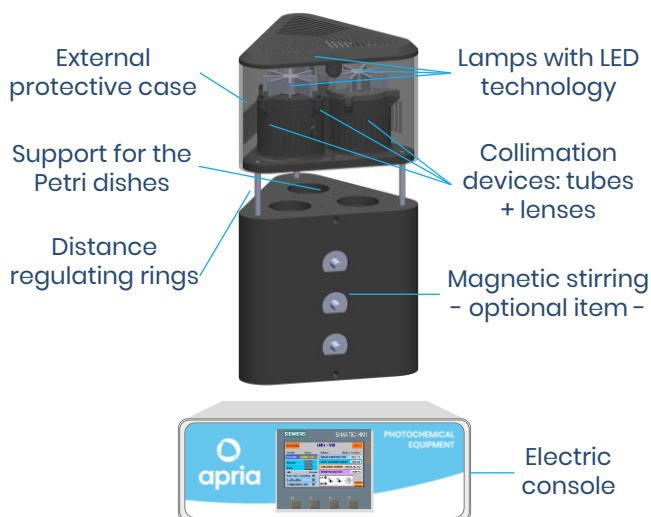
The **radiation intensity** of each lamp – that provide an extremely uniform irradiation in a Petri Dish with a diameter up to 5 cm – **can be regulated**, offering an adjustment to the needs of the treatment.

It emits light with **Petri Dish Factor above 0.9** providing a homogeneous intensity to the illuminated sample.

The distance from the lamps to the reaction system can be modified.



Elements of the system



Operation

1. Adjust the distance from the collimated device to the Petri dishes
2. Place the Petri dishes in their corresponding well
3. Turn-on the electric console
4. Select the working type of light, adjust its radiation intensity, and switch-on the lamp
5. Perform the photochemical treatment

We offer a wide range of alternatives to adjust our equipment to your needs

Reactor characteristics

Operation mode	Batch
Configuration	Triple wavelength –quadruple wavelength available under request-
Volume (mL)	30 – 100 (with each lamp)
Irradiated area	3 Petri dishes with diameters up to 5 cm each
Number of LEDs	3 –4 under request-
Adjustable radiation intensity	Yes, through an electric console with PLC
Adjustable distance	Yes, through rings: 0 – 3.5 cm
Optional items	Magnetic stirring / Portable radiometer

Source of light

Type of light	Wavelength (nm)	Peak (nm)	Radiant flux / LED
UV-C	263 – 268	265	100 mW
	268 – 280	275	
UV-B	295 – 305	300	32 mW
UV-A	365 – 370	365	1,200 mW
Violet	400 – 410	405	1,260 mW
White	400 – 700	450	315 lm
Blue	453 – 460	457	1,350 mW
Green	520 – 530	523	450 mW
Red	618 – 630	623	935 mW
IR	835 – 875	850	930 mW

