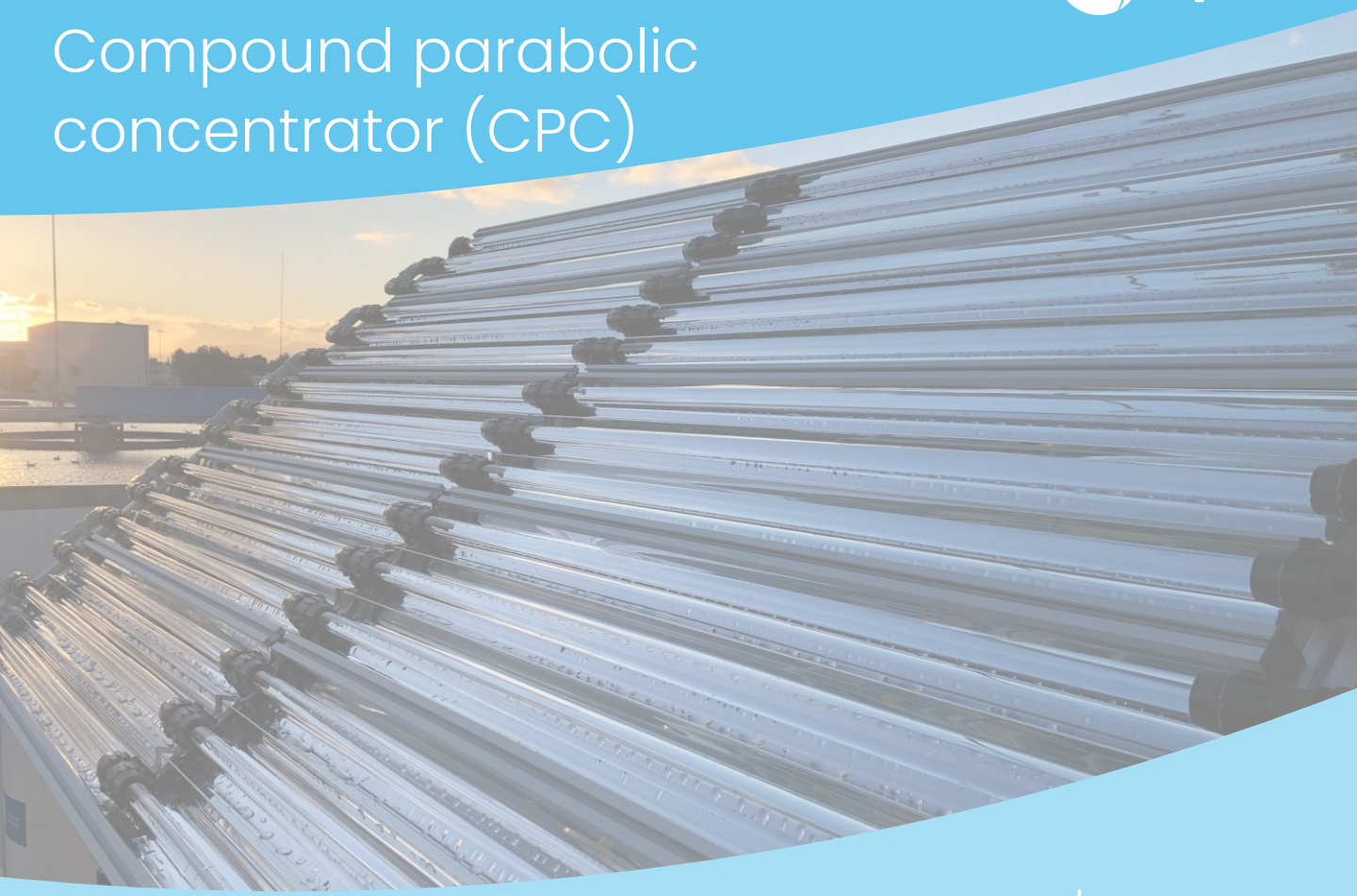
PHOTOREACTORS
Compound parabolic concentrator (CPC)



Solar

Selectable irradiation area and volume

Complementary LED technology

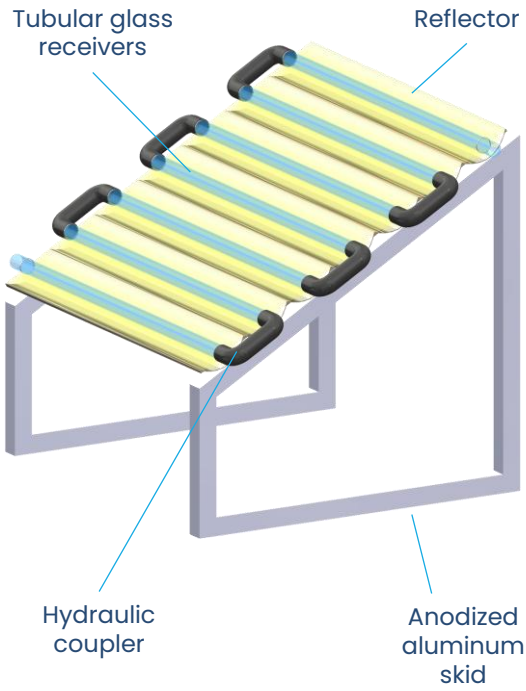
The equipment

Apria Systems has designed a series of flexible Compound Parabolic Concentrator (CPC) photoreactors. We offer a wide range of **tailor-made** models to adapt the equipment to the needs of our clients.

The **irradiated surface and volume can be customized**, offering an adjustment to the needs of the treatment.

It is remarkable that our CPC photoreactors can be combined with a **complementary light source with LED technology**, mainly with annular photoreactors –detailed information available in our annular LED photoreactors datasheet–. In this case, the equipment would also include a radiometer to acquire solar irradiance data continuously, allowing the optimal selection of the photoreactor to be used in the treatment –CPC or LED–.

Elements of the system



Operation

A. SOLAR MODE

1. Pump the fluid to be treated to the CPC photoreactor
2. Perform the photochemical treatment

B. COMPLEMENTARY MODE: LED TECHNOLOGY

1. Pump the fluid to be treated to the LED photoreactor
2. Turn-on the electronic console that is connected to the LED photoreactor
3. Select the working type of light, adjust its radiation intensity, and switch-on the lamp
4. Perform the photochemical treatment

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

Reactor characteristics

Operation mode	Continuous / recirculation
Radiation type	Solar
Irradiated volume (L)	4 – 125
Irradiated area (m^2)	0.5 – 15
Number of tubes	According to the irradiation area
Inclination (°)	According to local latitude of the client's facilities
Optional items	Automatization / feeding tank / LED photoreactors / online measurements (O_2, pH, etc.) / pumping / radiometer / system for the recovery of the photocatalyst / temperature control

For more information consult us: comercial@apriasystems.es