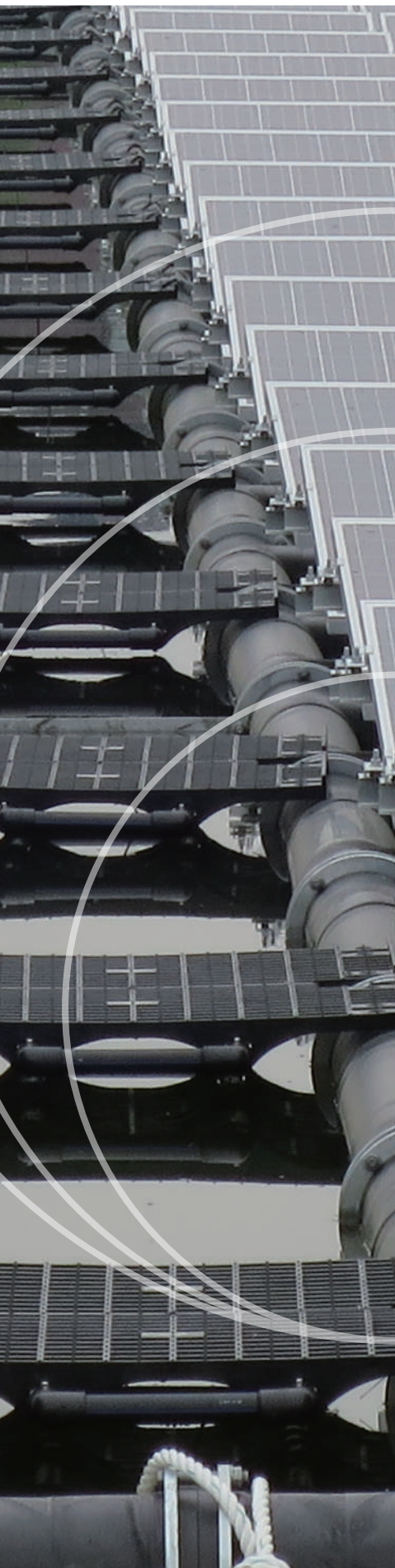




太 陽 能 浮 力 系 統

SOLAR FLOATING SYSTEM





About Us 關於旭東

旭東環保科技成立於1995年，為亞洲太陽能浮力系統設計製造領導品牌。憑藉25年以上的海上箱網及HDPE管材製造經驗，開發出的獨特繫泊系統，奠定了旭東在能源產業中的優良品質基礎。

自2010年開發浮台以來，旭東系統經歷多次颱風考驗仍安全穩固，贏得全球水上光電客戶及保險公司信賴。作為亞洲唯一受邀與國際權威海事能源認證公司DNV一同制定全球浮動型太陽能建議規範的浮台製造商，旭東致力於減緩產業風險並引領發展。

2024年旭東將攜手多家台灣龍頭企業，於台灣西側海域建置離岸海上太陽能示範場，浮台設計挑戰7-14米浪高，展現旭東在極端環境下的技術實力。未來更規劃結合多種再生能源及生態圈，朝著創造海上複合式能源公園的願景邁進。

Since 1995, Sun Rise E&T Corporation has been leading the Asian solar industry with innovative floating system designs. Spanning over 25 years of expertise in offshore fish cage and HDPE pipe manufacturing, our pioneering mooring system has established a foundation of excellence in the energy sector.

Our floating platforms, developed since 2010, have withstood numerous typhoons, earning trust from global floating solar clients and insurers alike. As the only Asian manufacturer invited by DNV to contribute to the global floating solar guidelines, Sun Rise continues to minimize industry risks and drive innovation.

In 2024, we're embarking on an exciting venture with Taiwan's industrial leaders to construct an offshore floating solar demonstration site. Our cutting-edge platforms, designed to brave 7-14 meter waves, showcase Sun Rise's mastery in extreme environments. In the future, we envision creating offshore multi-purpose energy parks, integrating diverse renewable energies and ecosystems.

FLOATER FEATURE 浮台特色

"20多年來的海上浮力系統經驗，創造出色的綠能浮台"

With more than 20 years of experience on the sea, we provide the most reliable floater.

抗風浪 Wave-Resistance



浮台設計可抗強烈颱風
Typhoon Resistance Structure

浮台底座設計內含破浪及消浪功能
Wave breaking design on floater structure

最安全 The Safest System

SAFE

繫泊系統維持無失效紀錄 (1999年至今)
No failure record in mooring system (since 1999)

獨特連岸電纜管線橋，走道凸點防滑設計
Unique cable bridge & anti-slip walkway pellets

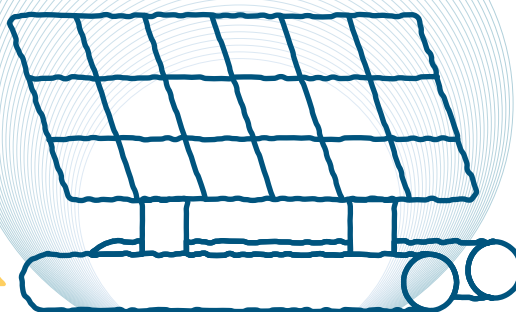
超靈活 Highly Customized



面板傾角靈活配置，0-90° 無限制精準選擇
Flexible panel tilt: 0-90° precision setting

浮台尺寸及走道寬度，可依需求彈性客製
Free choices of modules with customizable floaters.

旭東水上浮台6大特色 Sun Rise Floater's 6 Features



高電量 Higher Electrical Output



較市場他牌系統多3%發電量
3% more power output compared to other brands

雙面太陽能板可選用專利反射板，實測增加7%發電量

Patented reflector board can increase 7% power output for bifacial module

阻火災 Fire Risk Reduction



防火管包覆電纜線，搭配防火間隔設計，降低火災風險及延燒

Fireproof cable protection pipe with interval waterway to reduce the risk of fire and chances of spreading.

不破裂 Crackproof



高度可撓管，底座抗拉耐撞不破裂
High impact resistance structural design

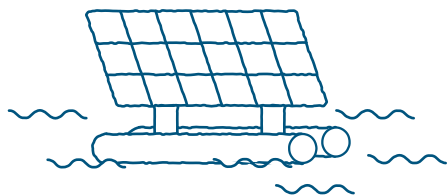
支架材質選用預防面板隱裂之鋼材
Selected material preventing panel microcrack

FLOATER TYPES 浮台型式

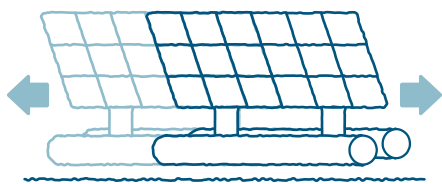
旭東提供高度客製化載台，依客戶需求及案場地理條件，提供最佳設計建議。

客戶可自由選擇任意太陽能模組款式，並依需求調整面板角度、方向、高度、浮台長度及間隙。

Sun Rise's floating systems are highly customizable. Based on site conditions and client requests, we provide the best design solution recommendation. Clients can freely choose any PV module, and decide the panel angle, direction, height, as well as floater gaps and sizes.



水上型
Floating System



陸上型
Onshore System

水陸兩棲設計 Amphibian Design

獨特高透氣、低接觸的管型載台底座。

Low material contact designed base structure.

水位變化時，載台易脫離地面，避免黏著、拉扯或擠壓。

Easily detach from the ground as water levels change, avoiding adhesion, pulling, or compression.

乾溼季水位變化大、易乾涸水域，或部分著陸之案場皆可使用。

Suitable for areas with significant seasonal water level changes, prone to drying, or partial ground contact.

可移動式陸上設計 Transportable Design

管型底座不需打樁、不破壞環境

No piling needed base structure. Zero impact on the environment

可重複使用、案場轉移時無事業廢棄物、可於新案場快速架設。

Reusable, no industrial waste when transferring between sites, swift installation.

礦場、石材場等地形不易打樁之場域皆適用。

Suitable at terrains where piling is challenging, such as mines and quarries.



REFLECTOR BOARD 反射板

2022年旭東獨步全球，推出全球第一組浮台適用之雙面太陽能模組反射板。100%無遮擋之結構設計使得模組背面可獲得全面性採光。

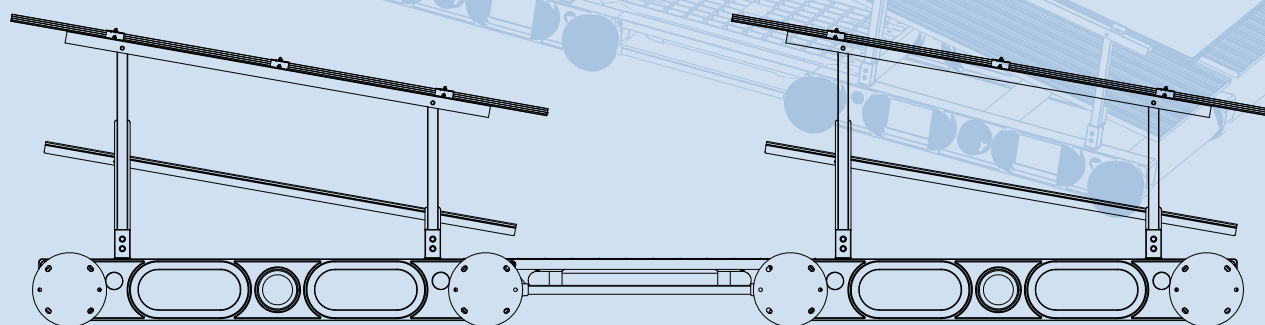
旭東與國際知名測試、檢驗和認證公司 Kiwa NV合作實測，架設旭東反射板系統後可增加約7%發電量。

反射板材質採用最新研發之無塗層高抗鹽蝕鋼材，可安心使用於海面、濕地、鹽灘地等高鹽分含量水域。

In 2022 Sun Rise E&T launched the world's first reflector board system for bifacial module floaters. With the zero blocking structure design, the back side of bi-facial modules can be fully exposed to sunlight.

Through collaboration with Kiwa NV, an internationally renowned testing, inspection, and certification company, we have empirically demonstrated that implementing the Sun Rise reflector board can increase power generation by approximately 7%.

The reflector board is constructed using cutting-edge, uncoated high salt-corrosion resistant steel. This advanced material allows for confident deployment in high-salinity environments such as sea surfaces, wetlands, and salt flats.





旭東擁有超過20年，零失敗繫泊紀錄的好口碑。在每一個案場皆以最高安全係數進行設計，確保客戶投注之心血，在每一次不可測的極端氣候考驗下都能穩固度過。

Sun Rise maintain its perfect anchoring record since 1999 by providing the highest safety factor on each project. We make sure clients' investments survive under the unpredictable extreme climate.

四重防護，最貼近案場實況的多重保護設計 Quadruple Protection

浮台結構- 結構技師簽證 Floater Structure- Engineer Certified

抗17級風 (湖庫型-10分鐘平均風速47.5m/s; 海上型-5分鐘平均風速62.5m/s)

Beaufort scale 17 (In land: 10 mins avg. wind speed 47.5m/sec; Offshore: 5 mins avg. wind speed 62.5m/sec)

浮台陣列- 經風洞測試 Floater Array- Passed Wind Tunnel Test

20組浮台串並檢測，確保強風下浮台不互相影響及擠壓

Tested with an array of twenty floaters to make sure no collision between floaters.

錨定重量- 電腦流體力學計算 Anchoring Weight - Calculated with Computational Fluid Dynamics

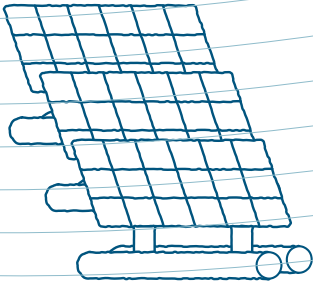
導入案場風速、面板角度等數據，精準計算所需錨定

Input geographic data with floater design, to calculate the precise weight needed in each direction.

實地校正- 浮台排佈模擬 Field Adjustment- Floater Onsite Simulation

整併浮台設計及電腦計算，模擬於案場空照圖中，依周圍地理環境補強隱性弱區

Simulate floater and anchoring design onto site aerial photography, to eliminate possible weakness.



全球水域皆有實地錨定經驗 On-Site Anchoring Record

宏都拉斯深120m水庫繫泊經驗 120m Depth Mooring Experience in Honduras

北海7.5米浪高海浪衝擊 Ride Out 7.5 Meters High Wave Impact

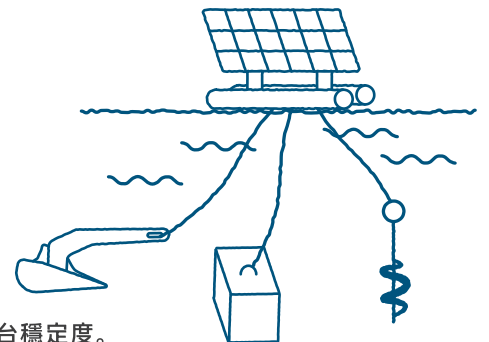
實際施作 Construction Features

旭東之案場，皆建議採用水底錨。相較於案錨，水底錨能提供較高抗拉拔力及浮台穩定度。

Sun Rise always recommends submerged mooring as it provides better floater stability and pullout resistance.

旭東使用自行開發之打錨船及拉拔船，案場施作時，不須抽乾或水下作業。

No pumping required, Sun Rise is equipped with our own developed mooring and pullout resistance test boat.





PROJECTS 案例

累積施作案場：400+百萬瓦

Constructed projects : 400+MW

寮國 LAOS / 14.1 MW

泰國 THAILAND / 5.6 MW

台灣 TAIWAN / 超過 30 個案場 Over 30 projects

洽談中案場：12+億瓦

Projects in the pipeline : 1.2+GW



The image features a background of a sunset over a large body of water, with a grid of thin, light-colored lines overlaid. The top portion of the image is dominated by a dense pattern of thin, parallel lines in shades of blue and green, which transition into a grid pattern over the sunset scene. The text is positioned in the upper left quadrant of the sunset area.

旭東環保科技股份有限公司
SUN RISE E&T CORPORATION

90093屏東市大洲里環東街2號(屏東加工出口區)

No. 2, Huandong St., Pingtung City, Pingtung County 900, Taiwan (R.O.C.)

(Ping-Tung Economic Processing Zone)

Tel: +886-8-7530968

Fax: +886-8-7535986

E-mail: sunrise@srise.com.tw