

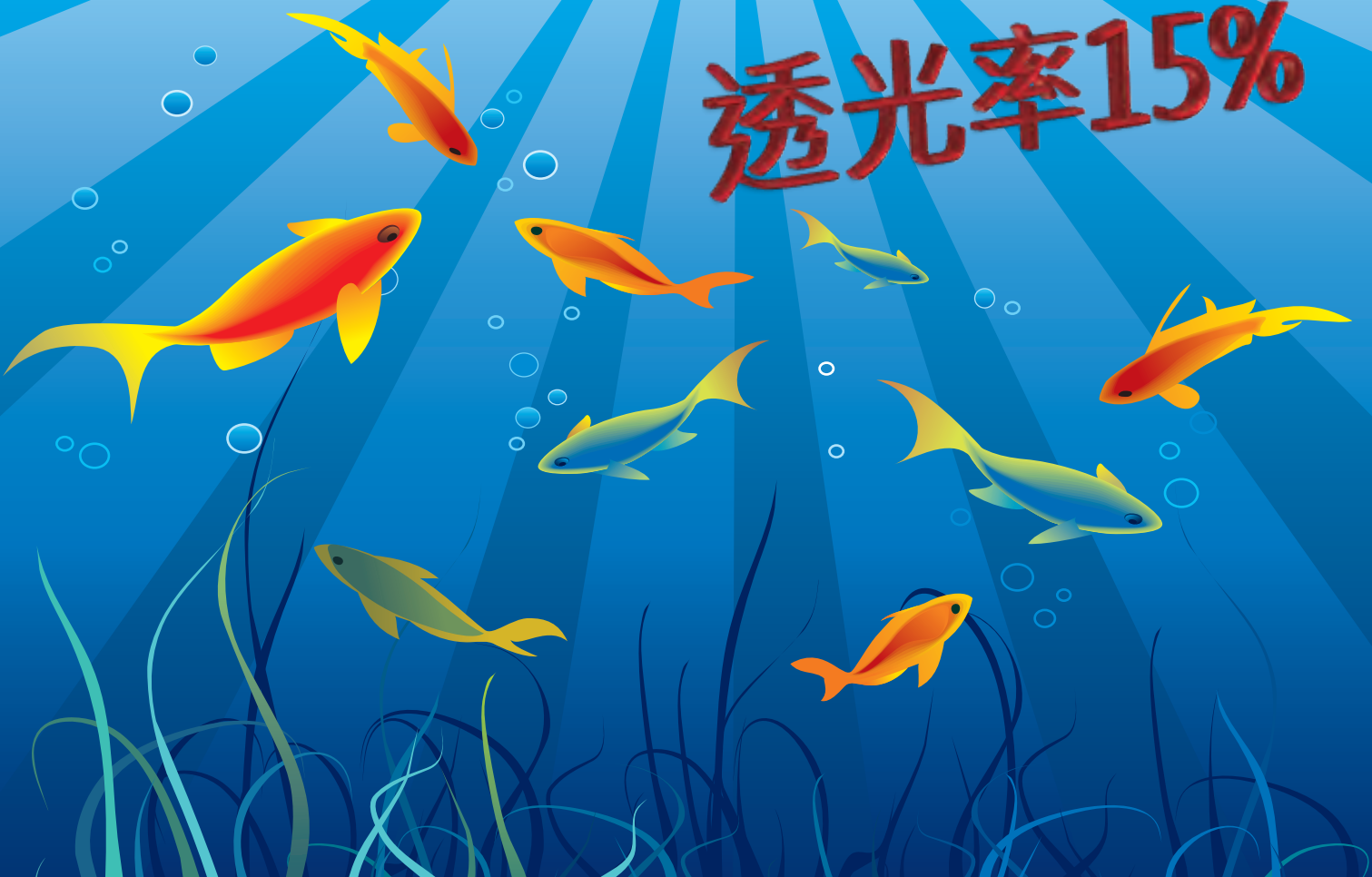
Floating PV

Stainless steel mounting system

不鏽鋼水面太陽能漂浮支架



透光率15%



產品特點

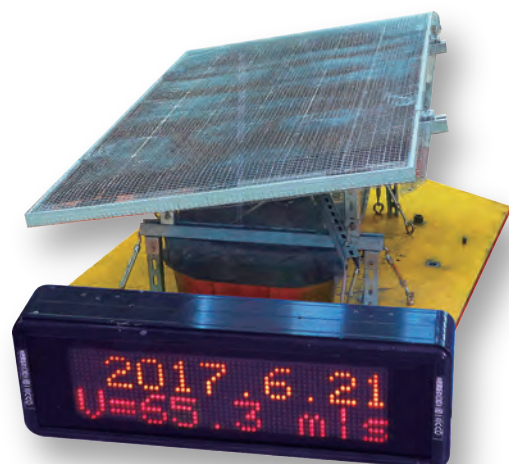
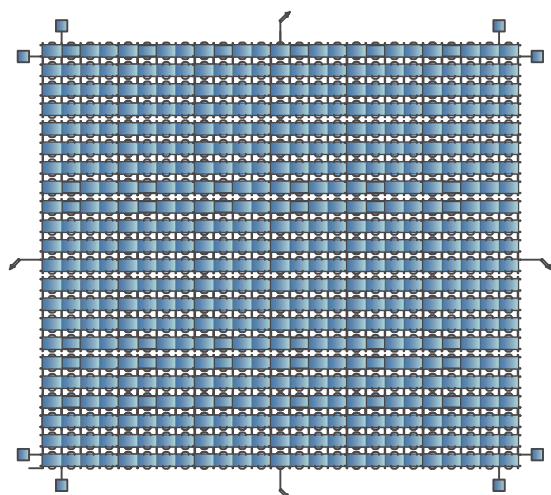
Features

不鏽鋼浮筒水面漂浮太陽能電站支架系統是由本公司首創研發的一款水面漂浮式太陽能電站的載體。徹底解決了現有吹塑料浮筒抗紫外線差、易老化、加工週期長、使用壽命短、後期大量的塑料垃圾無法處理、汙染水質等問題。並且大幅度降低了水上漂浮式太陽能電站浮體的周期成本。

不鏽鋼水面漂浮式支架技術參數

Technical Parameters of Stainless Steel floPV® Mounting system

浮體浮力 Buoyancy of pontoon	每個浮桶工作浮力40kg 最大浮力 181 kg 40kg working, 181 kg max.
發電增效 Increased power output	比地面或屋頂電站提高6-12%以上的發電量 Higher than ground or rooftop 6-12% or more
組件規格 Specifications of components	1650*992mm-1950*992mm · 鋁合金邊框 · 雙玻璃電池組件 1650*992mm-1950*992mm, aluminum alloy frame, and double-glass solar module assembly
陳列形式 Array	橫向佈置/豎向佈置 · 每個陳列 4 Kw - 1 Mw Horizontal or Vertical, 4 Kw - 1 Mw per array
組件角度 Angle of assembly	5°- 45° 5°- 45°
浮體材質 Material of floating unit	316~304 不鏽鋼 Stainless steel 316-304
扣合形式 Snap fit	不鏽鋼浮體蝕水面無焊縫 · 耐腐蝕 · 防滲漏 Free of weld at the contact of the stainless steel pontoon with water, corrosion-resistant and seepage-proof
浮體年限 Pontoon life	使用壽命25年 25 years service life
抗風等級 Wind-resistant rating	最大抗風等級17級, 更高 65 m/s 已達風機極限 Up to 17 wind beaufort scade, more 65m/s (testing rig limitation)



產品特點

Features



- ✓ 系統20年免更換，節省周期更換成本。
- ✓ 模組間間距透光率15%，提供覆蓋面積下各種水生生物的需光性。
- ✓ 可上環保漆增加反射光，依模組特性輸出功率增加15%~20%。
- ✓ 支架高度可1米以上增加反射增產電能輸出，加速回收。
- ✓ 採用食品級304或316不銹鋼，保護水質。
- ✓ 生產速度快、交貨周期短、回收價值高
- ✓ 方便安裝組串式變流器、匯流箱、電纜橋架，更便於電池組件的橫豎分佈位置
- ✓ 浮體具備外型美觀、強度高、耐高溫、耐腐蝕、無焊縫、水質無汙染、支架系統穩定性好、不易風捲起等特點
- ✓ 使用壽命安全、抗風穩定，不鏽鋼浮筒和不鏽鋼走道具有極強的反光功能增加6-12%的發電量



floPV® TAIWAN
CHIAYI

水面太陽能漂浮式電站塑料浮筒和不鏽鋼浮筒優劣勢對比表

Comparison of advantages and disadvantages

名稱 Name	塑料浮筒 (高密度聚乙烯) Plastic floating unit (high-density polythylene)	不鏽鋼浮筒 (不鏽鋼) Stainless steel floating unit (stainless steel)
使用年限 Service life	塑料製品壽命4-12年 (沒有使用25年的紀錄) The service life of plastic products is 4-12 years (no record of 25years service life)	不鏽鋼壽命25年以上 The service life of stainless steel products is 25years or longer.
保固期 Warranty period	5年 5 years	25年 25 years
周期成本 Life-cycle cost	可能更換次和2次以上成本 Maybe replaced once or twice	25年不用更換 without replacement in 25 years
產能 Yield	塑料浮筒採用吹塑法·產能有限·交貨周期長品牌雜亂無法滿足電站需求 Plastic pontoons are produced through a blow-molding process. The production is limited. The delivery cycle is longer, and there are numerous small brands. Hence, plastic potoons can't meet the requirements of power stations.	不鏽鋼浮筒生產工藝簡單·出貨快速·周期短可滿足電站需求 Stainless steel pontoons produced through a simple process. They can be delivered quickly in a short cycle, and can meet the requirements of power stations.
回收價值 Recycling value	吹塑產品因老化再生價值比例較小 Blow-molded products have little recycling value owing to aging.	不鏽鋼浮筒回收率100%·期滿後回收價值等於或高於購買價格·買賣雙方可簽定產品回收協議 The recycling rate of stainless steel pontoons is 100%. The recycling value is equal to or even higher than the price when the stainless steel pontoons were purchased. A product recycling agreement can be reached between the two parties.
環境 Environment	易老化、無法回收、產生大量工業垃圾·環境二次汙染與優氧化 Plastic floating system are aged easily and unrecyclable, ultimately become industrial wastes, which may cause secondary pollution to the environment and are a heavy burden on the local environment as well as eutrophication.	不易老化、可回收、不對水質造成汙染、不產生工業垃圾與優氧化 Stainless steel floating unit are free of aging, recyclable, and will not cause pollution to the water quality, become industrial wastes or eutrophication.
功能 Functions	塑料浮桶不便安裝組串式變流器、匯流箱、電纜橋架 (須另加浮筒或引向陸地安裝) It is inconvenient to use plastic pontoons to mount string inverters, combiner boxes, and cable trays.	不鏽鋼浮筒支架方便安裝組串式變流器、匯流箱、電纜橋架和電池組件的橫豎分佈方式 Stainless steel floating structure can be used to mount string inverters, combiner boxes, cable trays, and solar module assemblies in a horizontal or vertical layout.
穩定性 Stability	吹塑浮筒方塊式組合結構·重量輕、易晃、斷裂和被大風捲起 Blow-molded pontoons are assembled into a block structure, which is light in weight and may sway, break easily, and maybe lifted up in gale wind.	不鏽鋼大平台式組合·結構穩定性好·不易被大風捲起 Stainless steel pontoons are assembled into a largeplatform, which has high structural stability, and is not easy to be lifted up in gale wind.
收益 Benefit	對比地面電站可提高6%的發電量 The power output is increased by about 6% compared with ground-based power stations.	不鏽鋼有極強的反光功能·對比地面電站可提高12%以上·具良好降溫功能·有效延緩電池組件的衰退率 Stainless steel has a strong light reflection feature, which is higher than of a ground-based power station by 12% or more; stainless steel also has a favorable cooling effect and can effectively postpone degradation of the solar module assemblies.