

# THE LEADER OF FLOATING PV SYSTEM



Sungrow Floating Manufactory base relays on Sungrow Group which has 21 years' research and production experience of solar power industry and organizes a research and development group of floating system, which consists of several specialists and doctors. Sungrow Floating has more than 30 patents concerning floating body, matrix anchorage, inverter&booster floating platform and system operation and maintenance and takes the lead to set up a number of floating technology standards. The company adheres to the concept Innovation and Improvement, Pursuing of Excellence and devotes itself to be the supplier for Solar PV floating body and system with global leading technology.



Raw Material R&D Laboratory



Intelligent workshop

### Global Network Resource





### Product Advantages

antiseep & hydrolysis resistence	strong bearing capacity, stab resistance	
Air-tightness & water tightness	antifatigue and wave resistance	
anti-tensile for fitting lug	adjustable for different panel angles	
skid resistance; scratch and abrasion resistance;	Food-Grade material	
anti-looseness for connection	25 years life time	
Anti-LIV aging ESCR		

water quality detection 🖉 damp-heat aging 🗹 oxidation induction time 🗹 impact brittle temperature 🖉 strain relief test of opposite side angle 🔽 UV-irradiation aging 🗹 Bend fatigue test 🗹 RoSH 🗹 ESCR 🗹



Main floating body SF-M



aisle floating body SF-A



connection floating body SF-C



mutli-function floating body SF-H



accessories SF-B

Model	Function	Max buoyance force(N)	size(L×W×H)	temperature tolerance	Antifatigue	Material
SF-M	For Supporting	1380	1110×880×190mm		100,000 times of dynamic load cycle	HDPE
SF-C	For connection	860	1212×410×205mm			
SF-A	For O&M	600	880×410×205mm	- 40 ~ + 85℃		
SF-H	For electrical connection	1500	1110×880×205mm			
SF-B	/	/	Ф38×155mm			

## Advantages of Inverter&Booster Platform

Good compatibility of facility, high safety

Installation on site , convenient O&M

inverter-booster floating platform SF-P



displacement	40t
designed draft	0.87m
designed wind speed	30m/s
designed wave height	2m
safe heel angle	3°
extreme heel angle	10°
safety compartment quantity	15
O&M manhole and watertight door quantit	ty 15
coating thickness	≥320µm

### Floating System Solution

Relying on 21 years of technology accumulation and R&D advantages of Sungrow Group, Sungrow Floating has the experience in design, construction, O&M of the world's largest floating power plant, the Company is committed to provid world's top floating power plant system solutions.

#### Floating system



installed through guide rail and briguetting, can solve the deformation of cantilever part of panel; resistance of heavy snow.



good application for different panels, dual-glass panel is applicable.

#### System Layout



Single Row Array

good integrality, inside stress equilibrium, good orientation consistency. Various layouts can adjust different water regions.

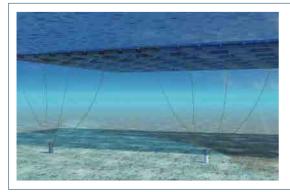


Dual Row Array

Improvement of solar irradiation, wide O&M aisle, quick response.

### Anchoring system

Customized anchoring system, adjustable for all scenes with less than 150 meters water depth, adjustable for 25 meters water range.



Design process for anchoring system
1 // Confirm the Max Wind, Wave&Water Flow Conditions
2 // Analysis of Wind&Water Flow Force or Model Wind Tunnel Experiment
3 // Selection for anchoring system Layout
4 // Coupling analysis of hydrodynamic force and anchoring system in extreme conditions
<b>5</b> // Confirm the max tension of mooring rope, confirm anchoring system
6 // Confirm the safe distance of matrix

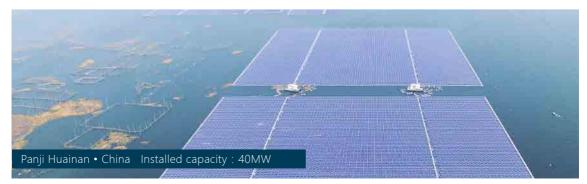
### Application Cases / Large-scale floating power plant













### special application floating power plant

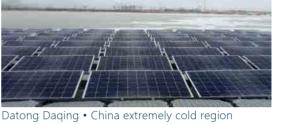


Japan extremely cold region Installed capacity : 0.16MW



Tainan Taiwan • China typhoon region Installed capacity : 3.1MW

### Advantages of Floating Power Plant



Installed capacity : 300kW



Huaiyang Zhoukou • China PV Poverty Alleviation Installed capacity : 200kW



Water protection

reduce water evaporation, control algae growth



Convenient O&M no obstructions, convenient cleaning



Market Prospect abundant water resource and able for large-scale promotion

Land Resource Conservation availability on water reservoir, fishpond, mining subsidence area, coastal waters etc.



#### Power generation improvement

good water cooling effects, 10% more power generation



Easy motanation

short period installation cycle

## Application Scope of PV Floating System

#### Coal subsidence



#### Aquaculture pound



offshore water area



#### Scenery lake



#### Reservoir



### Extremely cold area



frequent Typhoon area



### Our Services



#### Small unused water area



Sewage treatment reservoir





Address : No.1688, Xiyou Road, Hefei Hi-tech Zone, Anhui Province, China. Manufacture : Intersection of Huaipan Road and Shengtai Avenue, Pingwei Economic Development Zone, Huainan City, China Tel : +86-551-6532 7879 Tel : +86-554-2601 998 Email : overseas@sungrow.cn Website : www.sungrowpower.com



The latest information shall prevail without prior notice in case of any change in product dimensions and parameters.