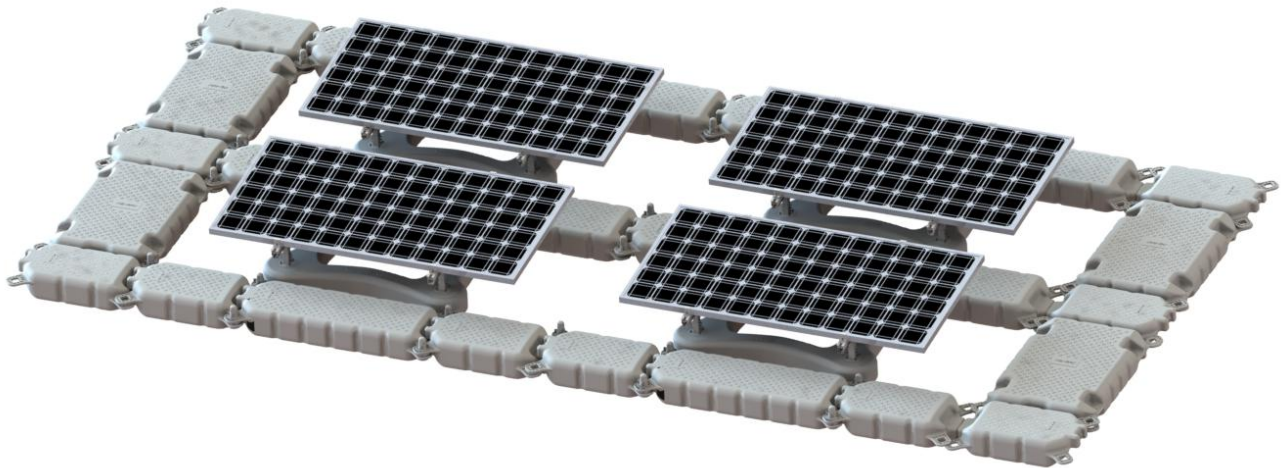


Floating PV Mounting System

Solar First floating PV mounting system consists of main floating body, outer aisle, different long and short aisles, aluminum bracket, spreader bar, fixing system, combiner box bracket & cable trunk.



High-efficiency

- Optimized, region-specific solutions
- Streamlined manufacturing process to ensure competitive system prices
- Enhanced power production due to the natural cooling effect of the water
- Accelerated development processes

Straightforward

- Modular for all power ranges and electrical configurations
- Compatible with most PV equipment
- Swift and simple assembly, no tools or heavy machinery needed
- Safe and easy operation & maintenance

Reliable

- UV-stabilized HDPE material
- Resilience to extreme wind conditions
- Designed and supplied with site-specific anchoring systems
- Lab-tested and field-proven worldwide




Eco-friendly



- Drinking-water compliant ; compatible with fresh & natural waters
- Neutral or positive environmental impact
- Reduces evaporation, conserves water & preserves existing ecosystems
- Recyclable materials, easy dismantlement

The Floats Technical Characteristics

Solar First floating system can be specifically developed in accordance with customer requests.

Main floating body		
<p>Function</p> <ul style="list-style-type: none"> Support the PV module. 	Material	High Density Polyethylene (HDPE) containing UV stabilizer. Compatible with drinking water (BS6920).
	Manufacturing process	Blow molding
	Dimension	1210*1020*185mm
	Weight	Average 7kg
	Buoyancy	980N
	Wall thickness	Average 3mm
	Aluminum bracket	
<p>Function</p> <ul style="list-style-type: none"> The aluminum brackets inserted in the main floating body to fix the PV modules; The different length of the front support and rear support gives an optimum slope to the module (5-20°). 	Material	AL6005-T5
	Manufacturing process	Extrusion
	Dimension	Design the length of the front and rear supports according to the installation angle
	Wind speed	34m/s
	Surface treatment	Anodizing
	Guideline	Wind load MS 1553-2002 / PV standard JIS C8955: 2017
	Outer Asile	
<p>Function</p> <ul style="list-style-type: none"> Support the combiner box and distributed inverter 	Material	High Density Polyethylene (HDPE) containing UV stabilizer. Compatible with drinking water (BS6920).
	Manufacturing process	Blow molding
	Dimension	700*1020*185mm
	Weight	Average 6kg
	Buoyancy	840N
	Wall thickness	Average 3mm

Aisle				
<p>Function</p> <ul style="list-style-type: none"> Ensures connection with the main floats; Used as maintenance walkway for the system; Main floater with different length aisle make the system match to different size PV Modules.  	Material	High Density Polyethylene (HDPE) containing UV stabilizer. Compatible with drinking water (BS6920).		
	Manufacturing process	Blow molding		
		Long Aisle 1	Long Aisle 2	
	Dimension	1210*425*185mm	1610*425*185mm	
	Weight	Average 5kg	Average 6.4kg	
	Buoyancy	700N	1010N	
		Short Aisle 1	Short Aisle 2	Short Aisle 3
	Dimension	700*425*185mm	830*425*185mm	900*425*185mm
	Weight	Average 3.3kg	Average 3.7kg	Average 3.96kg
	Buoyancy	420N	480N	520N
Wall thickness	Average 3mm			
Bolt kit				
<p>Function</p> <ul style="list-style-type: none"> Ensure the connection between the main floats and aisle floats, through the connection ears. 	Material	Polypropylene (PP) reinforced with 40% fiberglass + UV stabilizer		
	Manufacturing process	Injection		
	Dimension	φ44.5		
	Weight	Average 0.17kg		
	Wall thickness	Average 5mm		
Gasket				
<p>Function</p> <ul style="list-style-type: none"> Insert connection ears of different floats to ensure the connection pin tight. 	Material	Polypropylene (PP) reinforced with 40% fiberglass + UV stabilizer		
	Manufacturing process	Injection		
	Dimension	φ44.5		
	Weight	Average 0.04kg		

Spreader bar	Fixing System
<p style="text-align: center;">Function</p> <ul style="list-style-type: none"> Enables the connection of the mooring cables with the PV array and spread the load on two connection ears of the floats. 	<p style="text-align: center;">Function</p> <ul style="list-style-type: none"> The clamp fix the PV module on the brackets 

Certification and Performances

To offer you the best experience with a long-lasting solution, our entire product range is qualified through technical tests for the reliability, performance and lifetime of your floating PV project. Solar First floats comes standard with a 5-year warranty with the option to extend up to 25 years ensuring you a safe and effective investment.

Test	Result
Fatigue	After 1000N per cycle, 10000 times test there is no deformation, vibration, damage or looseness occurs.
Bending angle	After bearing 125kg, the contact ear deformation angle from 0.9°~8.1° .
UV Resistance	Resistance to UV corrosion for 25 years
Buoyancy	Withstand 150kg/M ²
Temperature Resistance	Resistant to temperatures between -30° to 85°
Wind Resistance	Withstands winds up to 60m/s
Drinking Water Compliance	Suitable for contact with water intended for human consumption.