

TO BE THE GLOBAL NAVIGATOR OF FPV



SUNGROW FPV SCI. & TECH. CO., LTD

Sungrow FPV Sci. & Tech. Co., Ltd. is a key high-tech enterprise dedicated to providing floating PV system solutions, focusing on creating ecologically friendly, reliable, and efficient Floating PV systems, committing itself to provide one-stop floating PV system solutions for different application scenarios worldwide. The Company has cultivated a professional R&D team with solid R&D experiences and strong capabilities of independent innovation, mastering the key technologies of floating PV plants such as system design, material, structure and phalanx, anchoring system. Sungrow Floating PV's core products have applied for more than 300 patents and have been accredited by international authorities. As of Dec. 2025, the global application of Sungrow Floating PV has exceeded 4.3GW, and its market share has ranked first in the world for 8 consecutive years.

NO.1

Global Market Share

GW+

World's First GW-level
Floating System Supplier

4.3GW+

Global Application

300+

Patents



SUNGROW
Floating PV

DEVELOPMENT HISTORY

Inception >

2016

Establishment

2017

Huainan Production Base Officially Begins Operations

Expansion >

2018

No.1 Global Market Share

2019

Key high-tech enterprise

Thriving >

2020

World's first GW-level Floating system Supplier

2021

Anchoring system has been accredited by DNV

2022

Design and Delivery of the First 200MW Project in 100-Meter Deep-Water Zone 2023

2023

Leading the Establishment of Industry Standards such as IEC

2024

market share has ranked first in the world for 7 consecutive years

ONE-STOP SERVICE



Feasibility Study

Engaged in Economic Feasibility Assessment and Preliminary Project Design



Scheme Design

Anchor System Design and Participation in General Layout Design



Supply and Construction Guidance

Global Delivery Capability; Involved in Construction Drawings, Installation Training, and On-Site Guidance



Operation and Maintenance Services

Operation and Maintenance Plans, Training, Guidance, and Follow-up

ADVANTAGES OF FLOATING PV

Higher Energy Production

The water cooling and ventilation effect is excellent, effectively improving the system's power generation

Water Protection

Reduces water evaporation and inhibits algae growth

Easy and Safe Maintenance

Modules are unobstructed, making cleaning convenient

Market Growth

As more countries and companies invest in this technology, the potential for expansion ahead remains tremendous

Easy Installation

Standard design improves installation efficiency, and provides higher and wider maintenance channels, enhancing the operation and maintenance experience

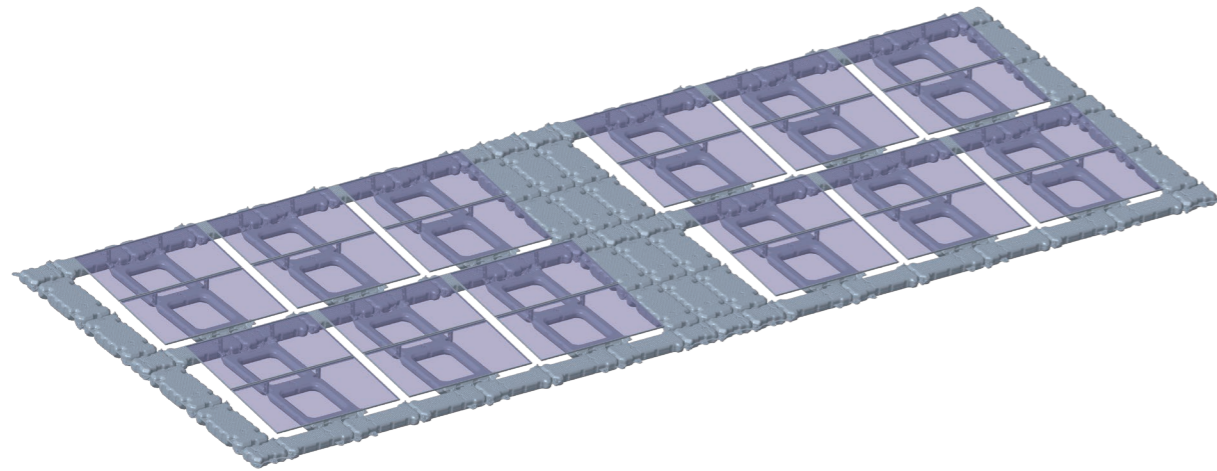
Efficient Land Use

It can fully utilize ponds, lakes, reservoirs, and so on, without any negative environmental impact



SUNGROW FPV SYSTEM SOLUTION

SGF-PT60 SYSTEM SOLUTION



High Installation Efficiency

Optimize the support structure to reduce the number of fastening nodes; increase installation efficiency by 10%

High System Capacity

Compared to regular system arrangements, the 2-row arrangement can increase capacity by up to 12%

High anchoring node force

North-South anchoring uses a three-point mount, anchoring node force increased by 20%

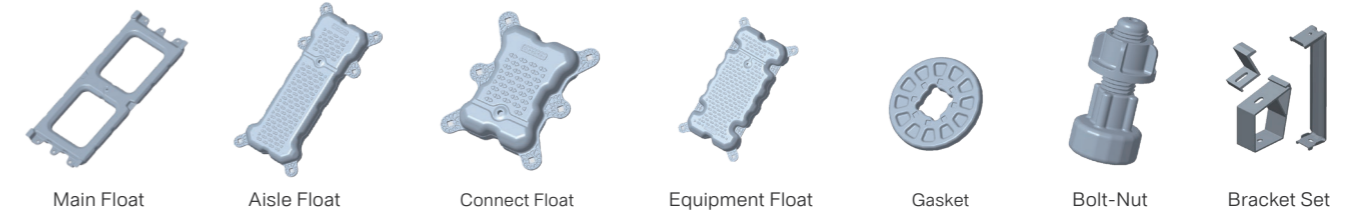
Stable Power Generation

Adjacent rows of modules are installed on the same plane without shading or relative movement, ensuring consistent power generation across strings and delivering more stable electricity output

Flexible System Cabling

Cable channels can be arranged in North-South or East-West directions

MAIN SYSTEM COMPONENTS



TECHNICAL PARAMETERS

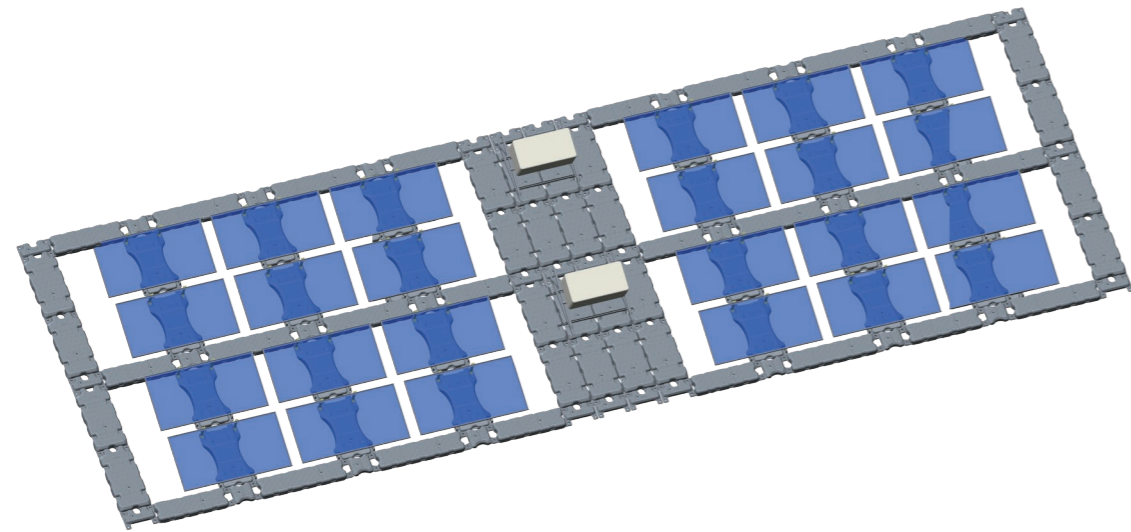
Product	SGF-PT60 FLOATING SYSTEM
Scenario	Reservoirs, Quarry Lakes, Industrial Ponds, etc.
Tilt	5°-15°, Customized design tilt
Wind speed	≤260km/h
Snow load	0.37kN/sqm~0.46kN/sqm
Width of O&M aisle	≥400mm
Capacity of system	Up to 186W/sqm
Size of panels	Up to 2500mm(length)×1350mm(width)
Orientation of system	S-N/E-W
Efficiency of assembly	8 solar panels/skilled worker/hour
Warranty	5 years with warranty extension options
Floating boat	Floating boat allows to place centralized inverters and transformers on water
Material of substructure	Steel with Aluminum-Zinc-Magnesium, Aluminum alloy
Material of floats	HDPE with food grade
Buoyancy	>165kg/m ²
Design standard	ASCE 7-2016-27/BS EN 1991-4-2005/MS1553-2006



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 RoHs & ESCR



SGF-PT50 SYSTEM SOLUTION



MAIN SYSTEM COMPONENTS



TECHNICAL PARAMETERS

Product	SGF-PT50 FLOATING SYSTEM
Scenario	Reservoirs, Quarry Lakes, Industrial Ponds, Post-Mining Lakes, etc.
Tilt	5°/12°/15°
Wind speed	≤ 260km/h
Snow load	0.4kN/sqm~0.6kN/sqm
Width of O&M aisle	≥400mm
Size of panels	Up to 2500mm(length)×1350mm(width)
Orientation of system	S-N
Efficiency of assembly	6 solar panels/skilled worker/hour
Water coverage ratio	26.5%
Warranty	5 years with warranty extension options
Floating boat	Floating boat allows to place centralized inverters and transformers on water
Material of substructure	Aluminum alloy
Material of floats	HDPE with food grade
Design standard	ASCE 7-2016-27/BS EN 1991-4-2005/MS1553-2006

Interlocking design between floats
Stable buoyancy transfer, even distribution

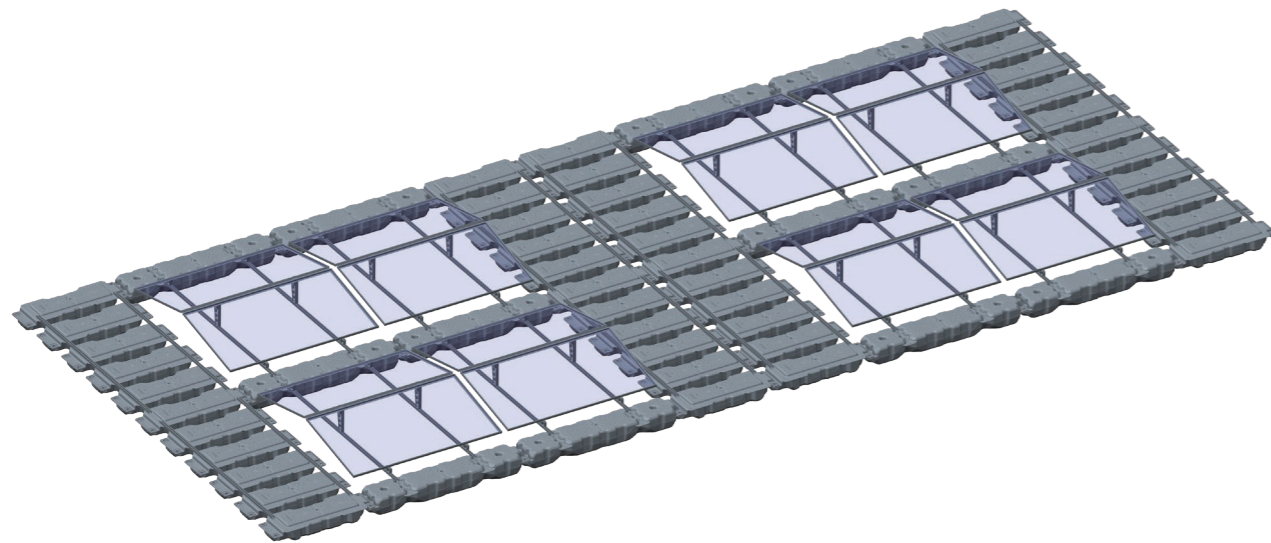
Inclination consistency excellence
The main floating body ear height difference design, the Angle difference between the front and rear components is less than 1°

More Efficiency
Cooling effect improve power generation

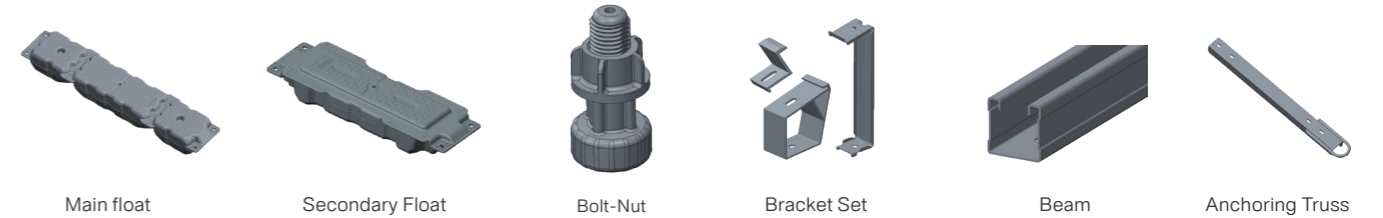
Adaptation to large waves, deep water conditions
Customized bracket design, 1 million fatigue tests, systematic load calculation

SUNGROW FPV SYSTEM SOLUTION

SGF-TS30(E-W) SYSTEM SOLUTION



MAIN SYSTEM COMPONENTS



TECHNICAL PARAMETERS

Product	SGF-TS30(E-W) FLOATING SYSTEM
Scenario	Reservoirs, Quarry Lakes, Industrial Ponds, Post-Mining Lakes, etc.
Tilt	5°~15°, Customized design tilt
Wind speed	Wind speed from 180km/h to 260km/h
Snow load	0.25kN/m ² ~1.65kN/m ² , Option for higher snow loads by project-specific design
Width of O&M aisle	≥450mm
Size of panels	Up to 2500mm(length)×1350mm(width)
Orientation of system	E-W
Efficiency of assembly	6 solar panels/skilled worker/hour
Water coverage ratio	20.6%
Warranty	5 years with warranty extension options
Floating boat	Floating boat allows to place centralized inverters and transformers on water
Material of substructure	Steel with Aluminum-Zinc-Magnesium, Aluminum alloy
Material of floats	HDPE with food grade
Buoyancy	>160kg/sqm
Design standard	ASCE 7-2016-27/BS EN 1991-4-2005/MS1553-2006



High System Stability

The solar modules are deployed in east-west dual orientation, which can secure the system stability against strong wind pressure



Low Water Coverage Ratio

Low water coverage ratio allows water circulation and reduces the environmental impact



Convenient and Safe O&M

Width of O&M aisle ≥450mm, high buoyancy(>160kg/sqm)



High Snow Load Adaptability

The system can be adapted to different snow loads: 0.25kN/sqm-1.65kN/sqm



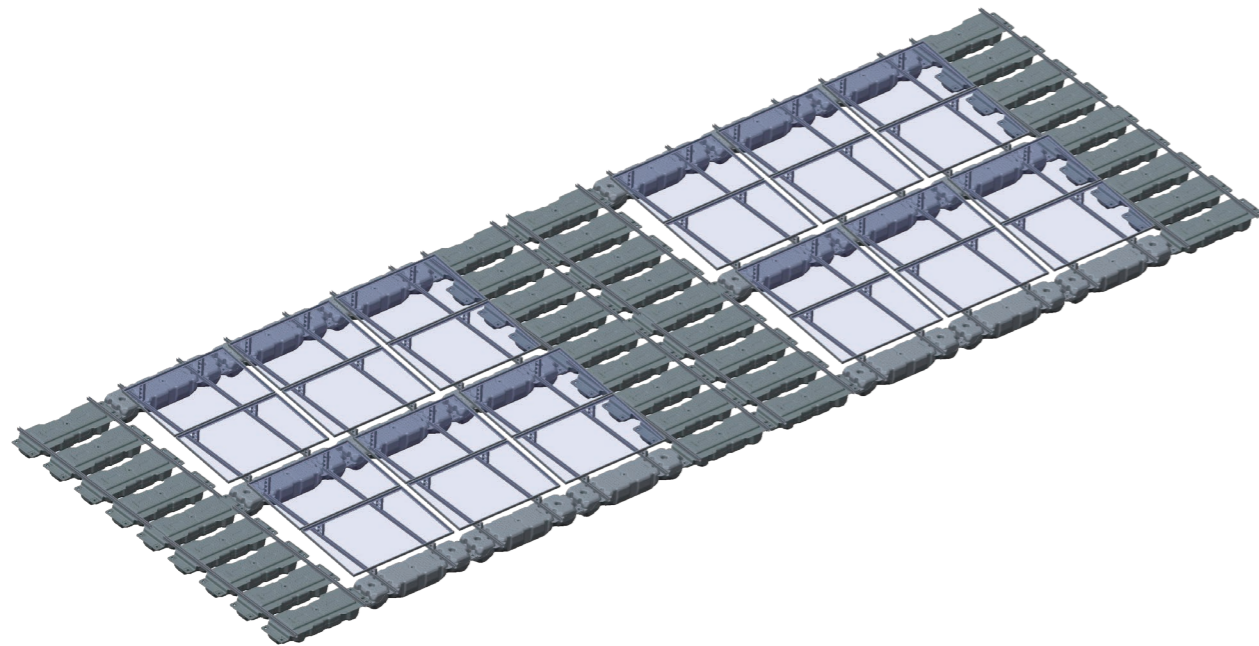
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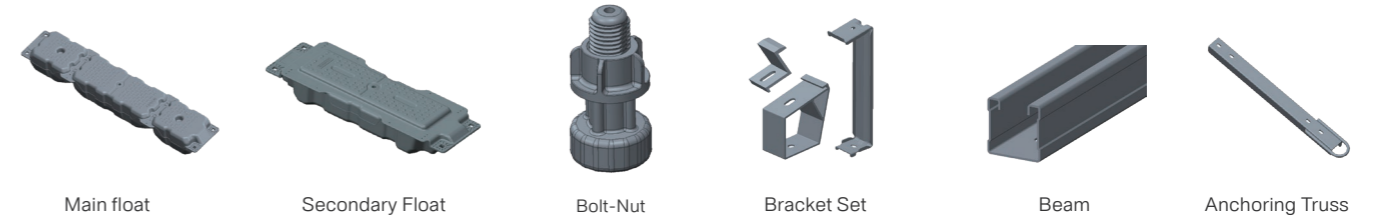


SUNGROW FPV SYSTEM SOLUTION

SGF-TS30 HIGH CAPACITY SYSTEM SOLUTION



MAIN SYSTEM COMPONENTS



TECHNICAL PARAMETERS

Product	SGF-TS30 HIGH CAPACITY FLOATING SYSTEM
Scenario	Reservoirs, Quarry Lakes, Industrial Ponds, Post-Mining Lakes, etc.
Tilt	5°-12°, Customized design tilt
Wind speed	Wind speed from 180km/h to 260km/h
Snow load	0.25kN/m ² -1.65kN/m ² , Option for higher snow loads by project-specific design
Width of O&M aisle	≥450mm
Size of panels	Up to 2500mm(length)×1350mm(width)
Orientation of system	S-N
Efficiency of assembly	6 solar panels/skilled worker/hour
Water coverage ratio	20.6%
Warranty	5 years with warranty extension options
Floating boat	Floating boat allows to place centralized inverters and transformers on water
Material of substructure	Steel with Aluminum-Zinc-Magnesium, Aluminum alloy
Material of floats	HDPE with food grade
Buoyancy	>160kg/sqm
Design standard	ASCE 7-2016-27/BS EN 1991-4-2005/MS1553-2006

High Gains
The power generation per unit area is 10% higher than the conventional south-facing scheme

Low Water Coverage Ratio
Low water coverage ratio allows water circulation and reduces the environmental impact

Easy Installation
Standard components result in less management costs and higher installation efficiency

High Snow Load Adaptability
The system can be adapted to different snow loads: 0.25kN/sqm-1.65kN/sqm

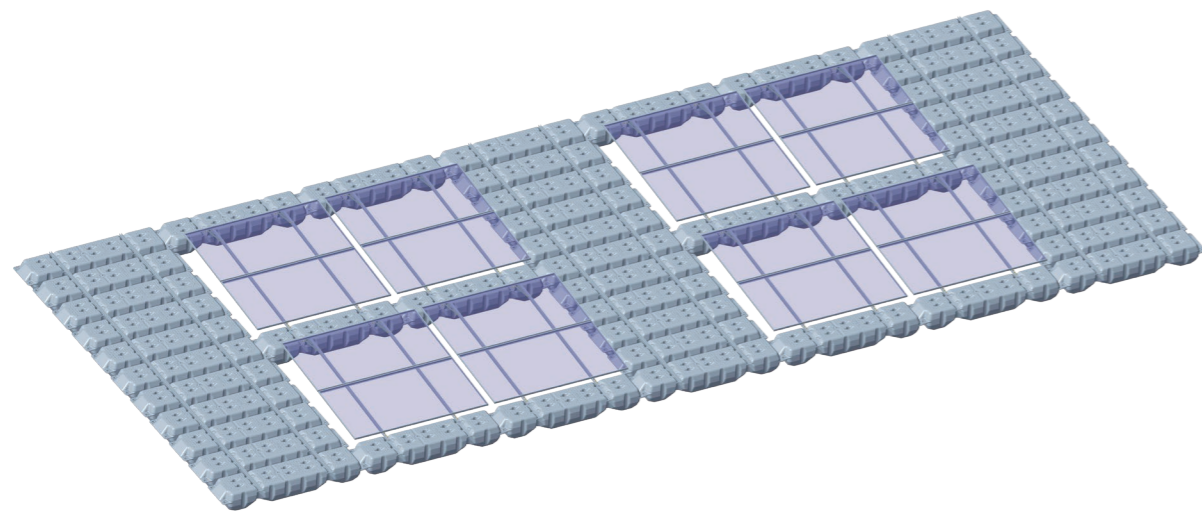


- Water quality detection
- Damp-heat aging
- Oxidation induction time
- Impact brittle temperature
- Strain relief test of opposite side angle
- UV-irradiation aging
- Bend fatigue test
- RoHs & ESCR

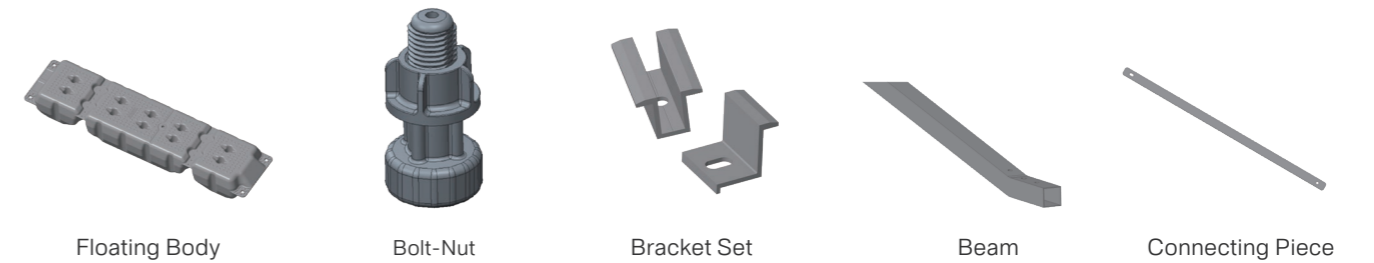


SUNGROW FPV SYSTEM SOLUTION

SGF-TS30S SYSTEM SOLUTION



MAIN SYSTEM COMPONENTS



TECHNICAL PARAMETERS

Product	SGF-TS30S FLOATING SYSTEM
Scenario	Reservoirs, Quarry Lakes, Industrial Ponds, etc.
Tilt	5°~15°, Customized design tilt
Wind speed	Wind speed from 180km/h to 260km/h
Snow load	0.59kN/m ² ~2.3kN/m ² , Option for higher snow loads by project-specific design
Width of O&M aisle	≥580mm
Size of panels	Up to 2500mm(length)×1350mm(width)
Orientation of system	S-N/E-W
Efficiency of assembly	8 solar panels/skilled worker/hour
Water coverage ratio	24%
Warranty	5 years with warranty extension options
Floating boat	Floating boat allows to place centralized inverters and transformers on water
Material of substructure	Steel with Aluminum-Zinc-Magnesium, Aluminum alloy
Material of floats	HDPE with food grade
Buoyancy	>250kg/m ²
Design standard	ASCE 7-2016-27/BS EN 1991-4-2005/MS1553-2006



Convenient Construction

Integrated bracket installation with high functional integration



High Installed Capacity

Low gap design between components, coupled layout, high water utilization rate



O&M Security

The width of the O&M channel ≥ 580mm, the high buoyancy >250kg/m²



High Snow Load Adaptability

The system can be adapted to different snow loads: 0.59kN/m²-2.3kN/m²



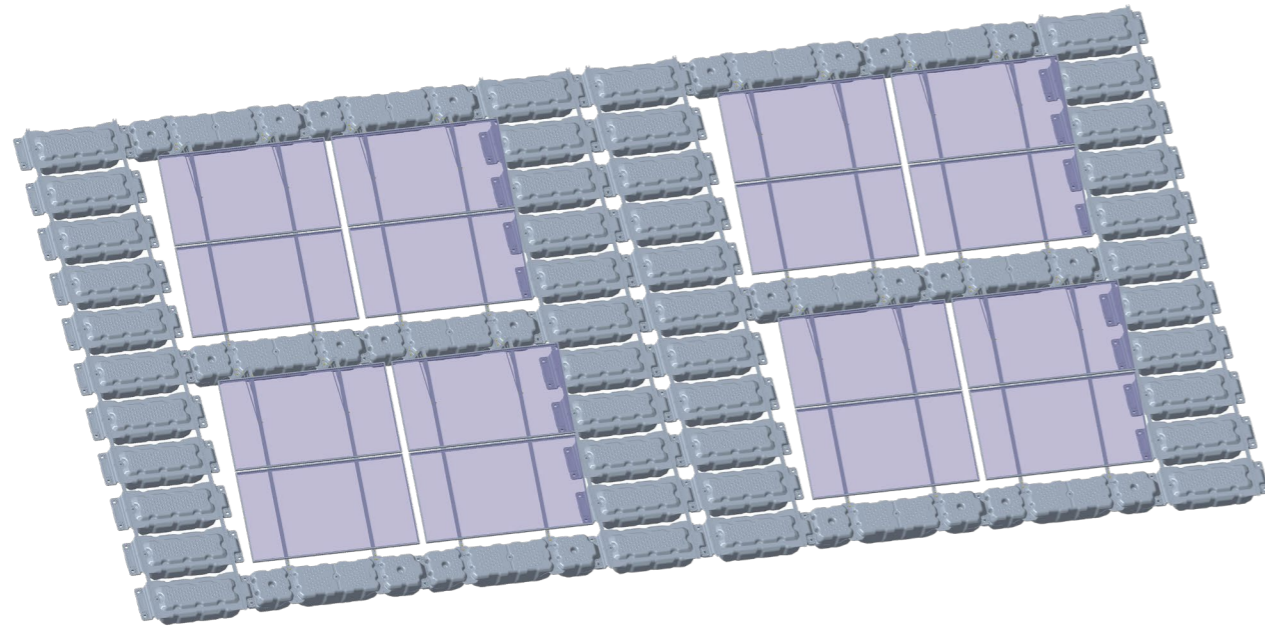
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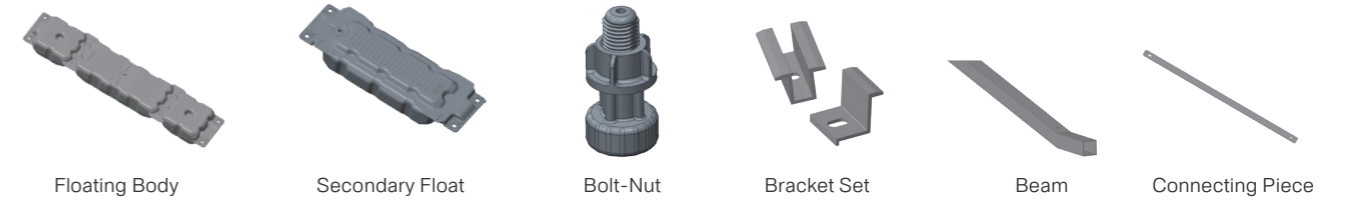


SUNGROW FPV SYSTEM SOLUTION

SGF-TS30M SYSTEM SOLUTION



MAIN SYSTEM COMPONENTS



TECHNICAL PARAMETERS

Product	SGF-TS30M FLOATING SYSTEM
Scenario	Reservoirs, Quarry Lakes, Industrial Ponds, etc.
Tilt	5°~15°, Customized design tilt
Wind speed	Wind speed from 200km/h to 260km/h
Snow load	0.37KN/m ² ~2.0kN/m ² , Option for higher snow loads by project-specific design
Width of O&M aisle	≥450mm
Size of panels	Up to 2500mm(length)×1350mm(width)
Orientation of system	S-N/E-W
Efficiency of assembly	8 solar panels/skilled worker/hour
Water coverage ratio	18%
Warranty	5 years with warranty extension options
Floating boat	Floating boat allows to place centralized inverters and transformers on water
Material of substructure	Steel with Aluminum-Zinc-Magnesium, Aluminum alloy
Material of floats	HDPE with food grade
Buoyancy	>160kg/m ²
Design standard	ASCE 7-2016-27/BS EN 1991-4-2005/MS1553-2006



Efficient construction

Integrated bracket design with a high degree of functional integration, reducing the number of installation nodes by 20%



Efficient water area utilization

By adopting a row - by - row layout, the capacity density is high. Under the condition of no shadow obstruction, the water area for the same installed capacity is reduced by 7%



Convenient and safe wiring

With the help of the integrated bracket and component frame, the wiring distance is reduced



High - efficiency operation and maintenance

Thanks to the modular design, the efficiency of component cleaning, disassembly and assembly has increased by 50%



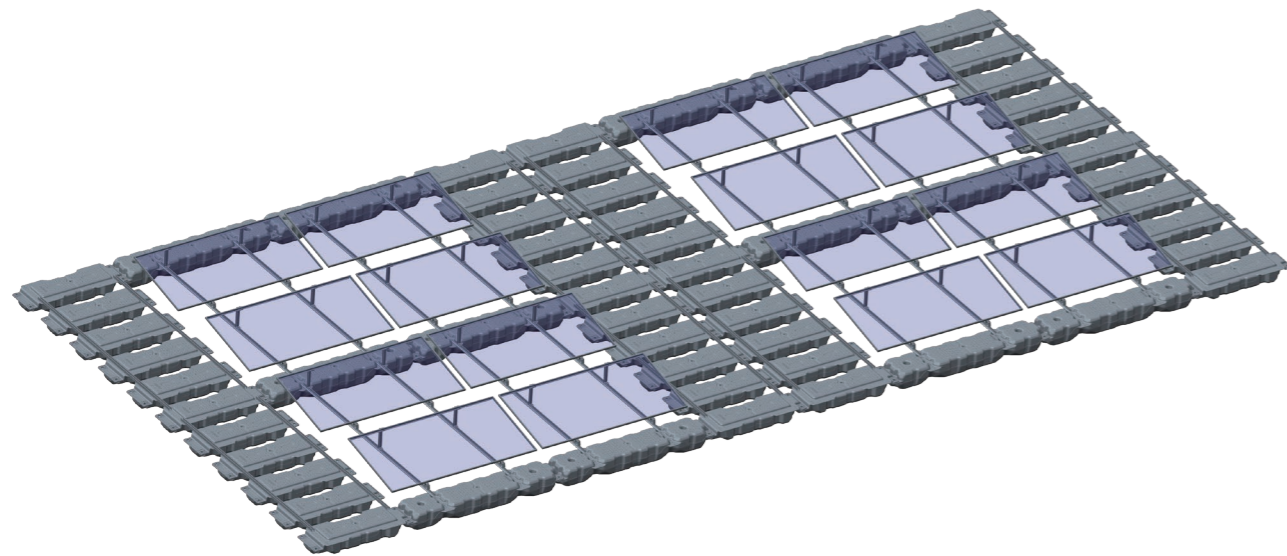
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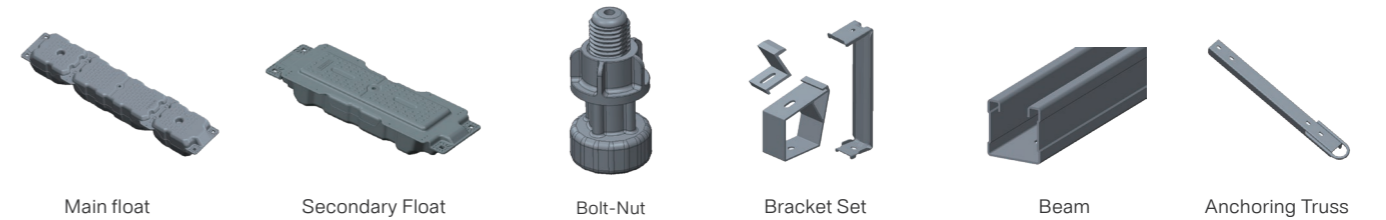


SUNGROW FPV SYSTEM SOLUTION

SGF-TS30(S-N) SYSTEM SOLUTION



MAIN SYSTEM COMPONENTS



TECHNICAL PARAMETERS


Product	SGF-TS30(S-N) FLOATING SYSTEM
Scenario	Reservoirs, Quarry Lakes, Industrial Ponds, Post-Mining Lakes, etc.
Tilt	5°-15°, Customized design tilt
Wind speed	Wind speed from 180km/h to 260km/h
Snow load	0.25kN/m ² -1.65kN/m ² , Option for higher snow loads by project-specific design
Width of O&M aisle	≥450mm
Size of panels	Up to 2500mm(length)×1350mm(width)
Orientation of system	S-N
Efficiency of assembly	6 solar panels/skilled worker/hour
Water coverage ratio	20.6%
Warranty	5 years with warranty extension options
Floating boat	Floating boat allows to place centralized inverters and transformers on water
Material of substructure	Steel with Aluminum-Zinc-Magnesium, Aluminum alloy
Material of floats	HDPE with food grade
Buoyancy	>160kg/sqm
Design standard	ASCE 7-2016-27/BS EN 1991-4-2005/MS1553-2006

Easy Installation
A system=2 types of floats+1 type of plastic fastners+1 type of metal rod+brackets

Low Water Coverage Ratio
Low water coverage ratio allows water circulation and reduces the environmental impact

Convenient and Safe O&M
Width of O&M aisle ≥450mm, high buoyancy(>160kg/sqm)

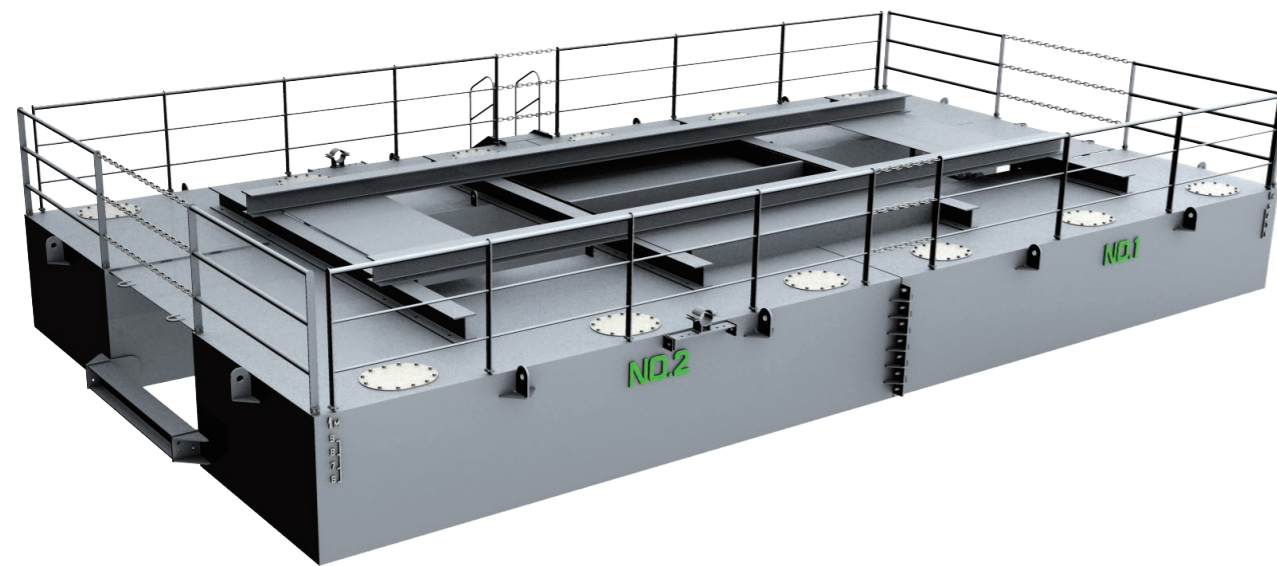
High Snow Load Adaptability
The system can be adapted to different snow loads: 0.25kN/sqm-1.65kN/sqm


 Water quality detection
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 RoHs & ESCR

SUNGROW FPV SYSTEM SOLUTION

FLAOTING BARGE

Excellent Equipment Compatibility and High Safety Margin | Reduces line loss and improves system efficiency



On-Site Installation and Convenient Maintenance

Modular design for easy transportation and maintenance

Multiple compartment design for floating boxes, enhancing overall safety

Multiple manholes for convenient operation and maintenance checks

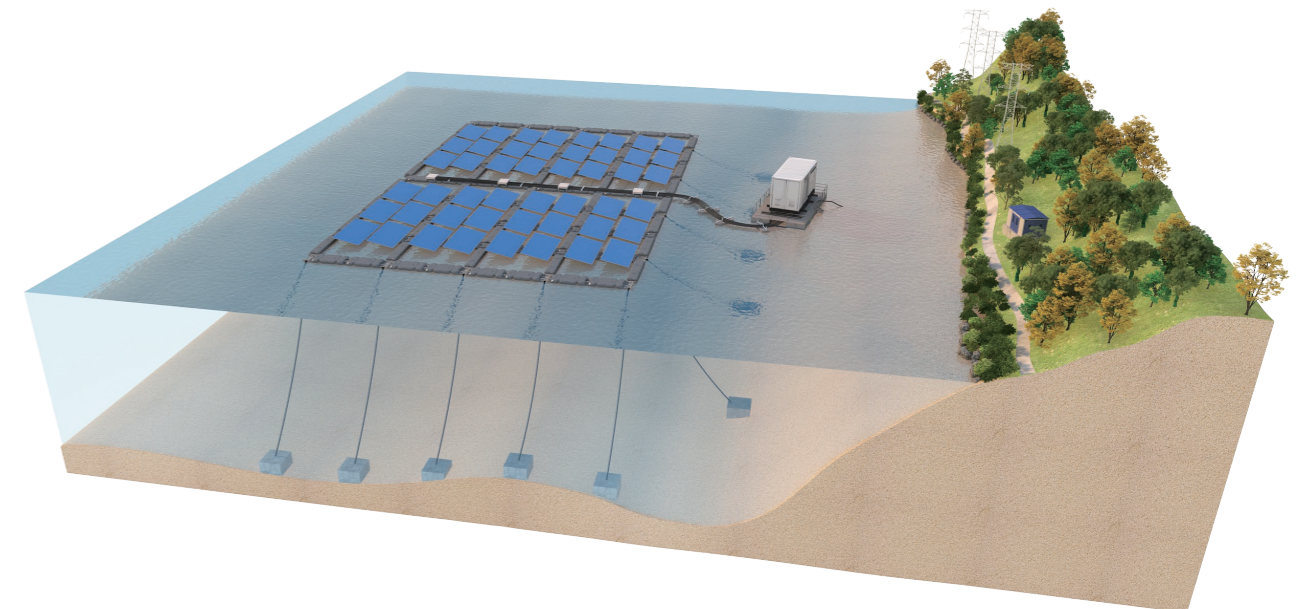
Optional independent oil tank for matching transformer equipment

Multi-layer coating process to meet C5 harsh environmental standards

SUNGROW FPV SYSTEM SOLUTION

ANCHORING SYSTEM SOLUTION

Customized anchoring system, adaptable to various water depths and water level variations



Led the development of China's first Floating Solar PV System Anchoring Design Standard, with anchoring design methods certified by DNV (the first globally)

Wind-wave-current coupling simulation and analysis for floating water systems, conducting large-scale wind-wave-current coupling experiments, and refining the calculation models based on experimental results

Extensive experience in designing and supplying anchoring systems for large-scale hydropower projects with depths of up to 100 meters, with anchoring design capabilities tested under harsh conditions.

Comprehensive application of anchoring design across all scenarios, with detailed designs that ensure easy and efficient on-site construction with no pressure.

NO.1 GLOBAL MARKET SHARE FOR 8 CONSECUTIVE YEARS





 **200** MW

Location: Anhui, China
COD Time: 2022





 **88** MW

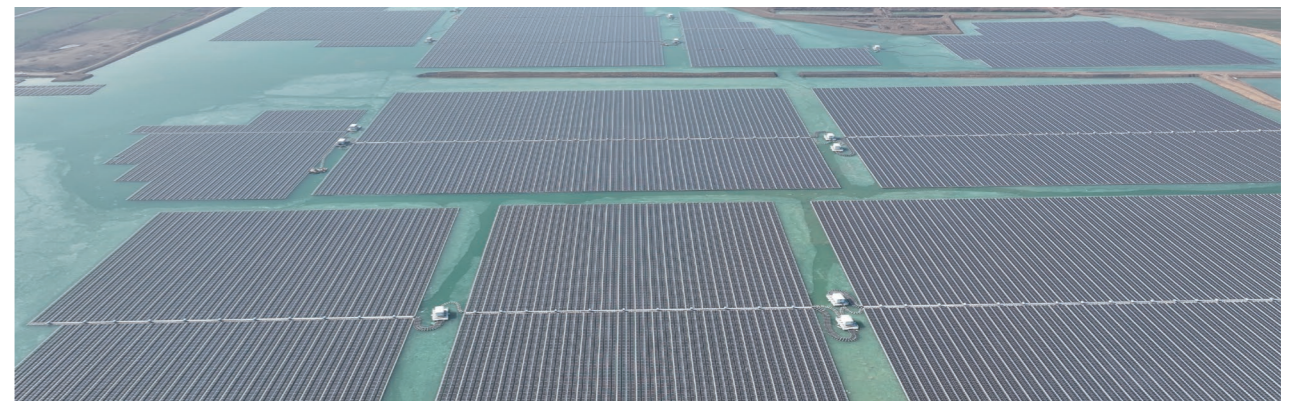
Location: Shandong, China
COD Time: 2024





 **84** MW

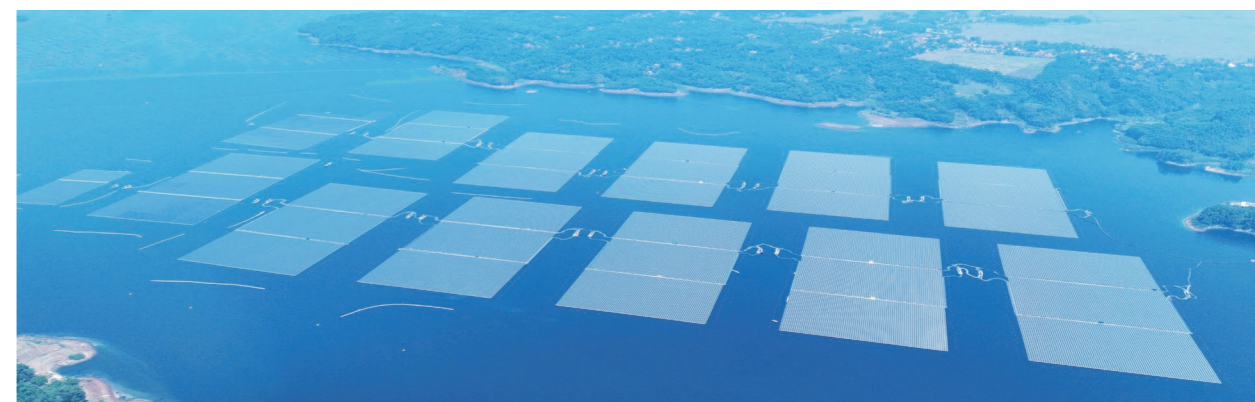
Location: Anhui, China
COD Time: 2023

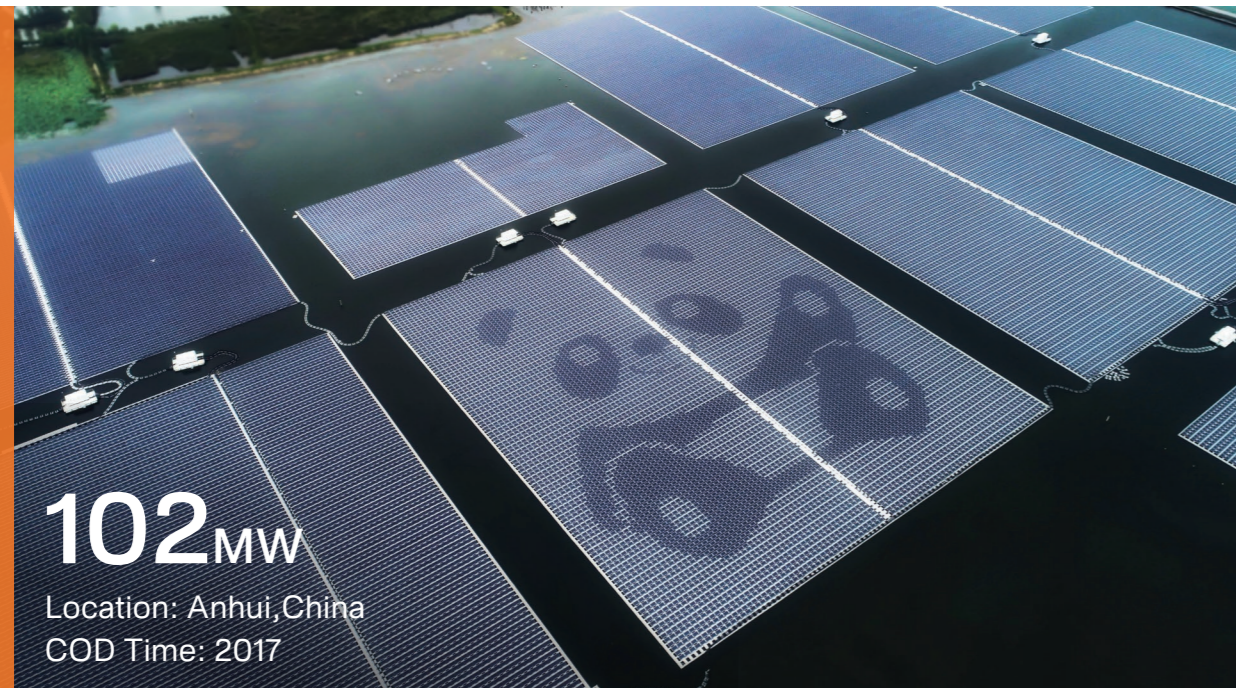




 **192** MW

Location: Cirata, Indonesia
COD Time: 2023















1MW

Location: South Africa
COD Time: 2023



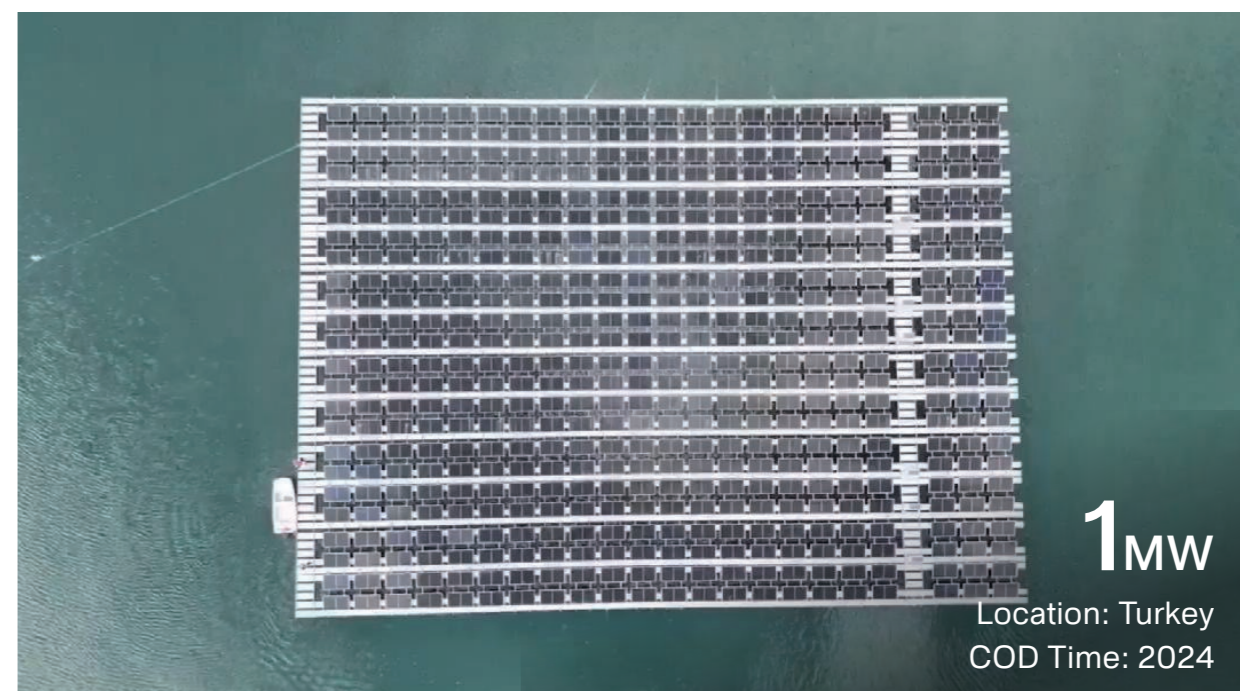
1MW

Location: India
COD Time: 2022



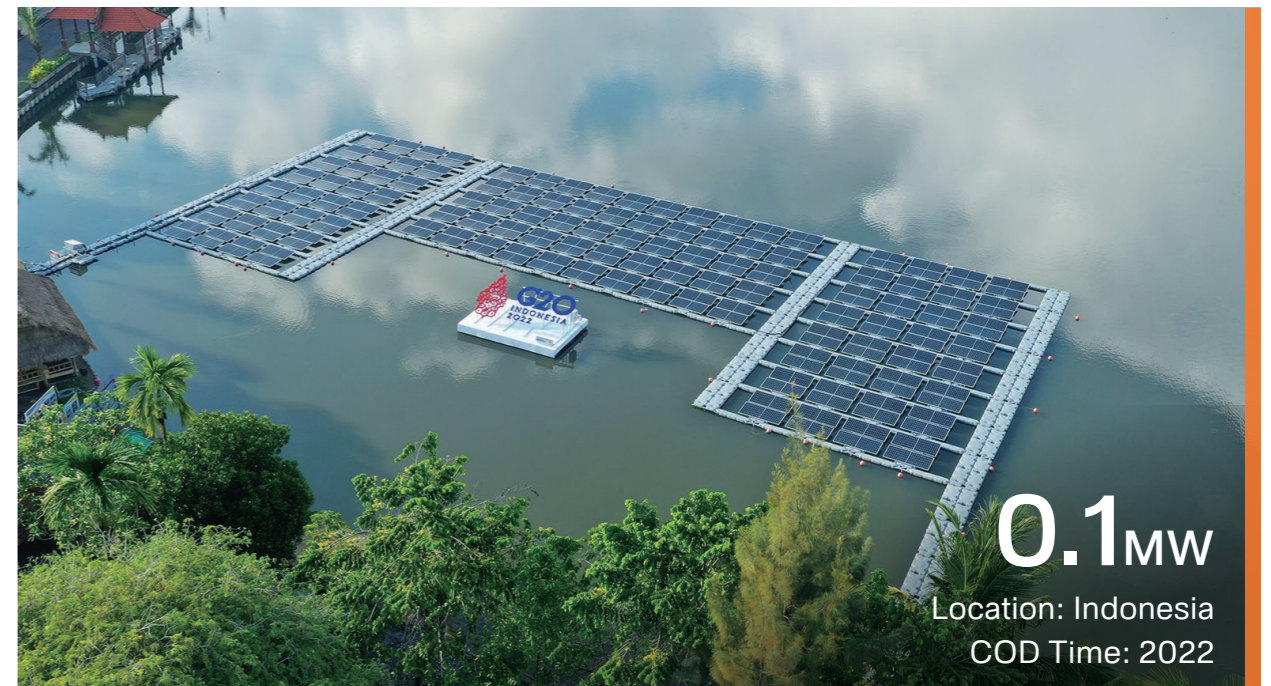
1.5MW

Location: Slovakia
COD Time: 2020



1MW

Location: Turkey
COD Time: 2024





BRIDGE TO FUTURE WITH RELIABLE FPV SOLUTIONS
S U N G R O W F P V S C I . & T E C H . C O . , L T D