

SHINE
杉恩

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New Energy New Future



SHINEBIPV

Xingtai Shine Technology Co., Ltd.
邢台杉恩科技有限公司
New Energy New Future
新能源 新未来

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China · Xingtai



→ COMPANY PROFILE

Founded in 2019, Xingtai Shine Technology Co., Ltd. is a comprehensive company specializing in the design, R&D, production and sales of solar energy products, covering project exploration, design and development, project contracting, photovoltaic equipment, photovoltaic materials, photovoltaic modules and photovoltaic application products, and providing all-round services in the photovoltaic field. The production base is located in Hebei, Tianjin, Shandong, Anhui, Jiangsu and other places, and has established a wide range of sales channels around the world, and its products are exported to more than 30 countries and regions such as Japan, South Korea, Europe and the United States, Southeast Asia, the Middle East, etc., and have won the wide trust and support of customers, providing professional and convenient photovoltaic products, solutions and services for the majority of users.



→ CATALOGUE

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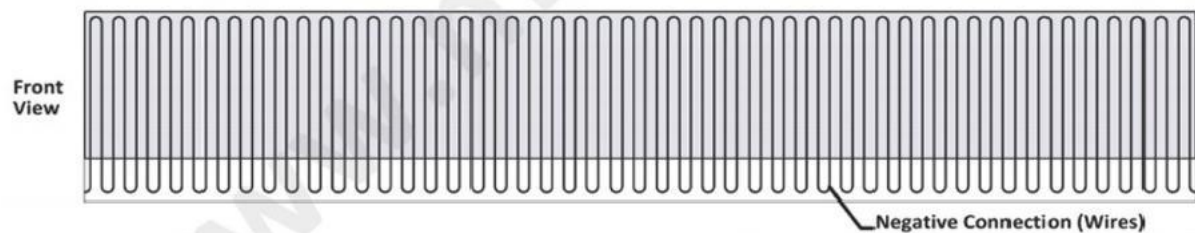


CIGS SOLAR CELL

CIGS 铜铟镓硒电池芯片
高转换效率的柔性电池

High efficiency of Flexible CIGS Cells

STANDARD FLEXIBLE PANEL



Human Readable Barcode
Machine Readable Barcode
Positive Connection(Metal)

315.50	44
308.00	57

NOMINAL PERFORMANCE BY 0.5%EFFICIENCY BINS

Cell fciency		>14.0%	>14.5%	>15.0%	>15.5%	>16.0%
Power PA	[W]	1.95	2.02	2.08	2.15	220
Maximum Power Volage VM	[V]	0.524	0.537	0.541	0.546	0.552
Maximum Power Curent Mu	[A]	3.73	3.77	3.84	3.93	3.98
Open Gircuit Voltage Vac	[V]	0.651	0.663	0.667	0.671	0.676
Short Cicuit Curent SC	[A]	426	425	4.30	4.36	4.39

PRODUCT FEATURES

LIGHTWEIGHT



EASY TO LWSTALL



ULTRA THIN



FLEXIBLE



·Junction Box Type-Installed on top:

Micro IP67 waterproof

·Cable:4mm²

·Junction Box Type-Installed on the bottom:

MC-JM/FM(MC4),IP67 Waterproof

·Cells Type:CIGS

·Adhesive:Edge Tape

·Heat Spot Protection:Setting one bowtie
between each two cells

·Material:Lead free,qualified to ROHS standard

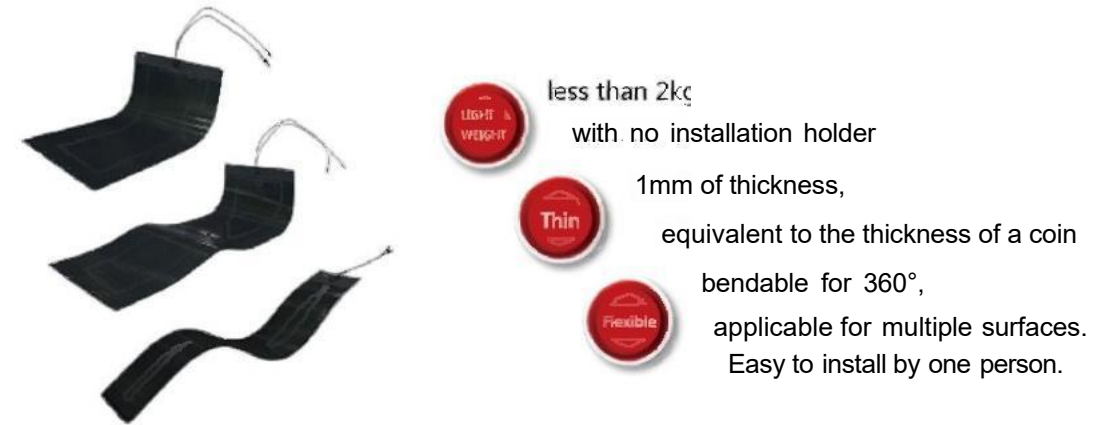
·Temperature range:-40℃-85℃

·Maximum Voltage:1000VDC IEC600VDC UL

·Warranty:5 year workmanship,25year warrenty
against power loss(10%power loss within 10years,
and 20%power loss within 25 years)

·Average efficiency of panels up to 16.5%,
lab efficiency up to 17.5%

PRODUCT APPLICATION



USA SAN FRANCISCO
LANDFILLS

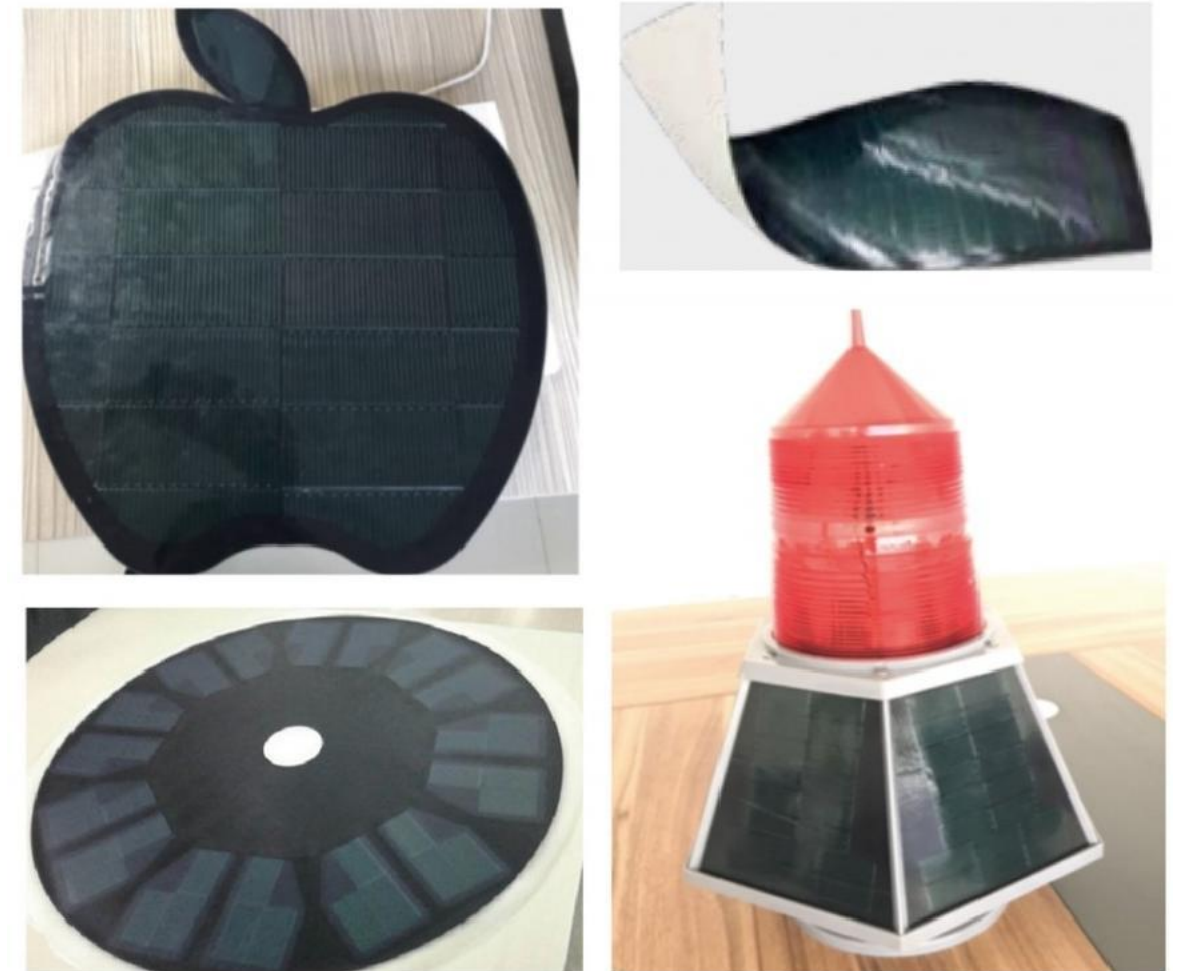
AUSTRALIA
ROOF SYSTEM

KATAR
CARPORTS

➔ CUSTOMIZED FLEXIBLE PANEL

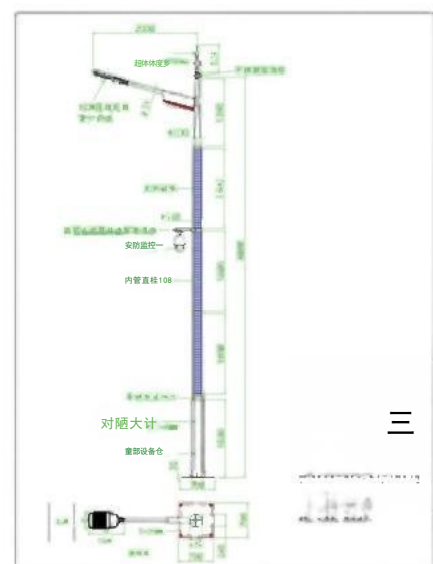
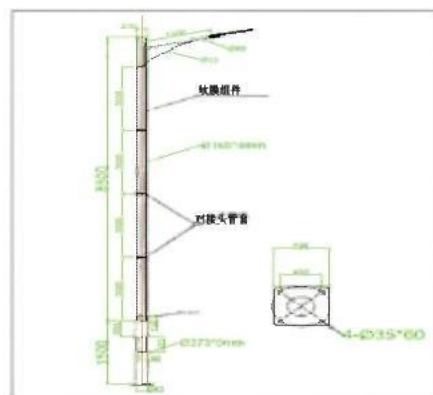
PRODUCT FEATURES

Flexible panels can be customized according to product appearance and functional requirements. High efficiency solar panel with features of lightweight, thin, flexible, it can be perfectly integrated into multiple curved surfaces. It has been successfully applied in various application scenarios such as traffic, ocean, and other outdoor places.





THIN-FILM SOLAR STREET LAMP



PRODUCT FEATURES



HIGH PERFORMANCE
MINIMUM EFFECT UNDER
LOWLIGHT CONDITIONS



LOW WINDAGE AND HIGH
ANTIKNOCK CHARACTERISTIC
AN EXCELLENT SAFETY PRODUCT



SELF-OWNED CORE TECHNOLOGY
CUSTOMIZED PRODUCT SOLUTIONS



DEVELOP GREEN ECOLOGICAL
MUNICIPAL LANDSCAPE

GREEN DEVELOPMENT

THE CONSTRUCTION OF A NEW GENERATION OF LIGHT POLES IS AN IMPORTANT STARTING POINT FOR THE IMPLEMENTATION OF INTELLIGENT COMPREHENSIVE ENERGY SAVING,EMISSION REDUCTION AND SUSTAINABLE EXHIBITION,AND FULLY REDUCE LIGHTING COSTS.

HIGH EFFICIENT MANAGEMENT

THROUGH CENTRALIZED MANAGEMENT,IT CAN PROMOTE THE DIGITALAND INTELLIGENT UPGRADING OF STREET LIGHTS AND REDUCE MANAGEMENT COSTS.

DIVERSIFICATION BENEFIT

AS AN IMPORTANT PUBLIC RESOURCE,THE INCREASE OF SMART STREEG LAMP WILL ENABLE THE RESOURCE TRANSFORMATION OF STREET LAMPS AND ACHIEVE DIVERSIFIED PROFITS.

SMART SYSTEM

AS AN IMPORTANT LINK OF THE SMART INDUSTRIAL PARK,THE SMART STREET LAMP NOT ONLY PROVIDES A CARRIER FOR VARIOUS KINDS OF SMART APPLICATIONS,BUT ALSO BECOMES A LANDMARK OF THE INTELLIGENT PROCESS OF THE ENTIRE INDUSTRIAL PARK.

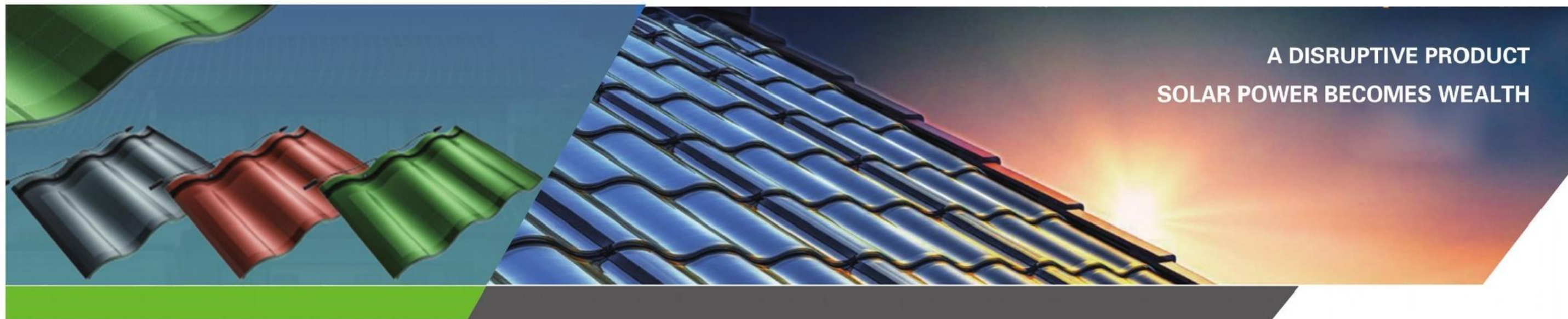
TECHNICAL PARAMETER



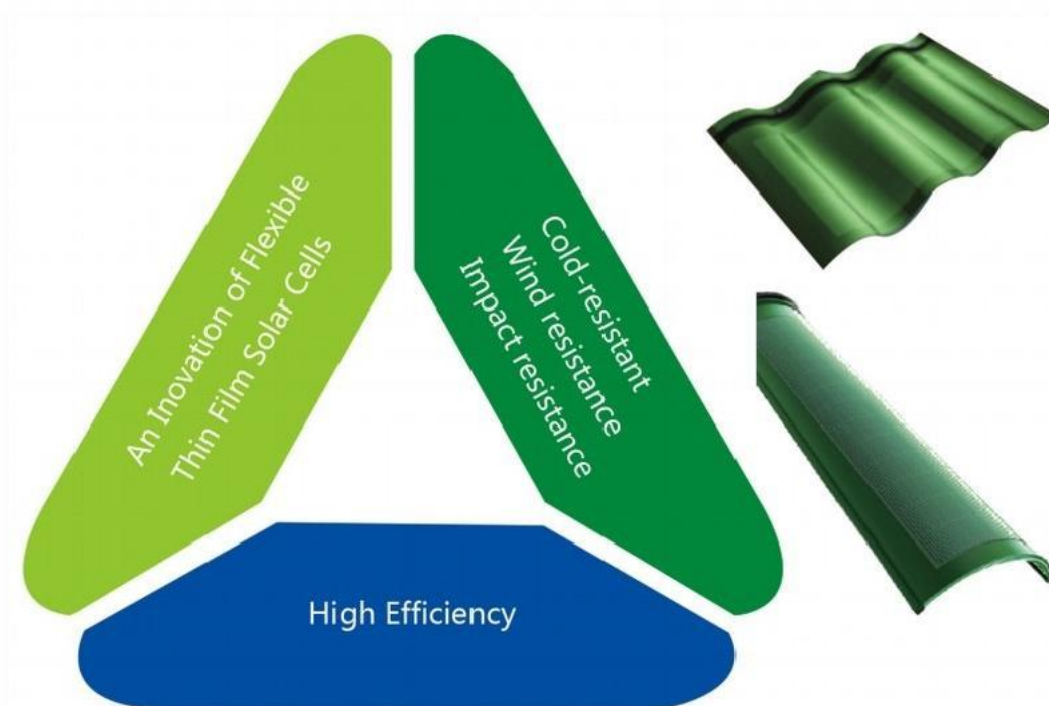
Technical Parameter			
Power Source	DC12V/24V		
Power	20W	30W	40W
Battery Type	Lithium battery,can be cycled for over 1500 times		
Color Tempreture	3000K-5700K		
Solar Panel Type	With minimum effect under lowlight conditions,flexible panels are integrated on the surface of the post.		
Controller	Mppt,automatic light,segmentation control,anti-reverse connection, anti-short circuit.		
Surface Treatment	Electrostatic spraying of metal powder(spray)		
Protection Dass	≥ IP65		
Operating Tempretu	-40℃~+50℃		
Lamp Life	>50000h		
Pole Size	R165mm*H4500~6000mm		

PRODUCT APPLICATION





→ CURVED-GLASS SOLAR TILE



Green Building Materials

Perfect integration of construction materials and solar power devices.

PRODUCT FEATURES

Green Construction Material

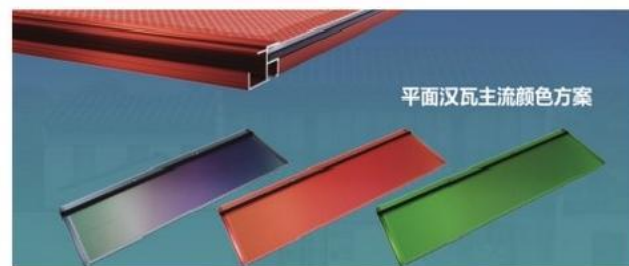
- 1、Attractive appearance
- 2、Waterproof
- 3、Shelter and Heat Insulation
- 4、Power Generation for Self-use and to Make Profits



Lenth	721(±1)mm
Width	500(±1)mm
Lenth of Contour Chamber	33(±1)mm
Thickness	8(±1)mm
Weight	6.5(±0.5)kg
Square Meter Weight	22(±0.5)kg
Power	30W (black)/25W (red) (±7%)
Square Meter Power	103W (black)/85W (red) (±7%)
Waterproof Rating	IP67
Fireproof Rating	A
Wind Protection Level	F
Load Rating	5400PA
Hail Test	Maximum diameter 25 mm, impact speed 23M/S
Operating Tempreture	-40℃~85℃
Linear Power Guarantee	25 years
Color Choice	Black/red/green



➔ FLAT SOLAR TILE



INOVATION OF CONSTRUCTION MATERIALS

Alternative of usual construction materials



HIGH EFFICIENCY

Minimum effect under lowlight conditions and high temperature environment adaptability



ATTRACTIVE APPERANCE

Beautiful appearance to light up your building



INTEGRATION

Comply with waterproof requirements of construction



Lenth	1460(±1)mm
Width	437(±1)mm
Lenth of Contour Chamber	21(±1)mm
Thickness	8(±1)mm
Weight	12(±0.5)kg
Square Meter Weight	24(±0.5)kg
Power	100W (black)/75W (red) (±7%)
Square Meter Power	200W (black)/150W (red) (±7%)
Waterproof Rating	IP67
Fireproof Rating	A
Wind Protection Level	F
Load Rating	5400PA
Hail Test	Maximum diameter 25 mm, impact speed 23M/S
Operating Tempreture	-40℃~85℃
Linear Power Guarantee	25 years
Color Choice	Black/red/green



PRODUCT FEATURES

IDEAL AND RELIABLE SOLUTION FOR EXTREME SITUATIONS.

Fire Rating:(A/B1)

Waterproof: Ip67 waterproof connector;U-shaped rubber, contains unique metal fixture,high water resistance

Lightning ProtectionThe use of insulated durable polymer materials,with lightning protection and waterproof dual functions.

Heat and Freeze Resistance:-40℃ to+85℃

Wind Pressure Resistance: Hurricane degree (high strength wind hook design,90kg wind resistance)

Hail Resistance:Class 4(ANSI FM 4473)

Pressure Resistance:5400Pa



ULTRA HIGH
FREQUENCY



ULTRA
SILENCE

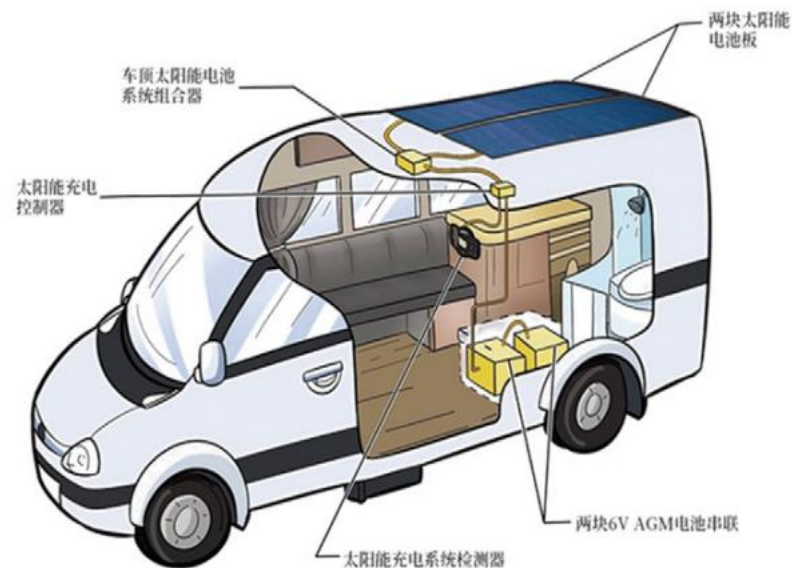


ULTRA
QUALITY

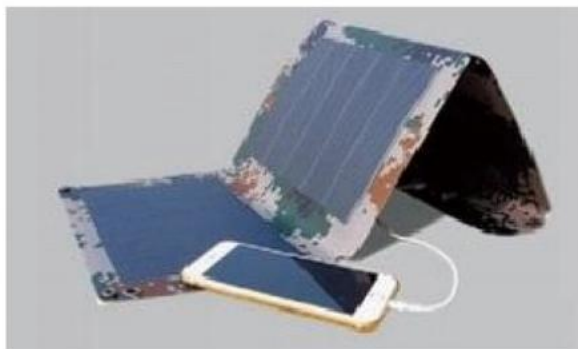


ULTRA POWER
EFFICIENT



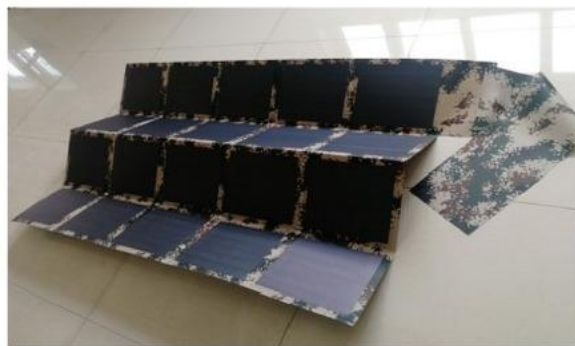


PORTABLE SOLAR PANEL



Portable Solar Panel-15W

Where there is light ,there is power.The portable panel is equipped with 5V/2A fast charge,high efficiency of power generation.It is made of semiconductor materials without light-induced degradation (SWE),and the light will improve its conversion efficiency,and the low light power generation performance is good.Up to aviation management standards,it can be carried wth your flight.



Portable Solar Panel-220W

Product feature includes:waterproof,mildew resistant, flame retardant,and easy to clean.It is easy to wipe and maintain.-20℃~50℃ high range temperature difference adaptation,it still can generate power whether in the desert area,or snow mountains.

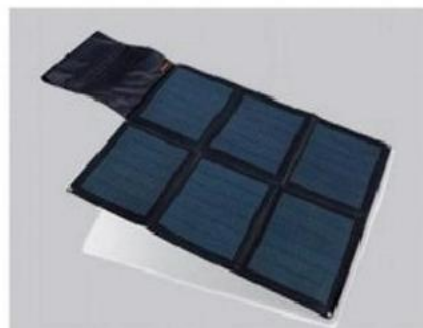
Portable Solar Panel-50W

High Power Generation



Power up to 50W,every drop of water and every bit of electricity is crucial in field environment.Portable solar panel can be used as SOS equipment to escort your outdoor journey.

Professtional Outdoor Equipment



New charging experience,no need to charge in advance, adventure immediately start,meet aviation management standards,can be safely carried on the plane.With mobile storage boxes and other conversion equipment,it can provide power support for your drones,cameras and other equipment,suitable for various professional electricity needs.

Portable Solar Panel-110W

Reliable Outdoor Equipment



This product is made of waterproof sunscreen fabric.It is easy to clean,wipe,and maintain.-20℃~50℃ temperature difference adaptaton,,it still can generate power whether in the desert area,or snow mountains.

Portable and Easy to Carry



Thickness of 1mm,it can be easily folded to 22mm,equivalent to the size of a magazine.

PRODUCT FEATURES

Portable Panel For Military Use



High Power: 15w-220W Solar power panel,

satisfy the need of quick charge

Thin: Minimum weight of 18g/W, portable and easy to carry

User-Friendly: Car charger USB output, suitable for various

electronic products

Rich application scenarios: can be used for off-grid systems scenarios

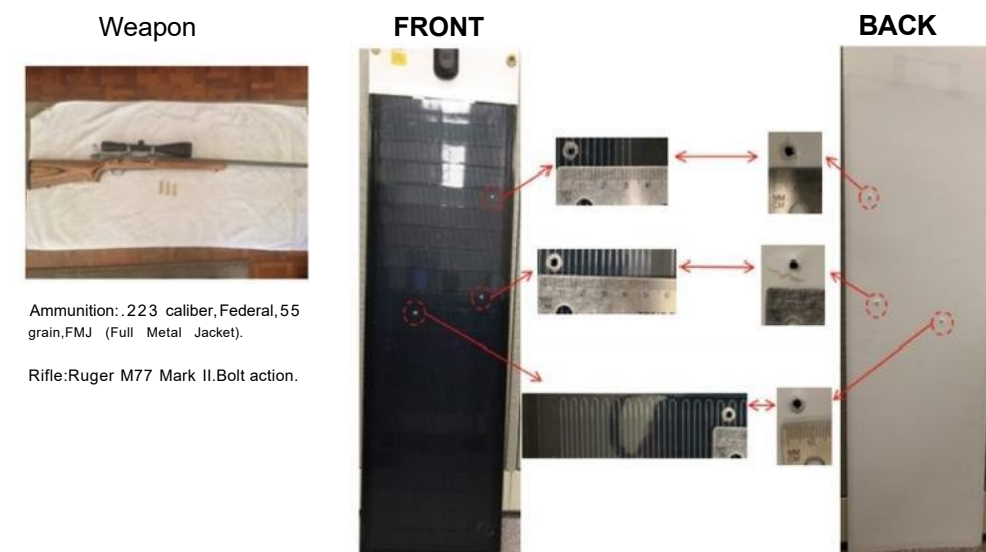
such as emergency rescue, outdoor exploration, camp building,

self-drive hiking, mountain area, pastoral areas, islands etc..

Weapon, Front and Back of Module:



Before and After Being Shot



Ammunition: .223 caliber, Federal, 55 grain, FMJ (Full Metal Jacket).

Rifle: Ruger M77 Mark II Bolt action.

Shot at 50 yards

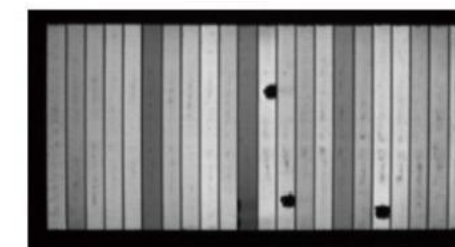
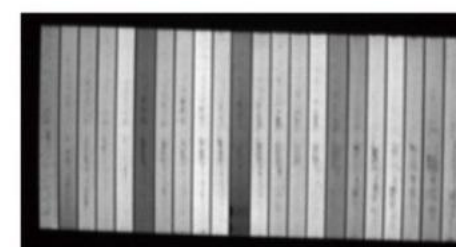
Before and After PV Performance:



Infrared Images and Electrical Performance

Before

After



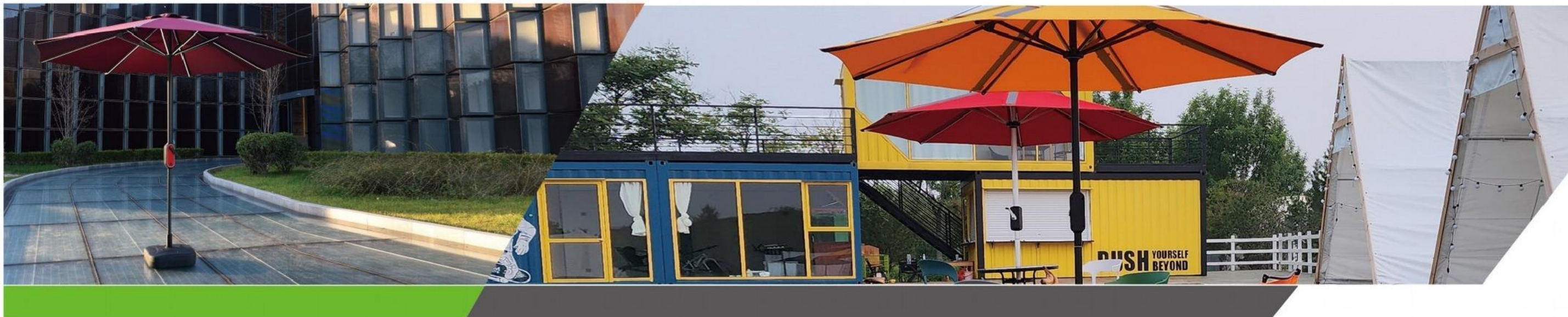
Efficiency: 15.8%
Maximum Power: 47.4W

Efficiency: 15.8%
Maximum Power: 47.4W



23456voltoae°101112131415

Same Power Output Before and After being Shot



MULTIFUNCTIONAL SOLAR UMBRELLA

Solar umbrella is a power generation umbrella based on CIGS cell technology, which not only has the basic functions of outdoor umbrellas for shading and rain shelter, but also for its surface layer of highly efficient flexible thin film cell. That makes it possible to generate power on both sunshine and cloudy days. Science and technology light up your life.



Attractive Appearance

The eight-sided shape makes it possible for dense expansion of multiple umbrellas.

UV Barrier

The surface of the umbrella adopts anti-fading treatment technology. The excellent quality makes it strong, durable, and colorfastness. The solar power umbrella can effectively resist the ultraviolet radiation, it can block 98% of UPF 40+UV.

Technology of Life

Interconnect integration technology of CIGS

The product adopts the leading thin film technology with the highest production and conversion efficiency, and has the technical advantages of weak light power generation, stable power rate, and non-light decay phenomenon. When the light environment is poor, it can still generate electricity sustainably and ensure the power supply.

SUPER LARGE ENERGY STORAGE HELPS COMMUNICATION



Storage: 115Wh, 31200mAh, large capacity of storage

Multiple charging ports: The frame integrates two USB ports, which can charge two mobile phones at the same time, and can also connect a variety of small household appliances

Standard charging interface: In special cases, it can be quickly charged through the standard DC interface

40/80W Solar power charging
High quality/yarn-dyed material which can, effective resistance to UV effective, waterproof, anti-fading treatment,

·Dual USB fast charge
·3W mAh battery
·Lasting power supply for digital products

·Bluetooth audio connection



PRODUCT FEATURES

Multiple Choice of Logo/Color/Design/Function



Patio Umbrella

Terminal charging of 138Wh,38400mAh
Large energy storage,and the solar umbrella integrated with 4 USB interface.It can be used for mobile phones and a variety of small household appliances at the same time.And the DC interface makes it possible for fast charge.



Red



Khaki



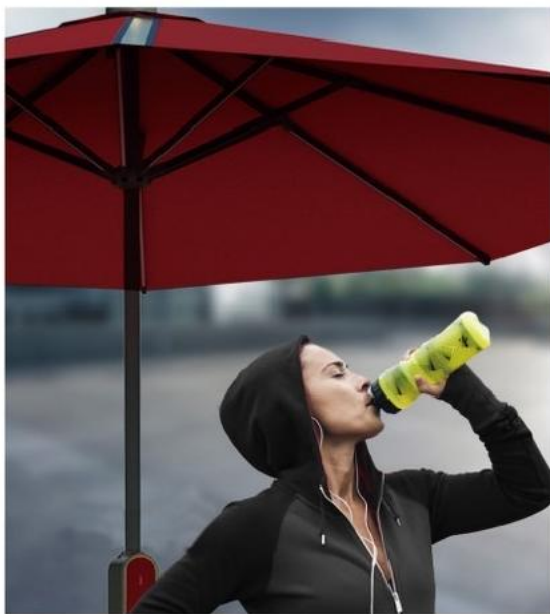
Dark Green



Type:8 ribs
Series Number:GH-S2308A02
Fabric:250g yarn-dyed I fabric
Cell:CIGS
Power:approx.40W/80W
Input:DC12.6V/2A*1(DC3.5*1.35mm)
Output:USB 5V/2.4A*2
Battery Storage:31200mAh
Sizer:approx.2.8m
Column Diameter:48mm
Weight:approx.12Kg(without base)
Base:Cistern
Height:approx.2.5m
Other Function:Bluetooth speaker
white warm light with
USB fast charge outlet

PRODUCT APPLICATION

Suitable for various scenarios,lighting up technological life anytime,anywhere



Municipal Facilities/Event Services
Brand Promotion



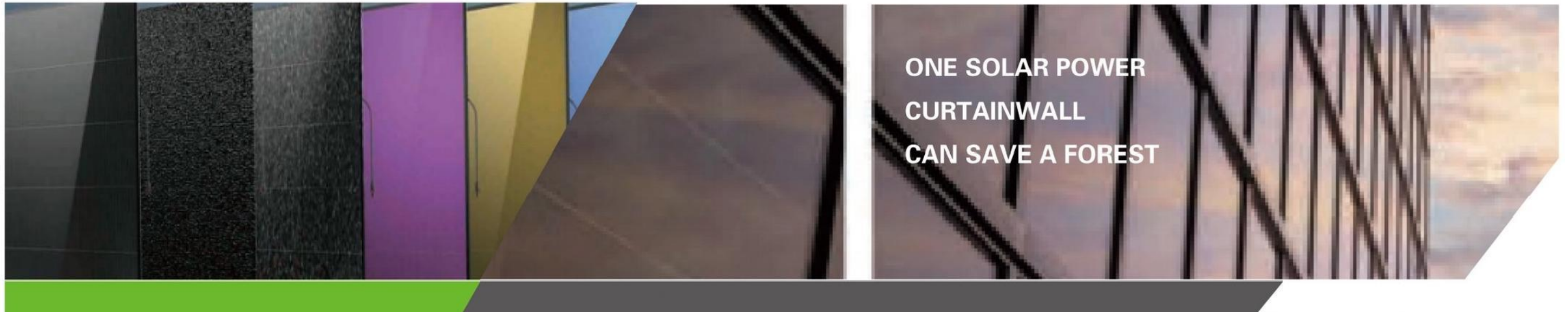
Outdoor Shops/Booth/Restaurant



Hotel/Resort



Villa/Court Yard/Park



THIN-FILM SOLAR CURTAIN WALL

The solar curtain wall products adopt the world's advanced glass-based CIGS thin film solar technology with both safety and power generation performance, which is a green solution for buildings.

TECHNICAL PARAMETER



Mechanical Specifications	Technical Drawings
Length 1182±1.5mm Width 752±1.5mm Thickness 15±0.2mm Weight 33.97kg Front plate 5mm ultra-white tempered glass (perforated) Battery Type CIGS (Cu (In, Ga) Se) Junction box Protection grade IP67, (60mm x 60mm x 12.5mm) Integrated junction box with one bypass diode Cable type 2.5mm² solar cable Cable connector MC4	
Electrical Parameters	Qualification and Certification
STC test conditions (1000 W/m², 25°C, AM 1.5 G spectrum) Power (P) [W] 140 Short-circuit current (Isc) [A] 1.72 Open-circuit voltage (Voc) [V] 108.80 Current at Power [A] 1.63 Voltage at Power [V] 86.10 Rated conversion efficiency [%] 15 Temperature coefficient at 1000 W/m² Pmax [%/°C] -0.20 Voc [%/°C] -0.01 Vmp [%/°C] -0.24 NOCT Module rated operating temperature [°C] 42 Integrated system feature parameters Maximum system [V] 1000(IEC) Protection Grade IP67 Maximum reverse [A] 4 Fire-proof rating A (GB8624) Snow load [Pa] 6000 Lower limit snow load [Pa] 40°C to +85°C Wind load [Pa] 6000 (-40°F to +185°F) Total Weight (kg) 740 The number of modules 20 in each box Packing Box Information Outer dimension (including Length (1310mm) width (140mm) height (100mm)) Total Weight (kg) 740 The number of modules 20 in each box	

Mechanical Specifications	Technical Drawings
Length 1182±1.5mm Width 752±1.5mm Thickness 15±0.2mm Weight 33.97kg Front plate 5mm ultra-white color coated tempered glass (perforated) Battery Type CIGS (Cu (In, Ga) Se) Junction box Protection grade IP67, (60mm x 60mm x 12.5mm) Integrated junction box with one bypass diode Cable type 2.5mm² solar cable Cable connector MC4	
Electrical Parameters	Qualification and Certification
STC test conditions (1000 W/m², 25°C, AM 1.5 G spectrum) Power (P) [W] 130 Short-circuit current (Isc) [A] 1.65 Open-circuit voltage (Voc) [V] 108.80 Current at Power [A] 1.50 Voltage at Power [V] 86.80 Rated conversion efficiency [%] 14 Temperature coefficient at 1000 W/m² Pmax [%/°C] -0.20 Voc [%/°C] -0.01 Vmp [%/°C] -0.21 NOCT Module rated operating temperature [°C] 42 Integrated system feature parameters Maximum system [V] 1000(IEC) Protection Grade IP67 Maximum reverse [A] 4 Fire-proof rating A (GB8624) Snow load [Pa] 6000 Lower limit snow load [Pa] 40°C to +85°C Wind load [Pa] 6000 (-40°F to +185°F) Total Weight (kg) 740 The number of modules 20 in each box Packing Box Information Outer dimension (including Length (1310mm) width (140mm) height (100mm)) Total Weight (kg) 740 The number of modules 20 in each box	

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Power-added efficiency $\geq 5W$
Low Temperature Coefficient

Perfect Solution for Visual Enjoyment

Standardization Module Design and Easy Installation

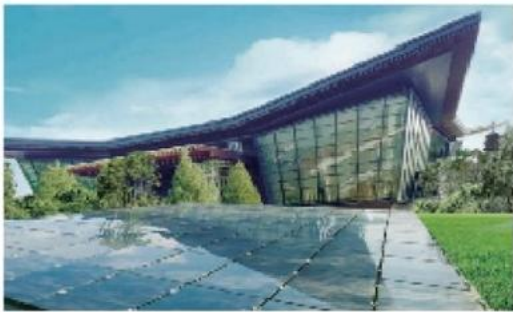
100% of Solar Curtain Wall pass EL Test

PRODUCT APPLICATION

Lucid waters and lush mountains are invaluable assets.As an important part of the national strategy,low energy consumption,energy saving,environmental protection,high-tech integrated building will be the future of China's building development trend.



THALHEIM BAPV-GERMANY



APEC



THALHEIM BIPV-GERMANY



HE FEI ZHOU YICHUN MEMORIAL HALL-CHINA



G20 SUMMIT



SHANG HAI HU PAN JIA YUAN-CHINA



HE YUAN OCT-CHINA



HAN DAN FENG HUANG ECOLOGICAL PARK-CHINA

INSTALLATION SEQUENCY OF THIN-FILM CURTAIN WALL

