

产品规格书

Product Specification

产品名称 **Product Name:** 轻质、高效、可缠绕式 异质结太阳能组件

High-efficiency, Light-weight & Wrapped HJT Solar Panel

产品型号 **Product Number:** GH-Flex-SHJ-XXX

芯片类型 **Cell Type:** 高效异质结太阳能电池 High-efficiency HJT Solar Cell

异质结太阳能电池: 薄膜+单晶技术优势的结合体, 柔性/弱光性+高效率

HJT Solar Technology: An integration of technical advantages from Thin Film Solar Cells and Mono-crystalline Cells

【产品特征 Features】

- 采用高效异质结单晶太阳能电池，电池片效率 24%以上，良好的弱光响应和优异的功率温度系数，功率增益 5%-10%以上。

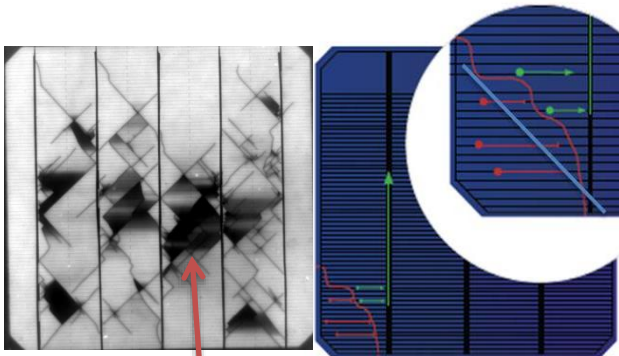
High-efficiency Hetero-junction Solar Cells (efficiency \geq 24%) are laminated inside with excellent weak-light performance and superior Power Temperature Co-efficient, which enable the solar panel to achieve 5%-10% more power.

- 独特的 Super-wire 柔性导线互联技术，优良的抗隐裂性能。极端条件下非粉碎性破坏，太阳能组件依旧发电工作。

Unique Super-wire Flexible Interconnection Technology ensures an excellent ability to resist cell crack and impact force. Even under extreme conditions, solar cells and the panel still generate power as long as they are not destructively damaged.

常规焊带互联

Conventional PV Ribbon Connection

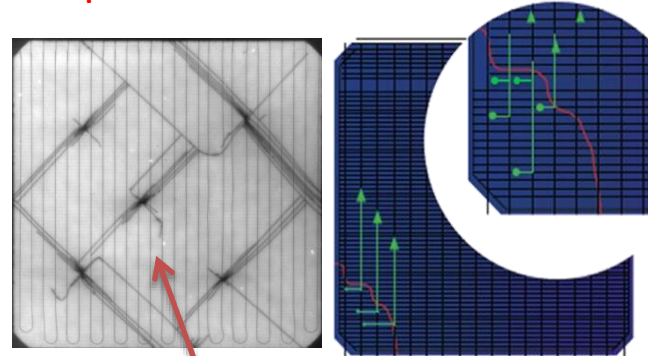


(黑色为失效区域，无法发电)

(Black failure area, no power output)

Super-wire 柔性导线互联

Super-wire Flexible Interconnection



(暴力破坏后，几乎无失效区域)

(Almost No failure area)

- 内部独特的 6~10 路并联设计，至少 2-4 路始终处于太阳光照射之中，提供稳定的电压输出，充电和储能利用效率高；

Unique design of 6~10 circuits in parallel connection ensures semi-cylinder areas are always faced to the sun to achieve stable voltage and high-efficiency power storage.

- 可适配直径 178mm 及以上直径的灯杆，充分利用灯柱长度空间，1.33 米/节，17.7V 或 35.4V/节，可多节并联、串联，充分利用灯杆高度，灵活匹配系统功率及电压；

The solar panels are applicable for poles with diameter \geq 178mm. Each flexible HJT solar panel is 1.33 meters long and its rated V_{mp} is 17.7V or 35.4V. One or more lengths can be installed to a pole to make the fullest use of pole's length to achieve the highest power.

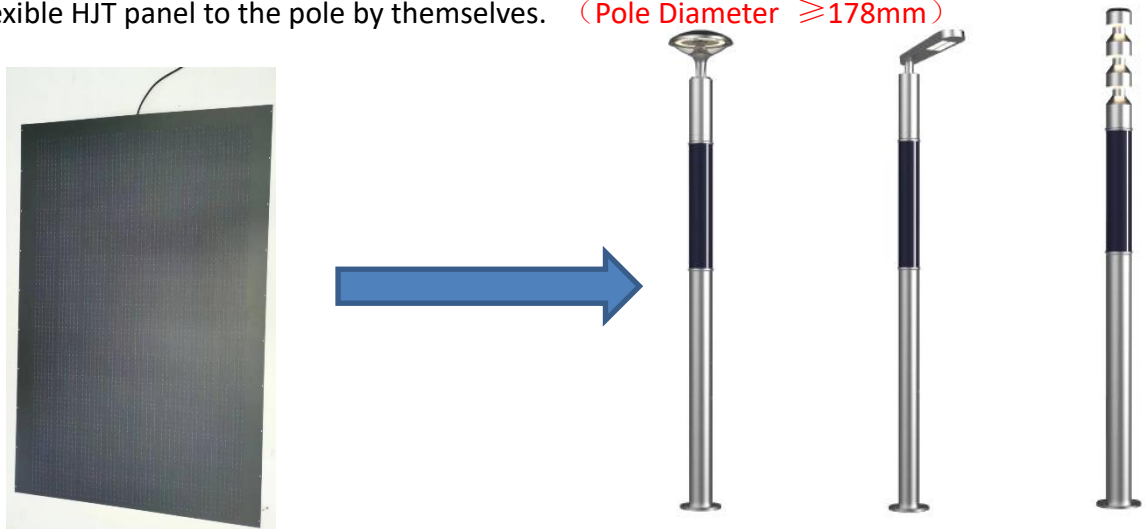
- 双面涂覆复合材料 (FFC/PET/FFC)，抗紫外老化，透过率 \geq 90%，环境适应性强，湿

热、盐雾；缠绕垂直安装，抗台风、风沙、积雪，不易沉积灰尘，降低组件清理频率；FFC/PET/FFC thin film (Transparency $\geq 90\%$) is laminated with good abilities to resist UV, low and high temperature, heat, humidity and salt spray. Vertical installation can protect the solar panel from dusts, storms, sands and snows, and reduce solar panel's cleaning frequency.

【安装方式 Installation】

方式 1: 仅供应太阳能组件，客户自行安装和锚固组件；(灯杆直径 $\geq 178\text{mm}$)

Type 1: We supplies solar panels only for assigned diameters, and customers will directly install the flexible HJT panel to the pole by themselves. (Pole Diameter $\geq 178\text{mm}$)



方式 2: 供应已安装在 PVC 套筒上的太阳能组件，带光伏线；客户直接将该套筒组件套在灯杆上，使用卡箍固定。(PVC 筒标准直径 180mm, 200mm, 250mm, 315mm)

Type 2: We supplies the PVC cylindrical solar panels. Customers will directly put the cylinder through the pole and use fastenings to fix the cylinder to the pole. (Standard PVC Diameter:180mm, 200mm, 250mm ad 315mm)



【典型规格 Typical Specifications】

方式 1: 可卷绕式异质结太阳能组件 Type 1: Flexible HJT Solar Panel

组件规格 Model No.	GH-Flex-SHJ-120		GH-Flex-SHJ-141	GH-Flex-SHJ-161		GH-Flex-SHJ-201	
适配灯杆直径 Applicable for Pole Diameter (mm)	180~200mm		210~230mm	240~250mm		300~315mm	
峰值功率 Pmax (W, ±5%)	120		141	161		201	
峰值功率电压 Vmp (V)	17.7	35.4	17.7	17.7	35.4	17.7	35.4
峰值功率电流 Imp (A)	6.81	3.405	7.95	9.09	4.545	11.36	5.68
开路电压 Voc (V)	22.14	44.28	22.14	22.14	44.28	22.14	44.28
短路电流 Isc (A)	7.35	3.67	8.57	9.80	4.9	12.25	6.125
组件尺寸 Dimension(mm)	1330×571/633×1.5		1330×664/697/ 729×1.5	1330×792×1.5		1330×949×1.5	
组件重量 Panel Weight	1.2 Kg/1.3Kg		1.4-1.6Kg	1.7Kg		2.0Kg	
工作温度 Working Temperature	-40°C~85°C						
峰值功率温度系数 Power Temp Co-efficient (%/°C)	-0.27						
短路电流温度系数 Current Co-efficient (%/°C)	0.04						
开路电压温度系数 Voltage Co-efficient (%/°C)	-0.26						

方式 2: 套筒式异质结太阳能组件 Type 2: Cylindrical HJT Solar Panel with PVC-U Tube

套筒外径 Tube OD	套筒壁厚 Tube Wall Thickness	套筒内径 Tube ID	套筒+光伏组件 外径 Cylinder OD	套筒长度 Cylinder Length	功率/电压 PV Power/Voltage	重量 Weight
180mm	3mm	174mm	185mm	1330mm	120W (17.7V/ 35.4V)	4.8Kg
200mm	4mm	192mm	203mm	1330mm	120W (17.7V/ 35.4V)	5.9Kg
250mm	5mm	240mm	253mm	1330mm	161W (17.7V/ 35.4V)	7.8Kg
315mm	5mm	305mm	318mm	1330mm	201W (17.7V/ 35.4V)	18Kg

备注: • 光伏线长标配 1 米; PV Cable Length: 1 meter

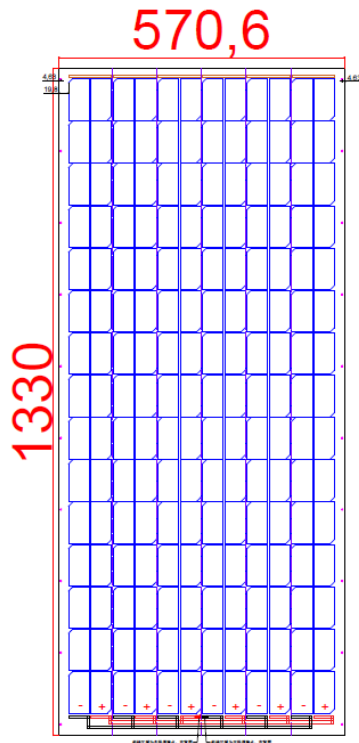
• 卡箍由需方自行设计、加工; 供方可提供相应图纸供参考

Fittings to fix the cylinder to the pole shall be prepared by the customer. We have drawings for your reference.

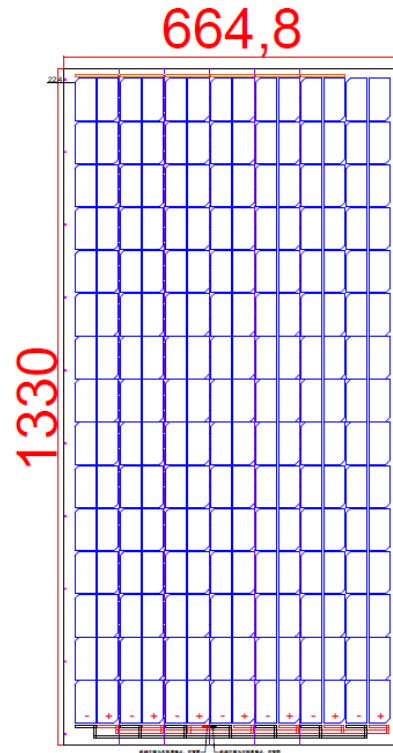
其他灯杆直径, 可定制!

HJT solar panels for other pole diameters can be specially-designed as per requirements.

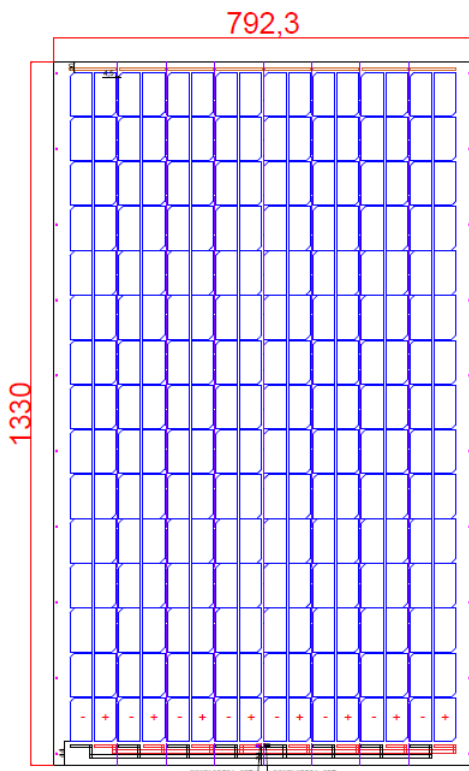
【组件示意图 Drawing】



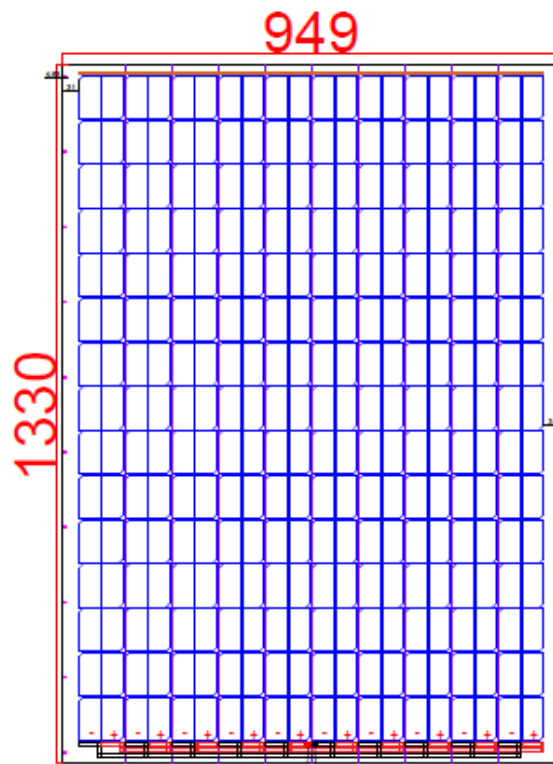
6 Circuits in Parallel 6路并联
GH-HJT-W-120 for ϕ 180-200mm



7 Circuits in Parallel 7路并联
GH-HJT-W-114 for ϕ 210/220/230mm



8 Circuits in Parallel 8路并联
GH-HJT-W-161 for ϕ 250mm



10 Circuits in Parallel 10路并联
GH-HJT-W-201 for ϕ 300mm

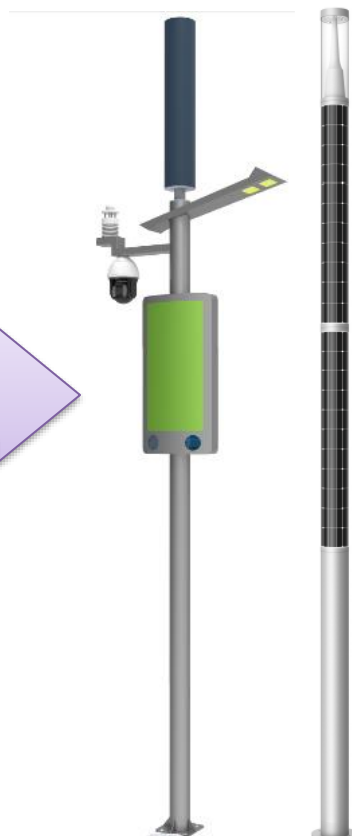
【典型应用 Typical Application】



庭院灯
Garden
Lighting



路灯
Street
Lighting



【典型案例 Typical Installation】

