

**核心优势**  
Main Advantages

为建筑赋能  
让地球更美 >

Power the building, beautify the earth



**安全**  
Safety

**A级防火认证 绿色无毒**

Class A fire rating, Safe and non-toxic

无毒释放

Non-toxic release

机械载荷  $\geq 3600\text{Pa}$  抗风雪踩踏  
Mechanical load  $\geq 3600\text{Pa}$   
to resist wind and snow



**环保**  
Environment

**隔热保温 隔声降噪 低碳排放**

Thermal insulation, sound insulation, and noise reduction, Low carbon emissions

中空设计 隔热保温

Hollow design for thermal insulation

天然的 BIPV 建材  
Suitable for BIPV building materials



**美观**  
Aesthetics

**色彩丰富 透光度可调 图案可定制**

Rich and beautiful colors  
Adjustable transparency  
Customizable patterns

300+ 种颜色可选

Available in over 300 different colors

透光度 0~60% 可选  
0-60% adjustable transparency



**发电**  
Power Generation

**发电量大 优势明显**

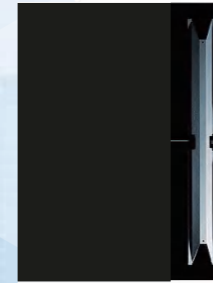
Great power generation  
Obvious advantages

功率温度系数低

潮湿炎热天气  
更具发电优势

Low power temperature parameters  
More advantageous for power generation in humid and hot weather

**产品系列**  
Product Series



**标准款系列**  
Standard Series

稳重大气  
发电量佳

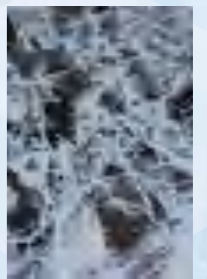
Modest and decent  
Good power generation



**炫彩系列**  
Colored Series

色彩丰富  
接受定制

Various and customized



**仿石材系列**  
Stone Imitation Series

纹理自由  
心随所欲

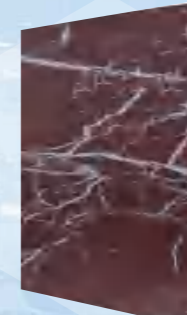
Subtle and steady  
Nature-friendly



**透光系列**  
Transparent Series

活泼好看  
整洁优雅

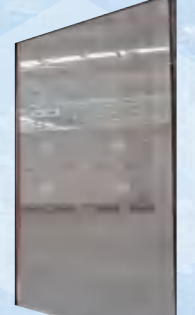
Lively and good-looking  
Neat and elegant



**三玻系列**  
Triple Glass Series

防风抗压  
安全可靠

Windproof and pressure resistant  
safe and reliable



**中空系列**  
Hollow Series

节能保温  
隔声降噪

Energy-saving and heat-preserved  
Sound insulating and noise reduction

## 应用场景及产品性能 Usage Scenarios and Product Performance

### 标准款系列 Standard Series

低调优雅  
发电量大

Modest and decent  
Great power generation



- IEC/EN 61215-2/61730
- DIN V VDE 0126-3, DIN V VDE V 0126-5
- 安全等级: Class II
- 防火等级 Class A

适用于户用屋顶、厂房屋顶和立面、地面电站、停车棚、公交站台等。  
Suitable for household roofs, factory roofs and facades, ground power plants, parking sheds, bus stops, etc.



### 温度系数 Temperature parameters

模块工作温度 NMOT	20±2°C
最大功率温度系数 Pmax	-0.32%/°C
开路电压温度系数 Voc	-0.17%/°C
短路电流温度系数 Isc	0%/°C

### 衰减系数 Attenuation parameters

首年衰减 First year attenuation	5%
次年及以后 The following year and beyond	0.4%

### 电性能参数 (STC) Signal-to-transmission parameters

型号 model	CIGS-TF-135W (*)	CIGS-TF-140W (*)	CIGS-TF-145W (*)	CIGS-TF-150W (*)
最大额定功率 Pmax (W)	135	140	145	150
功率公差 %	0	0	0	0
最大功率点的工作电压 Vmpp (V)	57.83	59.79	61.76	63.72
最大功率点的工作电流 Imp (A)	2.34	2.34	2.35	2.36
开路电压 Voc (V)	76.9	78.35	79.79	81.24
短路电流 Isc (A)	2.62	2.63	2.64	2.64
组件效率 Module efficiency (%)	12.8	13.3	13.7	14.2

STC (标准测试条件): 辐照度 Irradiance 1000W/m<sup>2</sup>, 电池温度 Cell temperature 25°C, 大气质量 AM1.5

(\*) 代表实际产地 Representing actual production place

### 工作参数 Operation parameters

最大系统电压 Maximum System Voltage	1000V
逆电流承受阈值 Reverse current withstand threshold	4.0A
工作温度 Operation temperature	-40°C ~ +85°C
最大静态载荷 Maximum static load	3600Pa(含背轨) 2400Pa(不含背轨)
冰雹测试 Hail test	通过 Pass
防护等级 Protection rating	IP67

### 机械参数 Mechanical parameters

产品尺寸 Product size	1587mm*664 mm
产品厚度 Product thickness	5.8mm
封装材料后产品厚度 Product thickness after packaging	18.8mm (含接线盒厚度; 一体式背接接线盒) Including the thickness of the junction box; Integrated back-wiring junction box
面积 Area	1.05m <sup>2</sup>
重量 Weight	17kg
接线盒 Junction box	分体式背接 Split Back Connection
产品结构 Product structure	3.2mm 超白钢化彩釉玻璃 Ultra white tempered colored glazed glass+EVA/POE/PVB+2.1mm 发电玻璃 Power generation glass
背轨 Backtrack	热镀锌板 Hot dip galvanized sheet

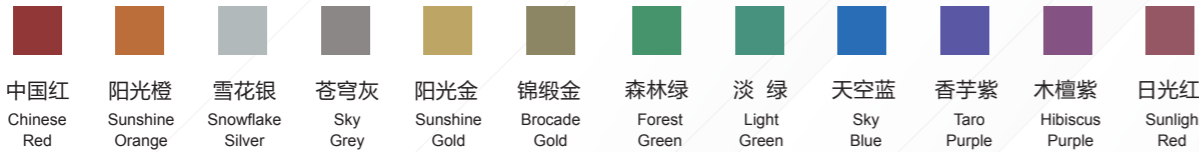
## 炫彩系列 Colored Series

色彩丰富  
接受定制

Various and customized

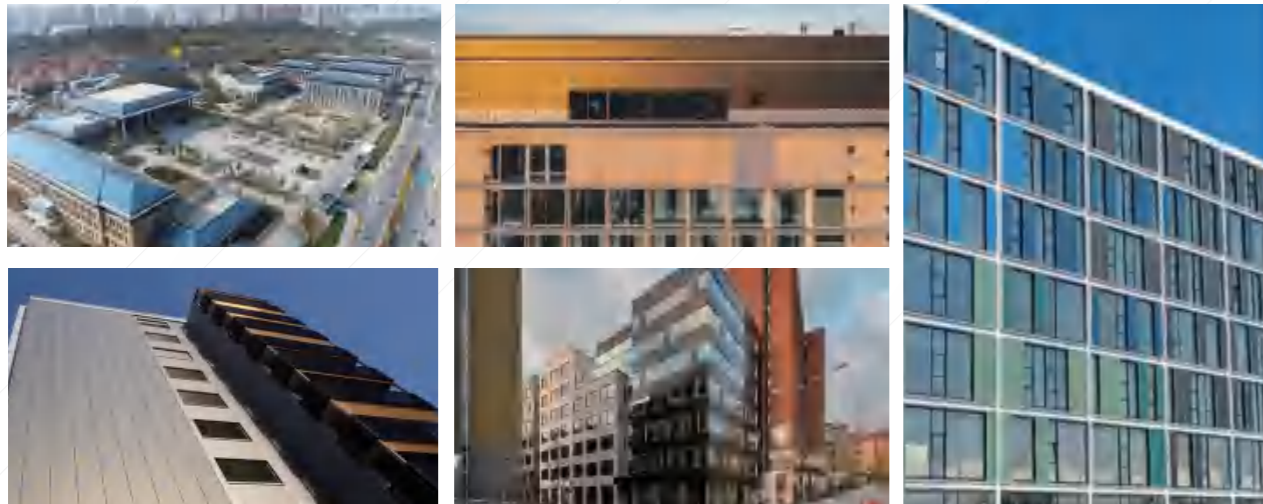


- IEC/EN 61215-2/61730
- DIN V VDE 0126-3, DIN V VDE V 0126-5
- 安全等级: Class II
- 防火等级 Class A



适用于建筑立面、廊道、观景台、防滑地面等，色彩丰富。

Suitable for building facades, corridors, observation platforms, anti slip floors, etc., with various colors.



## 应用场景及产品性能 Usage Scenarios and Product Performance

### 温度系数 Temperature parameters

模块工作温度 NMOT	20±2°C
最大功率温度系数 Pmax	-0.32%/°C
开路电压温度系数 Voc	-0.17%/°C
短路电流温度系数 Isc	0%/°C

### 衰减系数 Attenuation parameters

首年衰减 First year attenuation	5%
次年及以后 The following year and beyond	0.4%

### 电性能参数 (STC)

### Signal-to-transmission parameters

型号 model	CIGS-TG(*) - 中国红 Chinese Red ( * )	CIGS-TG(*) - 阳光金 Sunlight Gold ( * )	CIGS-TG(*) - 森林绿 Forest Green ( * )	CIGS-TG(*) - 天空蓝 Sky Blue ( * )
最大额定功率 Pmax ( W )	90	100	110	120
功率公差 Power tolerance ( % )	-1	-1	-1	-1
最大功率点的工作电压 Vmpp ( V )	60	60	60	60
最大功率点的工作电流 Impp ( A )	1.582	1.761	1.941	2.064
开路电压 Voc ( V )	76.5	76.7	76.9	77.5
短路电流 Isc ( A )	1.82	2.006	2.192	2.31

STC ( 标准测试条件 ) : 辐照度 Irradiance 1000W/m<sup>2</sup>, 电池温度 Cell temperature 25°C, 大气质量 AM1.5

( \* ) 代表实际产地 Representing actual production place

### 工作参数 Operation parameters

最大系统电压 Maximum System Voltage	1000V
逆电流承受阈值 Reverse current withstand threshold	4.0A
工作温度 Operation temperature	-40°C~ +85°C
最大静态载荷 Maximum static load	3600Pa (含背轨) 2400Pa (不含背轨)
冰雹测试 Hail test	通过 Pass
防护等级 Protection rating	IP67

### 机械参数 Mechanical parameters

产品尺寸 Product size	1587mm*664 mm
产品厚度 Product thickness	5.8mm
封装材料后产品厚度 Product thickness after packaging	18.8mm (含接线盒厚度; 一体式 背接接线盒) Including the thickness of the junction box; Integrated back- wiring junction box
面积 Area	1.05m <sup>2</sup>
重量 Weight	17kg
接线盒 Junction box	分体式背接 Split Back Connection
产品结构 Product structure	3.2mm 超白钢化彩釉玻璃 Ultra white tempered colored glazed glass+EVA/POE/PVB+2.1mm 发 电玻璃 Power generation glass
可选颜色 Color	中国红、阳光金、天空蓝 Chines Red, Sunlight Gold, Sky Blue

## 仿瓦片 / 仿石材系列 Stone Imitation Series

纹理自由  
心随所欲  
Subtle and steady  
Nature-friendly



- IEC/EN 61215-2/61730
- DIN V VDE 0126-3, DIN V VDE V 0126-5
- 安全等级: Class II
- 防火等级 Class A



可依据设计需求选择特定的图案。  
Specific patterns can be customized



## 应用场景及产品性能 Usage Scenarios and Product Performance

### 温度系数 Temperature parameters

模块工作温度 NMOT	20±2°C
最大功率温度系数 Pmax	-0.32%/°C
开路电压温度系数 Voc	-0.17%/°C
短路电流温度系数 Isc	0%/°C

### 衰减系数 Attenuation parameters

首年衰减 First year attenuation	5%
次年及以后 The following year and beyond	0.4%

### 电性能参数 (STC)

### Signal-to-transmission parameters

型号 model	CIGS-TC-100W (*)	CIGS-TC-120W (*)
最大额定功率 Pmax (W)	100	120
功率公差 Power tolerance (%)	-1	-1
最大功率点的工作电压 Vmpp (V)	60	60
最大功率点的工作电流 Impp (A)	1.76	2.06
开路电压 Voc (V)	76.7	77.5
短路电流 Isc (A)	2	2.31

STC (标准测试条件): 辐照度 Irradiance 1000W/m<sup>2</sup>, 电池温度 Cell temperature 25°C, 大气质量 AM1.5

(\*) 代表实际产地 Representing actual production place

### 工作参数 Operation parameters

最大系统电压 Maximum System Voltage	1000V
逆电流承受阈值 Reverse current withstand threshold	4.0A
工作温度 Operation temperature	-40°C ~ +85°C
最大静态载荷 Maximum static load	3600Pa (含背轨) 2400Pa (不含背轨)
冰雹测试 Hail test	通过 Pass
防护等级 Protection rating	IP67

### 机械参数 Mechanical parameters

产品尺寸 Product size	1587mm*664 mm
产品厚度 Product thickness	5.8mm
封装材料后产品厚度 Product thickness after packaging	18.8mm (含接线盒厚度; 一体式背接接线盒) Including the thickness of the junction box; Integrated back-wiring junction box
面积 Area	1.05m <sup>2</sup>
重量 Weight	17kg
接线盒 Junction box	分体式背接 Split Back Connection
产品结构 Product structure	3.2mm 超白钢化彩釉玻璃 Ultra white tempered colored glazed glass+EVA/POE/PVB+2.1mm 发电玻璃 Power generation glass
可选颜色 Color	大理石、瓦片、迷彩等 Marble, Tiles, Camouflage, etc.

## 透光系列 Transparent Series

活泼好看  
整洁优雅

Lively and good-looking  
Neat and elegant



- IEC/EN 61215-2/61730
- DIN V VDE 0126-3, DIN V VDE V 0126-5
- 安全等级: Class II
- 防火等级 Class A



## 应用场景及产品性能 Usage Scenarios and Product Performance

### 温度系数 Temperature parameters

模块工作温度 NMOT	20±2°C
最大功率温度系数 Pmax	-0.32%/°C
开路电压温度系数 Voc	-0.17%/°C
短路电流温度系数 Isc	0%/°C

### 衰减系数 Attenuation parameters

首年衰减 First year attenuation	5%
次年及以后 The following year and beyond	0.4%

### 电性能参数 (STC)

### Signal-to-transmission parameters

型号 model	CIGS-TT-105W (*)	CIGS-TT-80W (*)
透光率 %	20%	40%
最大额定功率 Pmax (W)	105	80
功率公差 Power tolerance (%)	-1	-1
最大功率点的工作电压 Vmpp (V)	61.82	61.51
最大功率点的工作电流 Impp (A)	1.71	1.28
开路电压 Voc (V)	78.82	78.42
短路电流 Isc (A)	2.11	1.58

STC (标准测试条件): 辐照度 Irradiance 1000W/m<sup>2</sup>, 电池温度 Cell temperature 25°C, 大气质量 AM1.5

(\*) 代表实际产地 Representing actual production place

### 工作参数 Operation parameters

最大系统电压 Maximum System Voltage	1000V
逆电流承受阈值 Reverse current withstand threshold	4.0A
工作温度 Operation temperature	-40°C ~ +85°C
最大静态载荷 Maximum static load	2400Pa
冰雹测试 Hail test	通过 Pass
防护等级 Protection rating	IP67

### 机械参数 Mechanical parameters

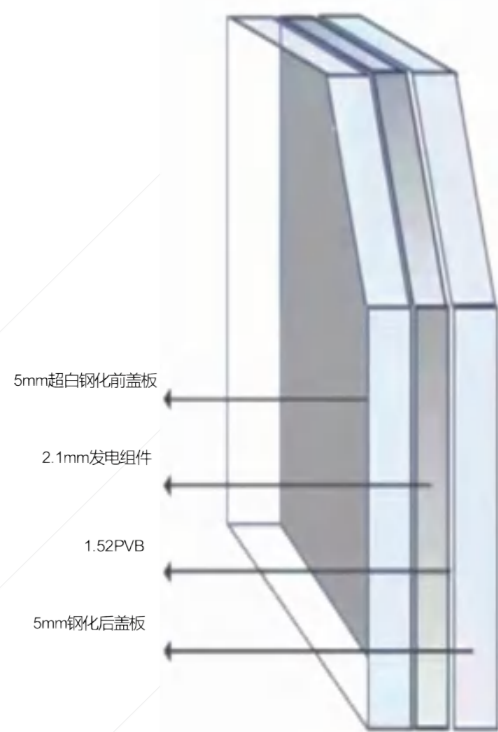
产品尺寸 Product size	1587mm*664 mm
产品厚度 Product thickness	5.8mm
封装材料后产品厚度 Product thickness after packaging	18.8mm (含接线盒厚度) Including the thickness of the junction box;
面积 Area	1.05m <sup>2</sup>
重量 Weight	14kg
接线盒 Junction box	分体式背接 Split Back Connection
产品结构 Product structure	3.2mm 超白钢化彩釉玻璃 Ultra white tempered colored glazed glass+EVA/POE/PVB+2.1mm 发电玻璃 Power generation glass

## 三玻系列 Triple Glass Series

防风抗压  
安全可靠  
Windproof and pressure resistant, safe and reliable



- IEC/EN 61215-2/61730
- DIN V VDE 0126-3, DIN V VDE V 0126-5
- 安全等级: Class II
- 防火等级 Class A



可依据设计需求选配产品厚度, 5mm、6mm、8mm、10mm; 可选择不同颜色、图案、透光度; 可根据设计要求定制尺寸, 请联系我们。

Product thickness can be selected according to design requirements, including 5mm, 6mm, 8mm, and 10mm; Can choose different colors, patterns, and light transmittance; Customized sizes can be made according to design requirements. Please feel free to contact us.

## 应用场景及产品性能 Usage Scenarios and Product Performance

### 温度系数 Temperature parameters

模块工作温度 NMOT	20±2°C
最大功率温度系数 Pmax	-0.32%/°C
开路电压温度系数 Voc	-0.17%/°C
短路电流温度系数 Isc	0%/°C

### 衰减系数 Attenuation parameters

首年衰减 First year attenuation	5%
次年及以后 The following year and beyond	0.4%

### 电性能参数 (STC)

### Signal-to-transmission parameters

型号 model	CIGS-TS-120W (*)	CIGS-TS-125W (*)	CIGS-TS-130W (*)	CIGS-TS-135W (*)
最大额定功率 Pmax (W)	120	125	130	135
功率公差 Power tolerance (%)	-1	-1	-1	-1
最大功率点的工作电压 Vmpp (V)	56.67	58.89	61.02	63.08
最大功率点的工作电流 Impp (A)	2.12	2.12	2.13	2.14
开路电压 Voc (V)	75.36	77.17	78.83	80.43
短路电流 Isc (A)	2.38	2.39	2.39	2.63

STC (标准测试条件): 辐照度 Irradiance 1000W/m<sup>2</sup>, 电池温度 Cell temperature 25°C, 大气质量 AM1.5

(\*) 代表实际产地 Representing actual production place

### 工作参数 Operation parameters

最大系统电压 Maximum System Voltage	1000V
逆电流承受阈值 Reverse current withstand threshold	4.0A
工作温度 Operation temperature	-40°C ~ +85°C
最大静态载荷 Maximum static load	5400Pa
冰雪测试 Hail test	通过 Pass
防护等级 Protection rating	IP67

### 机械参数 Mechanical parameters

产品尺寸 Product size	1587mm*664 mm
产品厚度 Product thickness	13.6mm
面积 Area	1.05m <sup>2</sup>
重量 Weight	35kg
接线盒 Junction box	笔形接线盒 Pen Split Type Junction Box
产品结构 Product structure	5mm 超白钢化 Ultra white toughened glass+EVA/POE/PVB+2.1mm 发电玻璃 Power generation glass+EVA/POE/PVB+5mm 钢化 toughened glass
可选颜色 Color	Customized

## 应用场景及产品性能 Usage Scenarios and Product Performance

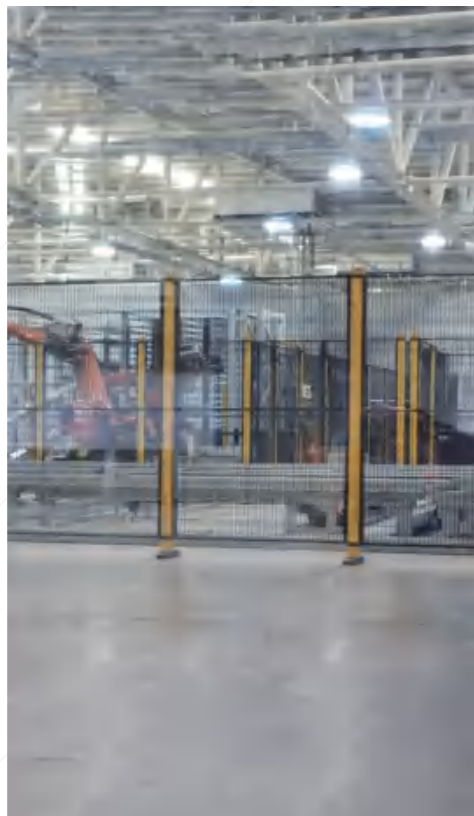
### 中空透光系列 Hollow Series

#### 节能保温 隔热降噪

Energy-saving and  
heat-preserved  
Sound insulating and noise  
reduction



- IEC/EN 61215-2/61730
- DIN V VDE 0126-3, DIN V VDE V 0126-5
- 安全等级: Class II
- 防火等级 Class A



适用于建筑幕墙、平开窗、采光顶等，  
透光度 0~60% 可调，保温隔热，隔  
声降噪

Suitable for building curtain walls,  
casement windows, daylighting roofs,  
etc., with adjustable transparency  
of 0-60%, thermal insulation, sound  
insulation, and noise reduction.

#### 温度系数

#### Temperature parameters

模块工作温度 NMOT	20±2°C
最大功率温度系数 Pmax	-0.32%/°C
开路电压温度系数 Voc	-0.18%/°C
短路电流温度系数 Isc	0%/°C

#### 衰减系数

#### Attenuation parameters

首年衰减 First year attenuation	5%
次年及以后 The following year and beyond	0.4%

#### 电性能参数 (STC)

#### Signal-to-transmission parameters

型号 model	CIGS-TI-105W (*)	CIGS-TI-80W (*)
透光率 %	20%	40%
最大额定功率 Pmax (W)	105	80
功率公差 Power tolerance (%)	-1	-1
最大功率点的工作电压 Vmpp (V)	61.82	61.51
最大功率点的工作电流 Impp (A)	1.71	1.28
开路电压 Voc (V)	78.82	78.42
短路电流 Isc (A)	2.11	1.58

STC (标准测试条件): 辐照度 Irradiance 1000W/m<sup>2</sup>, 电池温度 Cell temperature 25°C, 大气质量 AM1.5

(\*) 代表实际产地 Representing actual production place

#### 工作参数

#### Operation parameters

最大系统电压 Maximum System Voltage	1000V
逆电流承受阈值 Reverse current withstand threshold	4.0A
工作温度 Operation temperature	-40°C~ +85°C
冰雹测试 Hail test	通过 Pass
防护等级 Protection rating	IP67

#### 机械参数

#### Mechanical parameters

产品尺寸 Product size	1587mm*664 mm
产品厚度 Product thickness	31mm
面积 Area	1.05m <sup>2</sup>
重量 Weight	48kg
接线盒 Junction box	笔形接线盒 Pen Split Type Junction Box
产品结构 Product structure	5mm 超白钢化 Ultra white toughened glass+0.76PVB+2.1mm 发 电玻璃 Power generation glass+0.76PVB+5mm 钢化 toughened glass+12A+5mm 钢 化 toughened glass
透光度 Transparency	0-60%

## 应用场景及产品性能 Usage Scenarios and Product Performance

### 铜铟镓硒 电池芯片系列 CIGS Chips



- IEC/EN 61215-2/61730
- DIN V VDE 0126-3, DIN V VDE V 0126-5
- 安全等级: Class II
- 防火等级 Class A

适用于定制化的应用场景，深加工单位可以购置铜铟镓硒电池芯片后，根据尺寸做裁切或者拼接，然后合片。

Suitable for customized application scenarios, deep processing units can purchase copper indium gallium selenium battery chips, which can cut or spliced.

#### 温度系数 Temperature parameters

模块工作温度 NMOT	20±2°C
最大功率温度系数 Pmax	-0.32%/°C
开路电压温度系数 Voc	-0.18%/°C
短路电流温度系数 Isc	0%/°C

#### 衰减系数 Attenuation parameters

首年衰减 First year attenuation	5%
次年及以后 The following year and beyond	0.4%

#### 电性能参数 (STC)

#### Signal-to-transmission parameters

型号 model	CIGS-TX-120W (*)	CIGS-TX-125W (*)
最大额定功率 Pmax (W)	120W	125W
功率公差 Power tolerance (%)	0/+5	0/+5
最大功率点的工作电压 Vmpp (V)	59.59	61.47
最大功率点的工作电流 Impp (A)	2.02	2.04
开路电压 Voc (V)	77.39	80.08
短路电流 Isc (A)	2.48	2.06

STC (标准测试条件): 辐照度 Irradiance 1000W/m<sup>2</sup>, 电池温度 Cell temperature 25°C, 大气质量 AM1.5  
(\*) 代表实际产地 Representing actual production place

#### 工作参数 Operation parameters

最大系统电压 Maximum System Voltage	1000V
逆电流承受阈值 Reverse current withstand threshold	4.0A
工作温度 Operation temperature	-40°C ~ +85°C

#### 机械参数 Mechanical parameters

产品尺寸 Product size	1583mm*660mm
产品厚度 Product thickness	2.1mm
面积 Area	1.04m <sup>2</sup>
重量 Weight	8kg





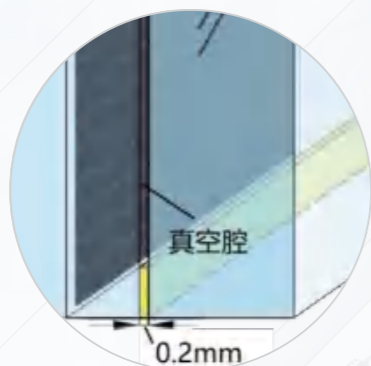
常规中空玻璃  
Conventional Hollow Glass



4SG 发电玻璃  
4SG Power Generation Glass

更节能  
窗户系统 U 值更低  
气密性更好  
使用寿命更长  
隔声性能更好

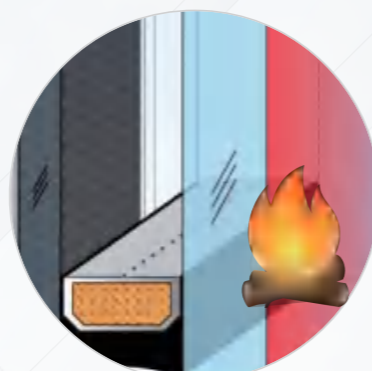
More energy-efficient  
Lower U-value of window system  
Better airtightness  
Longer service life  
Better sound insulation performance



真空发电玻璃  
Vacuum Power Generation Glass

节能性优异  
U 值可低至  $0.5W/m^2 \cdot K$   
厚度薄 安装友好  
隔声性能更好

Outstanding energy-efficiency  
 $0.5W/m^2 \cdot K$  U-value of window system  
Thick and installation-friendly  
Better sound insulation performance



防火发电玻璃  
Fireproof Power Generation Glass

安全防火  
满足国标 GB15763.1 要求  
可实现 1.5 小时以上  
耐火燃烧

Safe and fireproof  
Meeting the requirements of national standard GB15763.1  
Capable of fire resistance for over 1.5 hours combustion

PV/T 光伏光热一体化  
Photovoltaic photothermal integration



70%+

太阳能利用效率  
Solar energy utilization efficiency

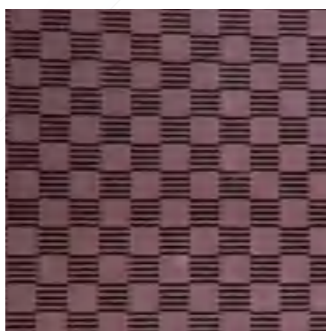
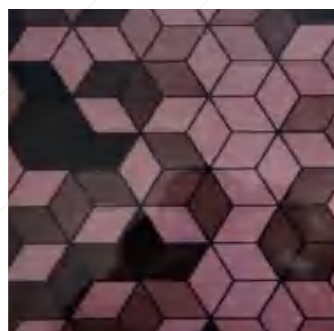
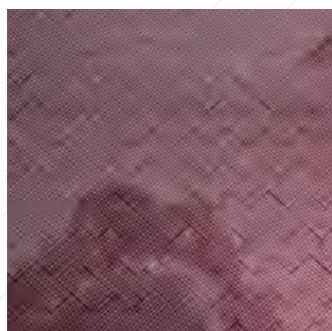
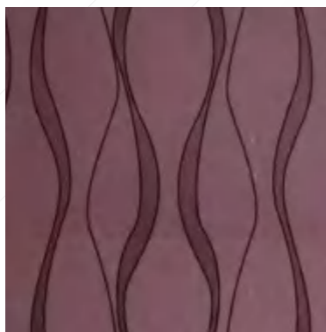
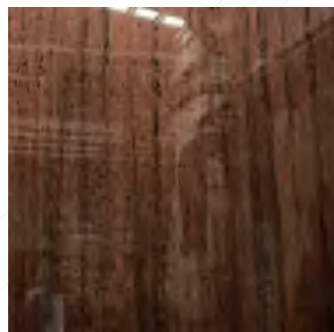
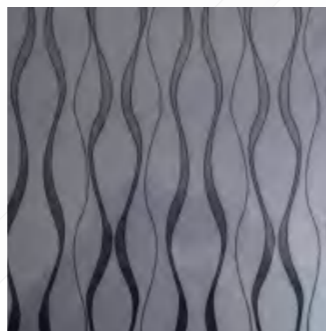
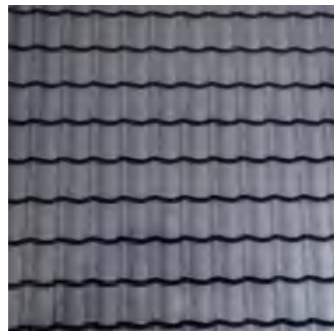
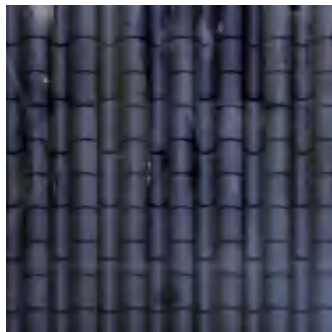
- 发电量更大
- 能量利用率更高
- 实力助力零能耗建筑
- Greater power generation
- Higher energy utilization rate
- Strength helps zero energy consumption buildings

300+ 色彩可选  
300+colors available

中国红 Chinese Red	锦缎金 Brocade Gold	黄金色 327 Golden 327	绿 -2 Green-2
红旗 1号 Red Flag 1	黄缎金 Yellow satin Gold	黄金色 307 Gilded 307	绿 -3 Green-3
红旗 2号 Red Flag 2	太阳金 Sungold	金 -1 Gold-1	绿 -4 Green-4
日光红 Sunligh Red	橙色 Orange	金 -2 Gold-2	绿 -5 Green-5
鲜丽红 Bright Red	黄色 Yellow	金 -3 Gold-3	绿 -6 Green-6
艳光红 Brilliant Red	阳光金 Sunshine Gold	黄金色 325 Golden 325	浅绿 Light Green
深馥红 Deep Crimson	红缎金 Red Satin Gold	帝皇金 Emperor Gold	白绿 White Green
红棕色 Reddish Brown	红金 Red Gold	黄金 -2 Golden-2	灰绿 Grey Green
阳光橙 Sunshine Orange	黄 Yellow	金黄 -3 Gold Yellow-3	翠绿 Emerald Green
铜棕色 1 Copper Brown 1	浅黄 Light Yellow	黄金 Yellow Gold	中绿 Medium Green

森林绿 Forest Green	蓝色 -1 Blue-1	深灰 Dark Grey	雪花银 Snowflake Silver
恒星绿 Stellar green	蓝色 -2 Blue-2	磨砂深灰 Frosted Dark Grey	企鹅白 Penguin White
深绿 Dark Green	蓝色 -3 Blue-3	磨砂中灰 Frosted Medium Gray	雪山白 Snow Mountain White
兰绿 Blue green	蓝色 -4 Blue-4	磨砂浅灰 Frosted Light Grey	水晶白 Crystal White
劳尔 50182 Raul 50182	蓝色 -5 Blue-5	银白 Silver White	玉石白 Jade White
劳尔 50212 Raul 50212	蓝色 -6 Blue-6	银灰 Silver Gray	瓷砖白 Tile white
天空蓝 Sky Blue	蓝色 -7 Blue-7	中灰 Medium Gray	铝合金 Aluminium Alloy Gold
香芋紫 Taro Purple	蓝色 -8 Blue-8	浅灰 Light Gray	苍穹灰 Sky Grey
木槿紫 Hibiscus Purple	蓝色 -9 Blue-9	铝合金色 Aluminum Alloy Gold	深空灰 Deep Sky Grey
猎豹黑 Cheetah Black	蓝色 -10 Blue-10	白 1 White	古典灰 Classical Grey

图案可自由定制  
Patterns can be freely customized



透光度 10%~60% 可选  
10%~60% Adjustable Transparency



10% 透光  
10% transparency



20% 透光  
20% transparency



30% 透光  
30% transparency



40% 透光  
40% transparency



50% 透光  
50% transparency



60% 透光  
60% transparency

## 选型推荐 Recommended Selection

产品类型	结构	透过率	接线盒	应用场景
标准电站系列产品	3.2mm 超白钢化玻璃 +0.5mmEVA/0.5mm POE/0.76mmPVB+2.1mmCIGS	0	分体式背接	电站, 车棚
标准幕墙系列产品	3.2mm 超白钢化玻璃 +0.5mmEVA/0.5mm POE/0.76mmPVB+2.1mmCIGS	0	分体式背接	幕墙
炫彩系列产品	3.2mm 超白钢化彩釉玻璃 +0.5mmEVA/0.5mmPOE/0.76mmPVB+2.1mmCIGS	0	分体式背接	幕墙
仿瓦片 / 仿石材系列	3.2mm 超白钢化彩釉玻璃 +0.5mmEVA/0.5mmPOE/0.76mmPVB+2.1mmCIGS	0	分体式背接	幕墙, 斜屋面
三玻产品	5mm 超白钢化玻璃 +0.76mmPVB+2.1mm CIGS+0.76mmPVB+5mm 钢化玻璃 (颜色图案可选)	0	笔形接线盒	幕墙
中空产品	5mm 超白钢化玻璃 +0.76mmPVB+2.1mmCIGS+0.76mmPVB+5mm 钢化玻璃 +12A+6mm 钢化玻璃	0%-60%	笔形接线盒	框式透光幕墙
芯片	2.1mm, 1583*660mm, 95~135W	0		客户购买后可根据需要裁切或拼接, 然后进行封装。

Model	Construction	Transmittance	Application scenarios
Standard Series products for power stations	3.2mm ultra white toughened glass+0.5mmEVA/0.5mm POE/0.76mmPVB+2.1mm CIGS	0	Power Station, carport
Standard Series products for curtain walls	3.2mm ultra white toughened glass+0.5mmEVA/0.5mm POE/0.76mmPVB+2.1mm CIGS	0	Curtain wall
Coloured Opaque Series	3.2mm ultra white toughened glazed colored glass+0.5mm EVA/0.5mmPOE/0.76mmPVB+2.1mm CIGS	0	Curtain wall and sloping roof
Stone Imitation Series	3.2mm ultra white toughened glazed colored glass+0.5mm EVA/0.5mmPOE/0.76mmPVB+2.1mm CIGS	0	
Triple Glass Series	5mm ultra white toughened glass+0.76mmPVB+2.1mm CIGS+0.76mmPVB+5mm tempered glass (color and pattern are optional)	0	Curtain wall
Hollow Series	5mm ultra white toughened glass +0.76mmPVB+2.1mm power glass +0.76mmPVB+5mm toughened glass +12A+6mm toughened glass	0%-60%	Frame type transparent curtain wall
Chip	2.1mm,1583*660mm,95~135W	0	Customers can cut or splice as needed after purchase,and then assmble

### 采光顶 Skylight

透光中空  
Hollow Series

5mm 超白钢化玻璃 ultra white toughened glass +0.76mmPVB+2.1mm power glass CIGS+0.76mmPVB+5mm 钢化玻璃 toughened glass+12A+6mm 钢化玻璃 toughened glass

### 透光幕墙 Transparent curtain wall

透光中空  
Hollow Series

5mm 超白钢化玻璃 ultra white toughened glass +0.76mmPVB+2.1mmCIGS+0.76mmPVB+5mm 钢化玻璃 toughened glass +12A+6mm 钢化玻璃 toughened glass

除膜率 CIGS removal rate:  
10%、20%、30%、40%、50%

### 彩色 / 仿石材墙面 Colored/ Stone Imitation Wall

彩色三玻  
Colored Triple Glass Series

5mm 超白钢化玻璃 ultra white toughened glass+0.76mmPVB+2.1mmCIGS+0.76mmPVB+5mm 钢化玻璃 (颜色图案可选) tempered glass (color and pattern are optional)

### 屋顶 BAPV Roof BAPV

标准电站组件  
Standard Series products for power stations

3.2mm 超白钢化玻璃 ultra white toughened glass+0.5mm EVA/0.5mmPOE/0.76mmPVB+2.1mmCIGS

### 旧房立面改造 Curtain wall renovation of old houses

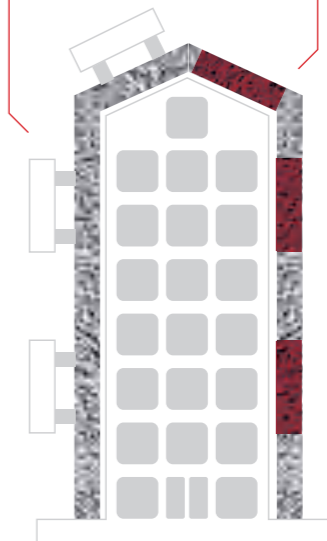
标准 BIPV 双玻  
Standard Series

3.2mm 超白钢化玻璃 ultra white toughened glass+0.5mmEVA/0.5mmPOE/0.76mmPVB +2.1mmCIGS

### 墙间层 Interlayer wall

彩色三玻  
Colored Triple Glass Series

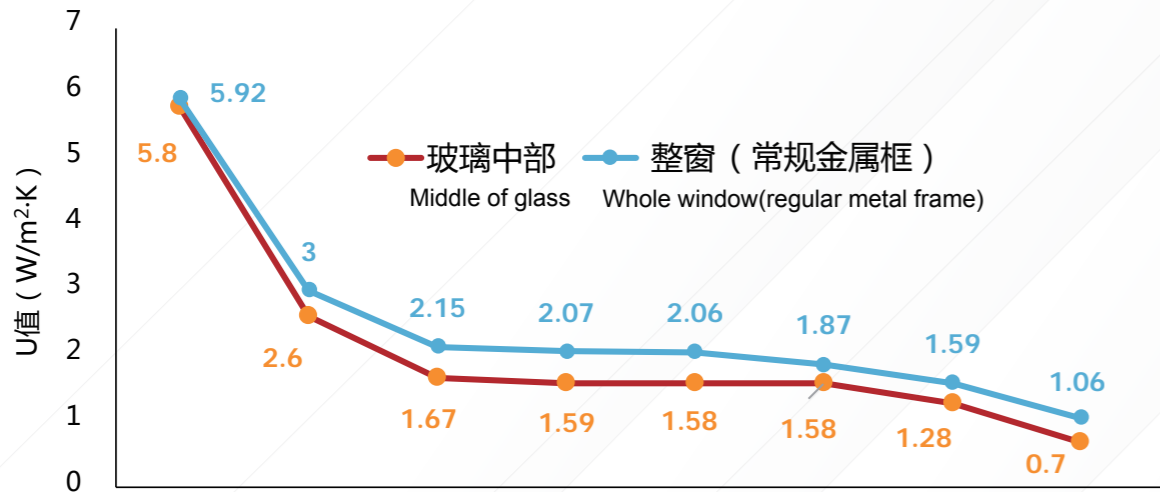
5mm 超白钢化玻璃 ultra white toughened glass+0.76mmPVB +2.1mmCIGS+0.76mmPVB+5mm 钢化玻璃 (颜色图案可选) tempered glass (color and pattern are optional)



# 中空产品——热工性能 Hollow products - thermal performance

## 发电玻璃 U 值 (传热系数) 越小 建筑越节能

The smaller the U-value (heat transfer parameters) of the power generation glass, the more energy-efficient the building is.



夹胶双玻	常规中空	单银中空	双银中空	三银中空	暖边条三银中空	充氩气三银暖边条中空	双中空充氩气三银暖边条
Laminated double glass	Hollow glass	Hollow Low-E Single Silver glass	Hollow Low-E Double Silver glass	Hollow Low-E Triple silver glass	Warm edge spacer Hollow Low-E Triple Silver glass	Argon gas filling Warm Edge Hollow Low-E Triple Silver glass	Argon gas filling Warm edge spacer Hollow Low-E Triple Silver Double hollow glass

● U 值根据 40% 除膜产品光谱数据及 Lawrence Berkeley 实验室 Window7.4 计算所得。  
The U-value is calculated based on the spectral data of the 40% membrane removal product and Lawrence Berkeley Laboratory Window 7.4.

玻璃中部  
Middle of glass

5.8



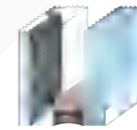
○ 夹胶双玻  
发电玻璃  
Laminated double glass  
power generation glass

2.6



○ 中空发电玻璃  
Hollow power generation glass

1.67



○ 中空 Low-E 单银发电玻璃  
Hollow Low-E Single Silver power generation glass

1.59



○ 中空 Low-E 双银发电玻璃  
Hollow Low-E Double Silver power generation glass

1.58



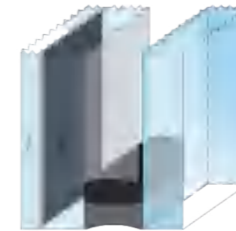
○ 中空 Low-E 三银发电玻璃  
Hollow Low-E Triple silver power generation glass

1.58



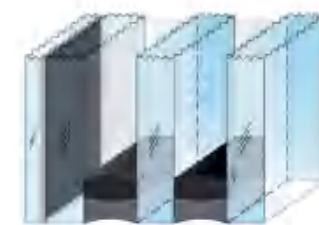
○ 暖边条中空 Low-E 三银发电玻璃  
Warm-edge spacer Hollow Low-E Three Silver power generation glass

1.28



○ 充氩气暖边条中空 Low-E 三银发电玻璃  
Argon gas filling Warm-edge spacer Hollow Low-E Triple Silver power generation glass

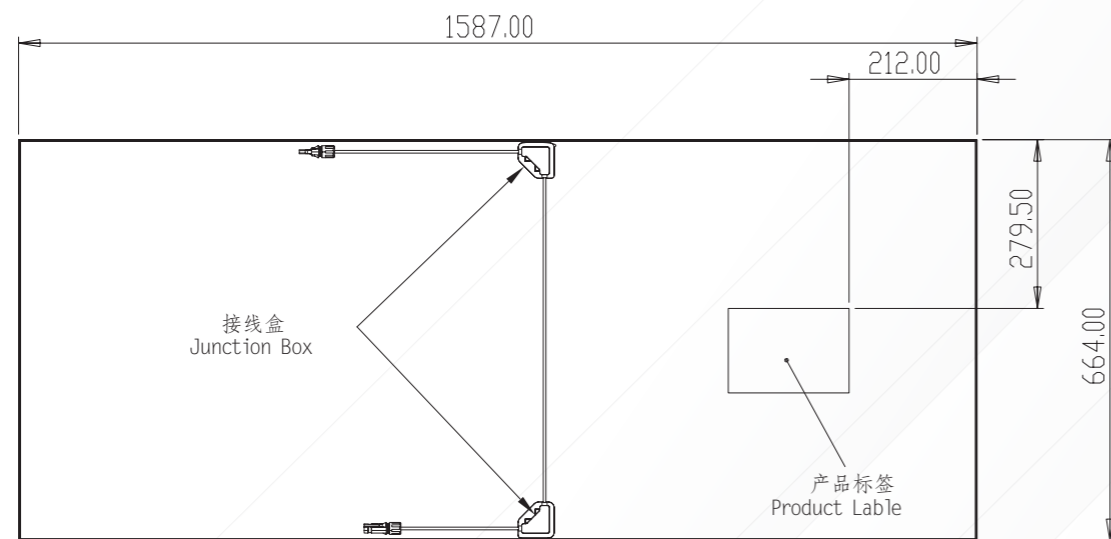
0.7



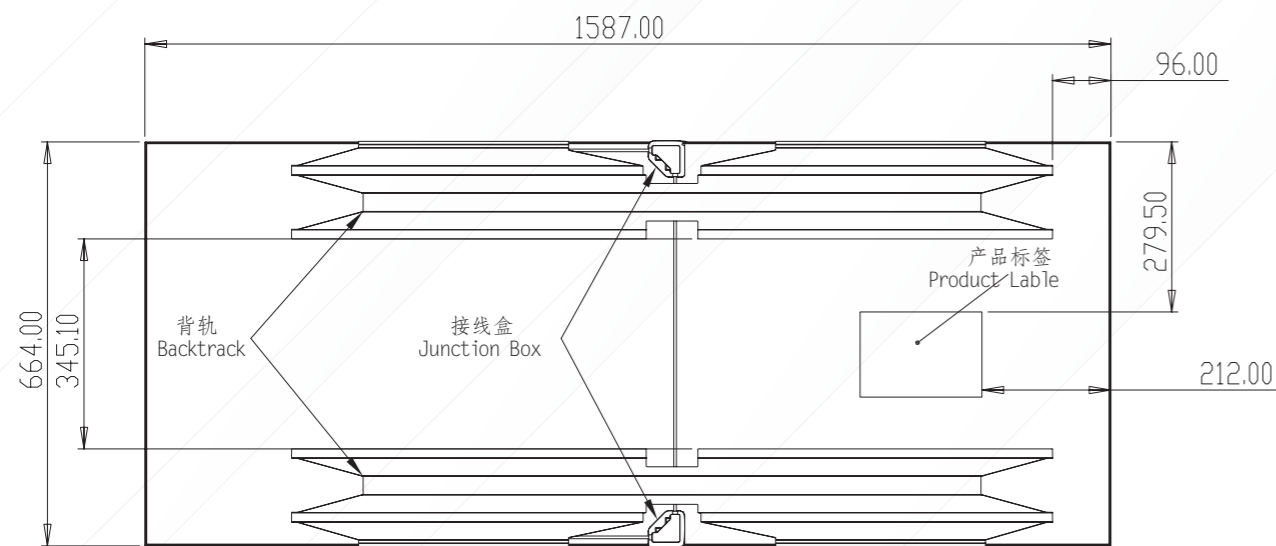
○ 充氩气暖边条中空 Low-E 三银双中空发电玻璃  
Argon gas filling Warm-edge spacer Hollow Low-E Triple Silver Double hollow power generation glass

双玻组件  
Double Glass Assembly

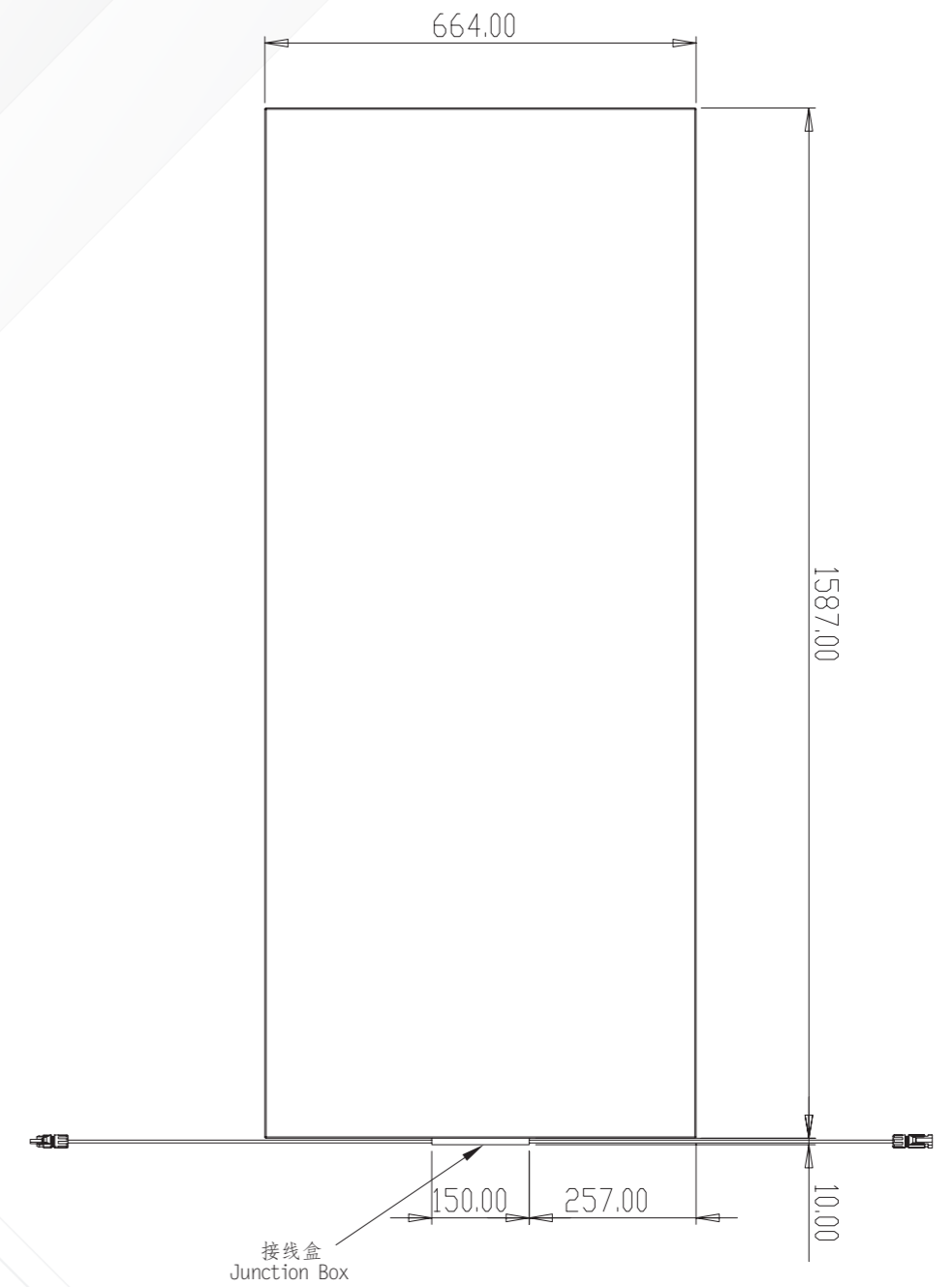
双玻组件无背轨  
Double Glass Assembly without Backtrack



双玻组件带背轨  
Double Glass Assembly with Backtrack



三玻组件  
Triple Glass Assembly



安徽科技之门——安徽自贸区大厦  
The Gate of Anhui Science and Technology – Anhui Free Trade Zone Building

铜铟镓硒发电玻璃幕墙  
CIGS power generation glass curtain wall



安徽蚌埠中光电 8.5 代 TFT-LCD 玻璃基板生产  
Anhui Bengbu 8.5 Generation TFT-LCD Glass Substrate Production Line

工业屋顶 BAPV 安装案例  
Industrial Roof BAPV Installation Case



- 项目地点: 安徽蚌埠
- 装机容量: 2300KW
- 安装面积: 20000 m<sup>2</sup>
- 项目类型: 屋顶 BAPV
- 并网方式: 低压并网
- Project location: Bengbu, Anhui
- Installed capacity: 2300KW
- Installation area: 20000 square meters
- Project type: Roof BAPV
- Grid connection method: low-voltage grid connection

经典案例  
Classic Projects

蚌埠市委党校光伏瓦项目  
Bengbu Municipal Party School Light Volt Project



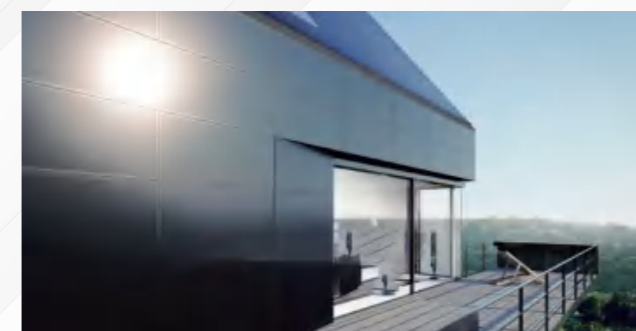
蚌埠市委党校项目采用安徽天柱公司自主研发的产品铜铟镓硒光伏瓦，安装面积约 5000 m<sup>2</sup>（其中教学楼 3070 m<sup>2</sup>，会议中心 1930 m<sup>2</sup>），装机功率 424.6kWp，总投资约 600 万元。投产后年均发电量约 40 万度，同比每年节约燃煤 150 吨，减少二氧化碳排放 400 吨，为推进资源全面节约和循环利用，实现“2030 碳达峰、2060 碳中和”的目标交出了一份亮丽的成绩单。



The Bengbu Municipal Party School project adopts a copper indium gallium selenium photovoltaic tile independently developed by Anhui Tianzhu Company, with an installation area of about 5000 square meters (including 3070 square meters for the teaching building and 1930 square meters for the conference center), an installed power of 424.6kWp, and a total investment of about 6 million yuan. After being put into operation, the

average annual power generation is about 400000 kilowatt hours, saving 150 tons of coal and reducing 400 tons of carbon dioxide emissions year-on-year. In order to promote comprehensive resource conservation and recycling, and achieve the goals of "2030 carbon peak and 2060 carbon neutrality", a brilliant transcript has been submitted.

波兰铜铟镓硒建筑光伏一体化  
CIGS BIPV Project in Polish



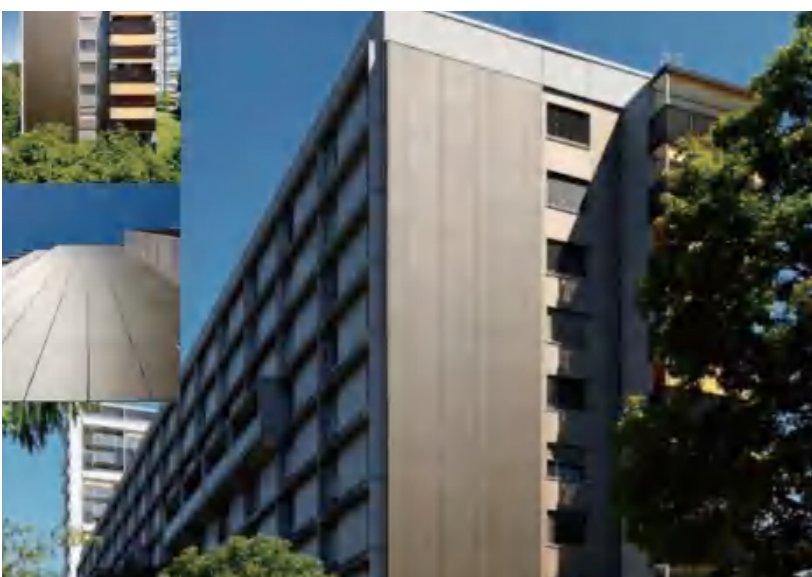
瑞士伯尔尼铜铟镓硒建筑光伏一体化  
CIGS BIPV Project in Bern, Swiss



伯恩斯坦美国研究基金  
Bernstein American Research Foundation

1971年建成的住宅综合体的全面翻新。高层建筑南侧和西侧的两个青铜色太阳能立面产生部分能量和热量，以改善建筑的生态评估。

The comprehensive renovation of the residential complex, which was completed in 1971. The two bronze colored solar facades on the south and west sides of the high-rise building generate some energy and heat to improve the ecological evaluation of the building.



新建办公楼  
住宅综合体伯恩斯坦美国研究基金  
New Office/Residential Complex Bernstein  
American Research Foundation

在建筑群的东南侧新建了一座具有黑色太阳能立面的节能住宅和商业建筑。

A new energy-saving residential and commercial building with CIGS glass has been built on the southeast side of the building complex.





德国利根施塔特建筑光伏一体化  
CIGS BIPV Project in Ligenstadt, Germany



瑞士伯尔尼铜铟镓硒建筑光伏一体化  
Swiss Bern Copper Indium Gallium Selenium  
Building Photovoltaic Integration

德国办公楼建筑  
German Office Buildings



瑞士 Volg 公司物流配送中心  
Swiss Volg Logistics Distribution Center

