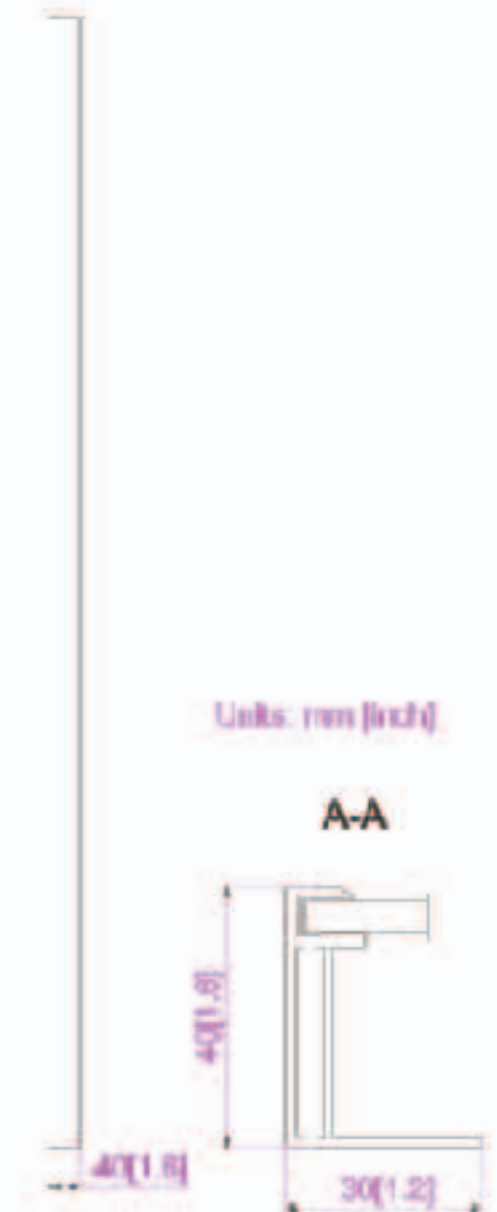
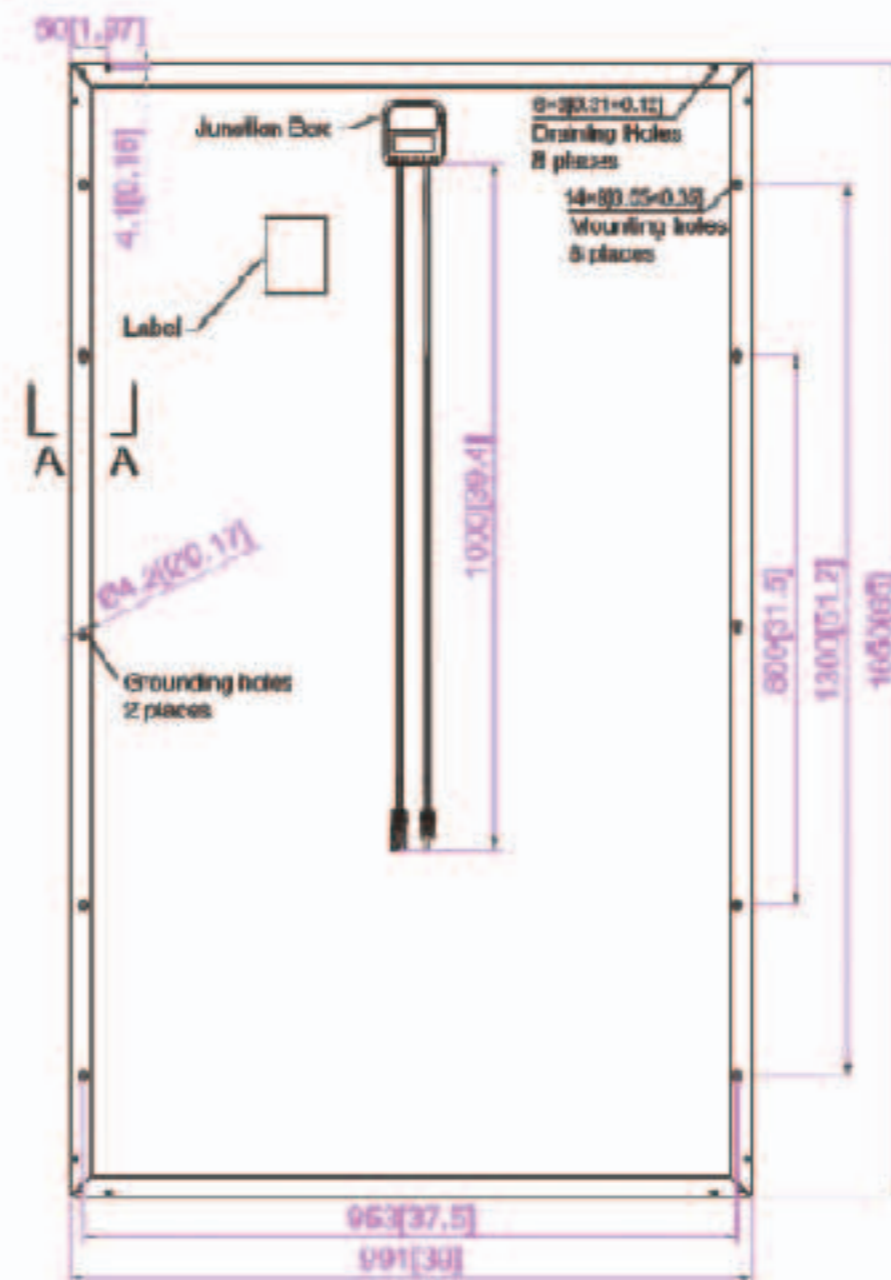


# GSM60(BK)

60/245W-275W  
M156x156

单晶太阳能光伏组件(黑色)

Monocrystalline solar photovoltaic module (BK)



## 可靠的质量 RELIABLE QUALITY

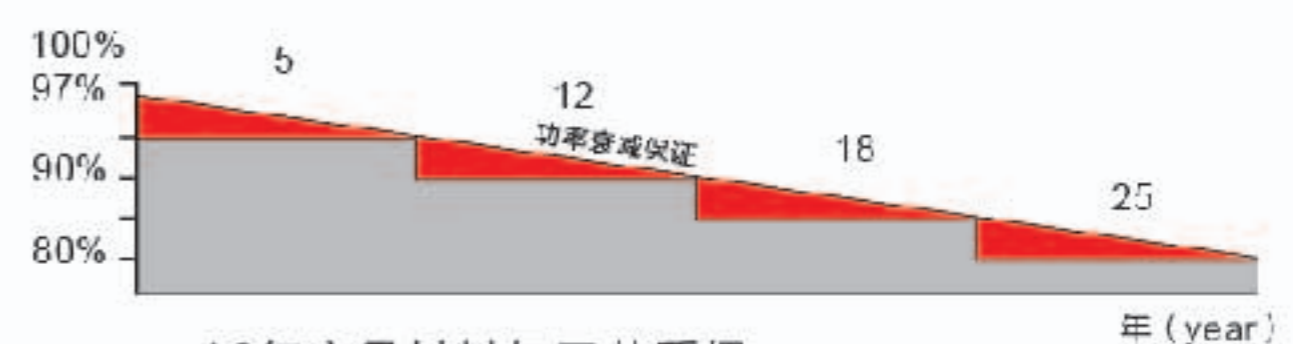
- 0~±5W正公差输出保证  
Positive power tolerance:0~+5W
- 产品100%两次EL全检, 有效排除产品缺陷  
100% EL double-inspection ensures modules are defects free

- 优化组件电流分档, 提高系统端发电量  
Modules binned by current to improve system performance
- 优异的抗电诱导衰减性能 (PID Resistant)  
Potential Induced Degradation(PID) Resistant

## 产品特性 KEY FEATURES

- 高效单晶组件使用与商业或家庭并网电站项目  
Monocrystalline modules designed for commercial and solar farm grid-tied applications
- 高输出功率, 最高组件效率可达16.51%  
High output, 16.51% highest conversion efficiency
- 优异的弱光发电性能 (早晨、傍晚、阴雨天)  
Outstanding performance in low-light irradiance environments
- 组件抗压能力强, 能承受2400帕的风压和5400帕的雪压  
Excellent mechanical load resistance: Certified to withstand high wind loads (2400Pa) and snow loads (5400Pa)
- 良好的抗盐雾, 抗氨气腐蚀性能, 全系列组件通过TüV北德测试  
High salt and ammonia resistance certified by TÜV NORD

## 一流的质保 SUPERIOR WARRANTY



- 10年产品材料与工艺质保  
10-year product warranty
- 25年线性功率输出质保  
25-year linear power output warranty





### 组件规格 MECHANICAL SPECIFICATION

电池片型号 Cell Type	单晶156X156毫米 Mono-crystalline 156X156mm
电池片数量 Number of cells	60(6X10)
尺寸 Dimensions ( AxBXC )	1640X990X40mm
重量 Weights	21kg
玻璃 Front Glass	3.2毫米低铁钢化玻璃 3.2mm tempered low iron glass
框架 Frame	阳极氧化铝合金 Clear anodized aluminium alloy
接线盒 Junction Box	IP65, 带旁路二极管 Ip65, with bypass diodes
连接头 Connector	Mc4 Mc4 compatible
输出电缆 Output Cables	TUV,长度900毫米, 4.0平方毫米 TUV,length 900mm, 4.0mm <sup>2</sup>

### 包装结构 PACKING CONFIGURATION

集装箱 Container	20尺柜	40尺柜
每托盘组件数 Pieces per pallet	27	27
每个集装箱托盘数 Pallets per container	14	28
每个集装箱组件数 Pieces per container	356	756

### 温度特性 TEMPERATURE CHARACTERISTICS

正常工作的电池片的温度 Nominal Operating Cell Temperature (NOCT)	45°C ± 2°C
最大功率的温度系数 Temperature Coefficient of Pmax	-0.44%/°C
开路电压的温度系数 Temperature Coefficient of Voc	-0.34%/°C
短路电流温度系数 Temperature Coefficient of Isc	0.06%/°C

### 电性能参数 ELECTRICAL CHARACTERISTICS

STC测试条件下最大功率 Manimum Power at STC(Pmax)	245W	250W	255W	260W	265W	270W	275W
短路电流 Short Circuit Current ( Isc )	8.65A	8.74A	8.85A	8.89A	9.02A	9.07A	9.21A
开路电压 Open Circuit Voltage(Voc)	36.8V	37.3V	37.4V	38.0V	38.3V	37.8V	38.0V
最大工作电流 Maximum Power Current ( Impp )	8.13A	8.21A	8.32A	8.35A	8.48A	8.51A	8.63A
最大工作电压 Maximum Power Voltage ( Vmpp )	30.1V	30.5V	30.6V	31.1V	31.3V	31.7V	31.9V
封装电池效率 Encapsulated Cell Efficiency	18.8%	18.8%	18.8%	18.8%	18.8%	18.8%	18.8%
组件效率 Module Efficiency	15.09%	15.40%	15.71%	16.01%	16.32%	16.63%	16.94%
输出功率公差 Power Tolerance	0~+3%	0~+3%	0~+3%	0~+3%	0~+3%	0~+3%	0~+3%

STC:AM1.5 辐射度1000W/m<sup>2</sup> 组件温度 25°C

### 系统交互作用参数 SYSTEM INTEGRATION PARAMETERS

最大系统电压 Maximum system voltage	DC1000V
最大系列保险丝 Maximum series Fuse	15A
新增雪压 (参考IE61215) Increased snow load according to IEC61215	5400Pa
工作温度 Operating Temperature	-40to+85°C
旁路二极管数量 Number of bypass diodes	3or6

