SM-60BKM

ALL BLACK SERIES 60 CELLS

300-320w



19.55% Max efficiency



Guarantee on product material and workmanship



156.75mm Monocrystalline solar cells



Linear power output warranty





100% double EL test enabling remarkable reduction of hidden crack rate of modules



Positive power tolerance (3 ~ +10W) guaranteed



Lower risk of hot spot effects



Significantly lower LCOE and BoS cost savings



Low Light Features Higher performance under low light environment.



5BB Cell

More uniform current collection capability, reducing the current heat loss of the internal cells.



PID Protection

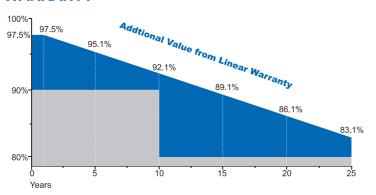
Ensure the attenuation probability caused by PID phenomenon is minimized

#### **MANAGEMENT SYSTEM**

ISO 9001: Quality management system

ISO 14001: Standard for environmental management system OHSAS 18001: International standard for occupational health and safety assessment system

### **WARRANTY**



### **INSURANCE**



### **PRODUCT CERTIFICATES**











## MONO 60 CELLS | 5BB

Electric Characteristics										
Model of modules	SM-300-	-60BKM	SM-305	-60BKM	SM-310	-60BKM	SM-315-	60BKM	SM-320-	-60BKM
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
${\rm Maximum\ power-}{\rm P_{_{mp}}}\  \   ({\rm W})$	300W	224W	305W	227W	310W	231W	315W	235W	320W	239W
Open-circuit voltage $-V_{_{\rm oc}}$ (V)	40.1V	37.0V	40.3V	37.2V	40.5V	37.4V	40.7V	37.6V	40.9V	37.8V
Short-circuit current— $\mathbf{I}_{\mathrm{sc}}$ (A)	9.72A	8.01A	9.83A	8.12V	9.92A	8.20A	10.04A	8.33A	10.15A	8.44A
${\rm Maximum\ power\ voltage-V_{{}_{\rm mp}}\ (V)}$	32.6V	30.6V	32.8V	30.8V	33.0V	31.0V	33.2V	31.2V	33.4V	31.4V
$\operatorname{Maximum power current} - \operatorname{I}_{\scriptscriptstylemp} \ (A)$	9.21A	7.32A	9.30A	7.40A	9.40A	7.49A	9.49A	7.56A	9.59A	7.62A
Module efficiency— $\eta_{_{\rm m}}$ (%)	18.	33%	18.	63%	18	.94%	19.	24%	19.	55%

STC: Irradiance 1000 W/m², 25°C, AM1.5

NOCT: Irradiance 800 W/m<sup>2</sup>, 20°C, wind velocity 1m/s

# Temperature Characteristics Temperature coefficient at maximum power

Temperature coefficient at maximum power	-0.37%/°C
Temperature coefficient of Voc	-0.28%/°C
Temperature coefficient of lsc	+0.048%/ °C
Current operating temperature	-40~+85 °C
Rated operating temperature of cells	45±2 °C

#### **Structural Characteristics**

Module dimensions	1640x992x35mm
Weight	18.0kg
No.of cells	60
Cell	Mono crystalline 156.75x156.75mm
Glass	3.2mm AR coating tempered glass
Frame	Anodized aluminum alloy, black color
Junction box	IP68, three diodes
Output wire	4.0 mm², wire length: 1200mm or Customized
Connector	MC4 compatible
Mechanical load	Snow load 5400Pa/Wind load 2400Pa
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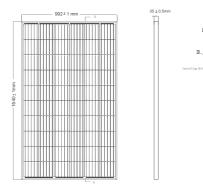
#### Working Characteristics

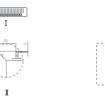
Power tolerance(W)	(3,+10)
Maximum system voltage(V)	1000V/1500V
Maximum rated fuse current (A)	20

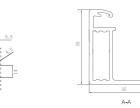
### Packaging Configuration

Container	20GP	40HQ
Quantity per pallet	30	31
Pallets per container	12	28
Quantity per container	360	952

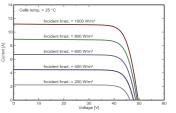
### **Engineering Drawings**

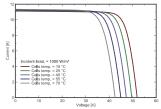






# **IV Curves**





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