SM-72 MLC 166 SERIES 72 CELLS

430-450w





20.4% Max efficiency



Guarantee on product material and workmanship



166\*83mm Monocrystalline solar cells



Linear power output warranty

### **KEY FEATURES**



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.



#### 9 Bus Bar

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



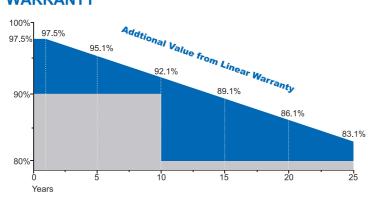
Ensure the attenuation probability caused by PID phenomenon is minimized

#### **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**













#### 166 MONO HALF CELL | 9BB

Electric Characteristics										
Model of modules	SM-430-	-72MLC	SM-435-	72MLC	SM-440	-72MLC	SM-445-	72MLC	SM-450-	72MLC
	STC	NOTC	STC	NOTC	STC	NOTC	STC	NOTC	STC	NOTC
$\text{Maximum power-}  P_{_{mp}} \   (W)$	430W	318W	435W	322W	440W	326W	445W	330W	450W	334W
Open-circuit voltage-V <sub>oc</sub> (V)	49.2V	45.9V	49.4V	46.1V	49.6V	46.3V	49.8V	46.5V	50.0V	46.7V
Short-circuit current— $\mathbf{I}_{\mathrm{sc}}$ (A)	11.19A	9.02A	11.26A	9.08A	11.33A	9.13A	11.40A	9.19A	11.47A	9.25A
${\it Maximum power voltage} - {\it V}_{_{\it mp}} \ ({\it V})$	40.6V	37.5V	40.8V	37.7V	41.0V	37.9V	41.2V	38.1V	41.4V	38.3V
${\rm Maximum\ power\ current} - {\bf I}_{_{\rm mp}}\ ({\rm A})$	10.6A	8.5A	10.67A	8.56A	10.74A	8.61A	10.81A	8.67A	10.88A	8.73A
Module efficiency– $\eta_{_m}$ $(\%)$	19.	.5%	19.	7%	19.	.9%	20.	2%	20.	4%

STC: Irradiance 1000 W/M2, 25°C, AM1.5

Rated operating temperature of cells

NOCT: Irradiance 800 W/m², 20°C, wind velocity 1m/s

45±2°C

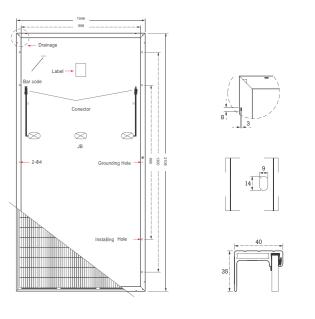
#### **Temperature Characteristics** -0.37%/°C Temperature coefficient at maximum power Temperature coefficient of Voc -0.29%/°C Temperature coefficient of Isc +0.05%/°C -40~+85°C Current operating temperature

Structural Characteristics				
Module dimensions	2108x1046x40mm			
Weight	24kg			
No.of Half-cells	144(6x24)			
Cell	Mono crystalline 166x83mm			
Glass	3.2mm AR coating tempered glass			
Frame	Anodized aluminum alloy			
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			

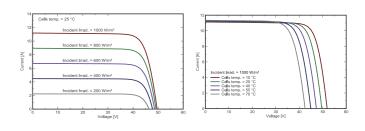
Norking Characteristics				
Power tolerance(W)	(3,+10)			
Maximum system voltage(V)	1000V/1500V			

Packaging Configuration					
Container	20GP	40HQ			
Quantity per pallet	26	27			
Pallets per container	10	22			
Quantity per container	260	616			

## **Engineering Drawings**



## **IV Curves**



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