

# M10 HALF CELL MONO

# 435W-455W

## 120 CELL

M10 MBB MONO PERC

## 435W-455W

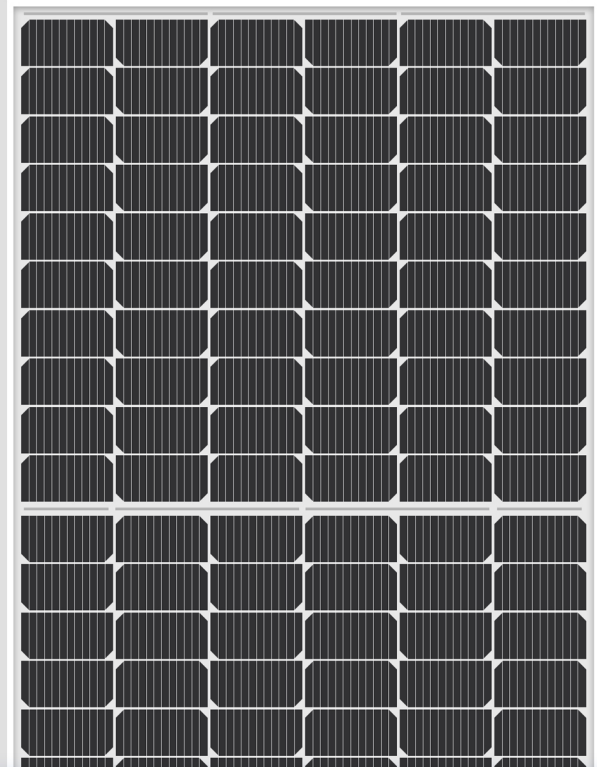
POWER OUTPUT RANGE

## 20.05%

MAXIMUM EFFICIENCY

## 0 to +5W

POSITIVE POWER TOLERANCE



### Higher Output of Power

Effectively reduce the unit cost of PV solar system by watt



### Optimize the temperature coefficient

Improve the performance under the condition of shadow and low temperature coefficient



### Reduce the shadow loss on the power output

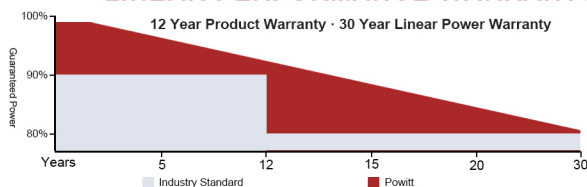
Effectively reduce the risk of heat spot on high efficiency



### Stronger the physical property

Optimize the property of power generating and reliability of the system

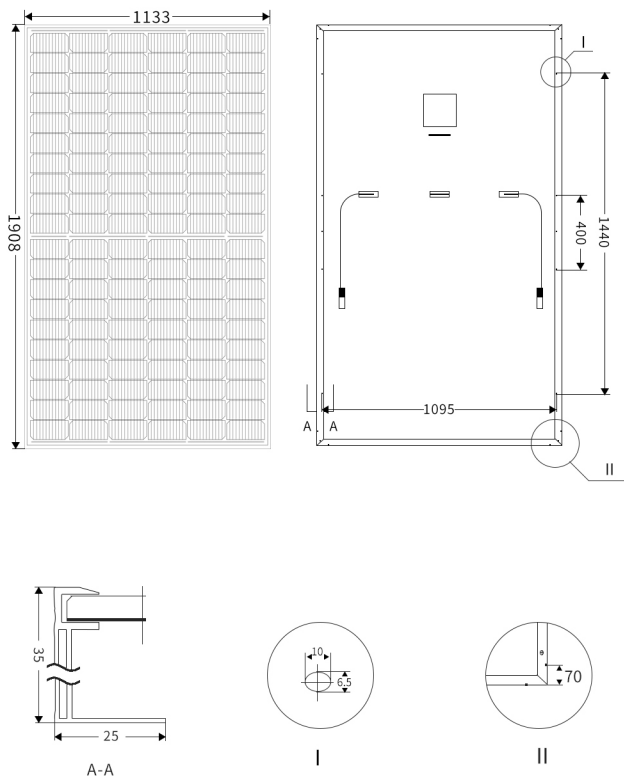
## LINEAR PERFORMANCE WARRANTY



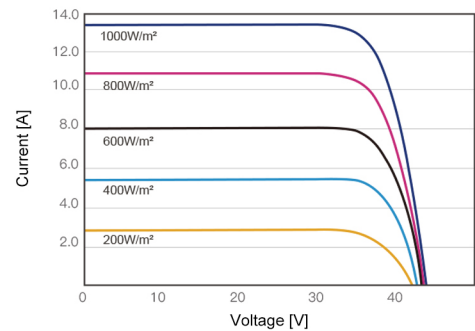
Module Type		PW-60M435HM10		PW-60M440HM10		PW-60M445HM10		PW-60M450HM10		PW-60M455HM10	
Test Environment		STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power	$P_{MAX}(W)$	435	323.74	440	327.46	445	331.18	450	334.9	455	338.63
Maximum Power Voltage	$V_{MPP}(V)$	34.16	31.78	34.21	31.83	34.26	31.87	34.31	31.92	34.36	31.97
Maximum Power Current	$I_{MPP}(A)$	12.74	10.19	12.87	10.29	12.99	10.39	13.12	10.49	13.25	10.6
Open Circuit Voltage	$V_{oc}(V)$	41.38	39.06	41.44	39.12	41.50	39.17	41.56	39.23	41.62	39.29
Short Circuit Current	$I_{sc}(A)$	13.41	10.83	13.55	10.94	13.67	11.04	13.81	11.15	13.95	11.26
Tolerance	(W)	0 - +5		0 - +5		0 - +5		0 - +5		0 - +5	
Module Efficiency	(%)	20.13		20.36		20.59		20.82		20.05	

STC: Irradiance 1000 W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM1.5 according to EN 60904-3.  
 Average efficiency reduction of 4.5% at 200W/m<sup>2</sup> according to EN 60904-1  
 NOCT: Irradiance at 800 W/m<sup>2</sup>, Ambient Temperature 20°C, Wind Speed 1m/s.

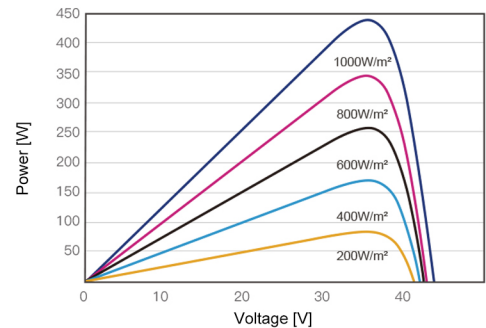
**DIMENSIONS OF PV MODULE**



**I-V CURVES OF PV MODULE(450W)**



**P-V CURVES OF PV MODULE(450W)**



MECHANICAL DATA		TEMPERATURE RATINGS	
Solar Cells	MBB MONO PERC 182x91mm	Nominal Operating Cell Temperature(NOCT)	45±2°C
Cell Orientation	120 cells (6 x 20)	Temperature Coefficient of $P_{MAX}$	-0.348%/°C
Module Dimensions	1908 x 1133 x 35mm	Temperature Coefficient of $V_{oc}$	-0.282%/°C
Weight	24kg	Temperature Coefficient of $I_{sc}$	+0.05%/°C
Glass	3.2mm low-iron tempered suede glass	<b>MAXIMUM RATING</b>	
Backsheet	White	Operational Temperature	-40 to +85°C
Frame	Silver Anodized Aluminium Alloy(Black Available)	Maximum System Voltage	1500V DC
J-Box	IP 68 rated	Max Series Fuse Rating	25A
Cables	Photovoltaic Technology cable 4.0mm <sup>2</sup> , 350mm	Mechanical Load	5400pa
Connector	EVO2 or EVO2 Compatible	Wind Load	2400pa
<b>PACKING CONFIGURATION</b>	Modules per box:31 pieces	Modules per 40' container:744 pieces	

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