

# MBB Monocrystalline

## Half-Cell Module

**530-550W**

Output power

### PID Resistant Guarantee

Strict selection of encapsulation materials eliminates PID risk.

### Hot-Spot Resistance

Lower internal current and power to effectively reduce hot-spot.

**10 Years**  
Warranty for product

**25 Years**  
Warranty for linear power output

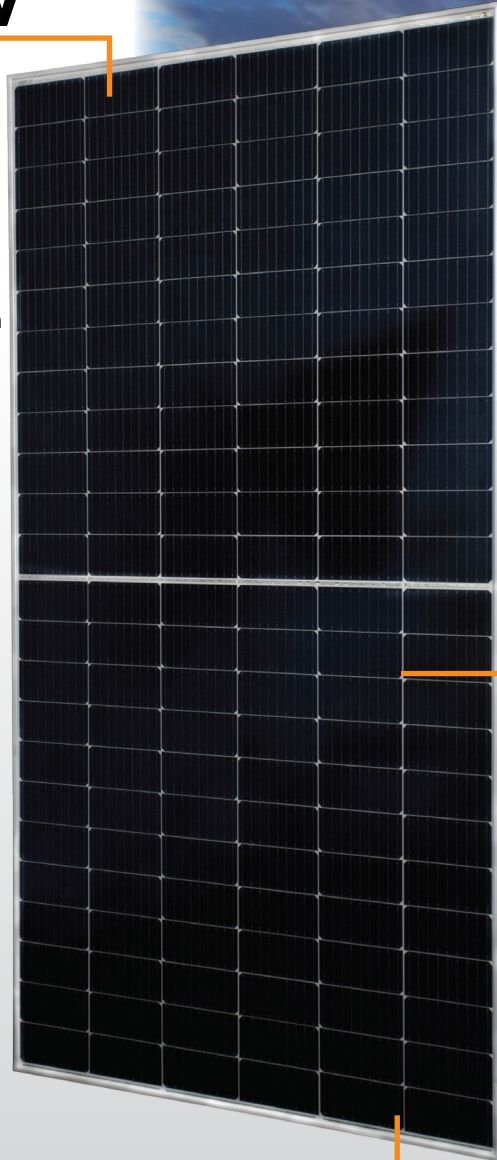
IEC 61215  
IEC 61730  
IEC TS 62941  
(PV Quality Management System)

ISO9001:2015  
(Quality Management System)

ISO14001  
(Environmental Management System)

ISO45001  
(Occupational Health and Safety Management System)

ISO50001  
(Energy Management System)



**21.3%**

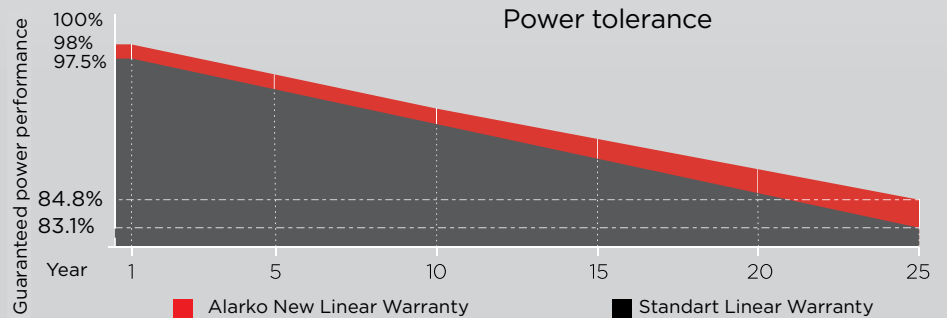
Maximum efficiency

### Multi Busbar Technology

Better light utilization and current collection ability, effectively improve the power output and reliability with 10BB high efficient bifacial cell technology.

**0~+5W**

Power tolerance



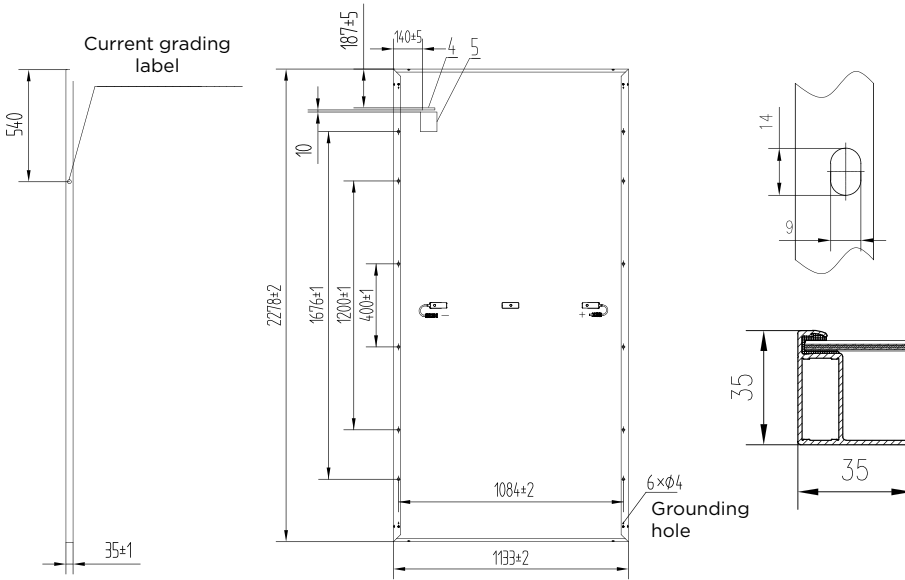
**21.3%**  
MAX. MODULE  
EFFICIENCY

**0~+5W**  
POWER  
TOLERANCE

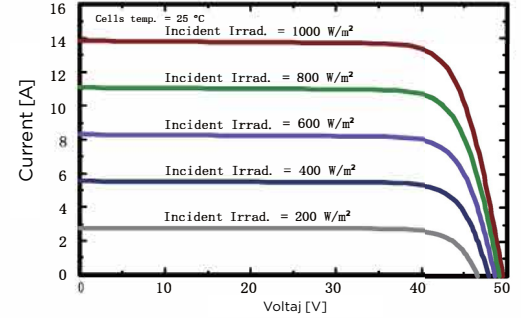
**<2%**  
FIRST YEAR  
POWER DEGRADATION

**0.55%**  
YEAR 2-25  
POWER DEGRADATION

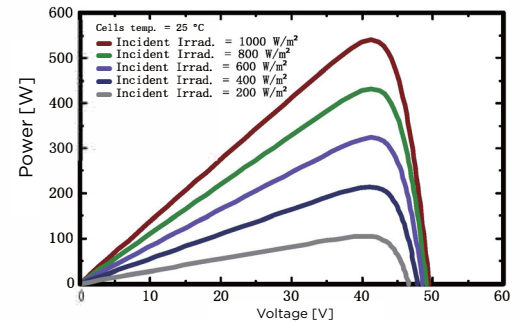
### PV Module Dimensions (mm)



### I - V Curves of PV Module



### P - V Curves of PV Module



### ELECTRICAL PARAMETERS (STC)

Model	530M	535M	540M	545M	550M
Maximum Power (Pmp) STC	530	535	540	545	550
Working Point Voltage (Vmp)	41.35	41.50	41.65	41.80	41.95
Working Point Current (Imp)	12.83	12.90	12.97	13.04	13.12
Open Circuit Voltage (Voc)	49.20	49.35	49.50	49.65	49.80
Short Circuit Current (Isc)	13.72	13.78	13.85	13.92	13.98
PV Module Efficiency	20.74%	20.93%	21.13%	21.32%	21.52%
Standart Test Conditions	Atmospheric quality Am 1.5, Irradiance 1000w/m², Cell Temperature 25°C				

### MECHANICAL PARAMETERS

Module Sizes	2278 x 1133 x 35 mm
Number of Solar Cells	144 PCS (2x6x12)
Weight	27 kg + %5
Junction Box	IP68, MC4
Cables	4mm², + 300mm & -200 mm (Customizable)
Front Plate Glass	3.2 mm, Ultra white & Minus reflection film toughened glass
Static Load on The Front	5400 Pa
Static Load on The Back	2400 Pa

### ELECTRICAL PARAMETERS (NMOT)

Model	530M	535M	540M	545M	550M
Maximum Power (Pmp) STC	395	398	402	405	409
Working Point Voltage (Vmp)	37.95	38.09	38.25	38.39	38.57
Working Point Current (Imp)	10.41	10.47	10.52	10.57	10.62
Open Circuit Voltage (Voc)	45.8	46.00	46.10	46.20	46.40
Short Circuit Current (Isc)	11.07	11.13	11.19	11.24	11.29
NMOT	The irradiance is 800W/m, the ambient temperature is 20 degrees, and the wind speed is 1m/s				
The Electrical performance parameters are neither just referred to one PV Panel, nor are a part of the contract; They are only used as reference.					

### TEMPERATURE PARAMETERS

NMOT	45±2°C
Temperature Coefficient of Maximum Power (Pmax)	-0.35%/°C
Temperature Coefficient of Open Circuit Voltage (Voc)	-0.28%/°C
Temperature Coefficient of Short Circuit Voltage (Isc)	+0.048%/°C

### MAXIMUM RATINGS

Working Temperature	-40- +85°C
Maximum System Voltage	1500VDC
Maximum Fuse Rated Current	25A

### PACKAGING & TRANSPORT

40'HQ Container transport	31 Pcs/Box x 20 Box = 620 Pcs
13.5m Truck transport	31 Pcs/Box x 22 Box = 682 Pcs