

MBB Monocrystalline

Half-Cell Bifacial 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)



Bifacial Technology

More energy production from sunlight with mesh transparent backsheet

21.3%

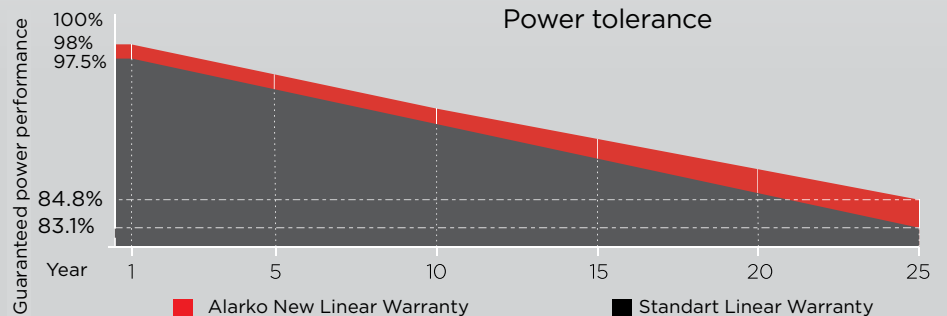
Maximum efficiency

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



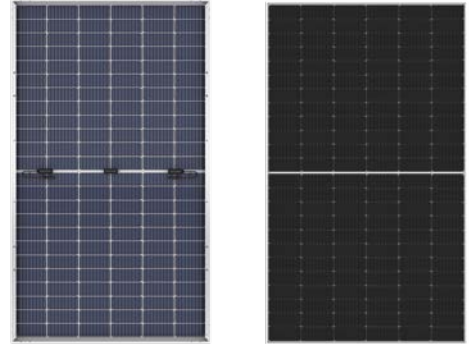
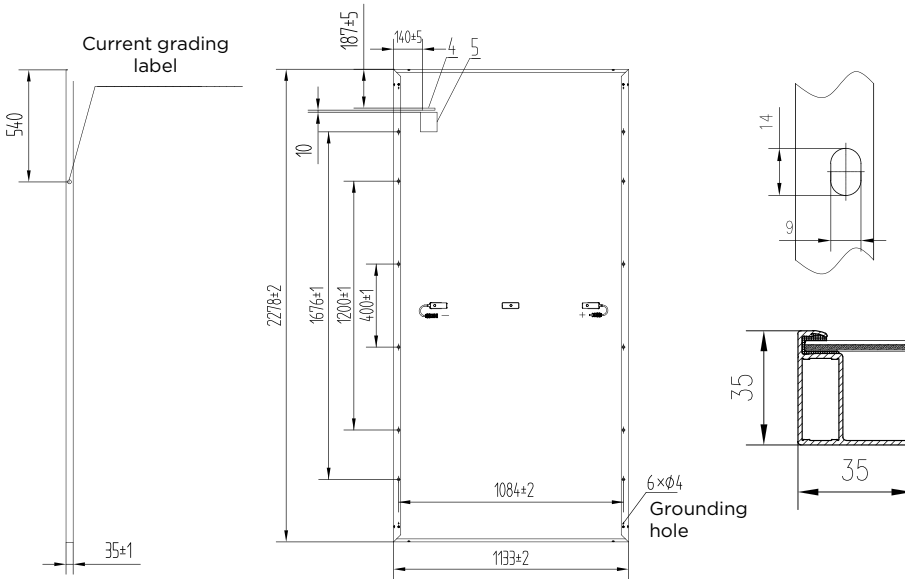
21.3%
MAX. MODULE
EFFICIENCY

0~+5W
POWER
TOLERANCE

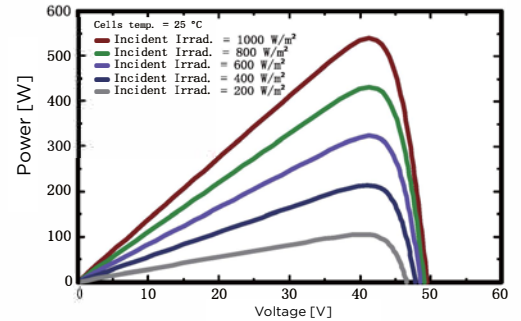
<2%
FIRST YEAR
POWER DEGRADATION

0.55%
YEAR 2-25
POWER DEGRADATION

PV Module Dimensions (mm)



P-V Curves of PV Module



ELECTRICAL PARAMETERS (STC)

Model	530B	535B	540B	545B	550B
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/m ² , 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	4mm ² , + 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 CHARACTERISTICS WITH DIFFERENT REAR SIDE POWER GAIN (REFERENCE TO 540W FRONT)

Pmax/W	Voc/V	Isc/A	Vmp/V	Imp/A	Pmax gain
567	49.50	14.54	41.65	13.61	5%
594	49.50	15.23	41.65	14.26	10%
621	49.60	15.92	41.75	14.91	15%
648	49.60	16.62	41.75	15.56	20%
675	49.60	17.31	41.75	16.21	25%

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

ELECTRICAL PARAMETERS (NMOT)

Model	530B	535B	540B	545B	550B
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

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

MAXIMUM RATINGS

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

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.