

MBB Monocrystalline

Half-Cell Photovoltaic Module

390-410W

Output Power

Better Reliability

Reduce Shading & Risk of Micro Crack.

PID Resistant Guarantee

Strict selection of encapsulation materials eliminates PID risk.

Hot-Spot Resistance

High protection against Hot-Spot formation with lower internal current and power usage.

12 Years Product Warranty

25 Years Linear Performance Guarantee

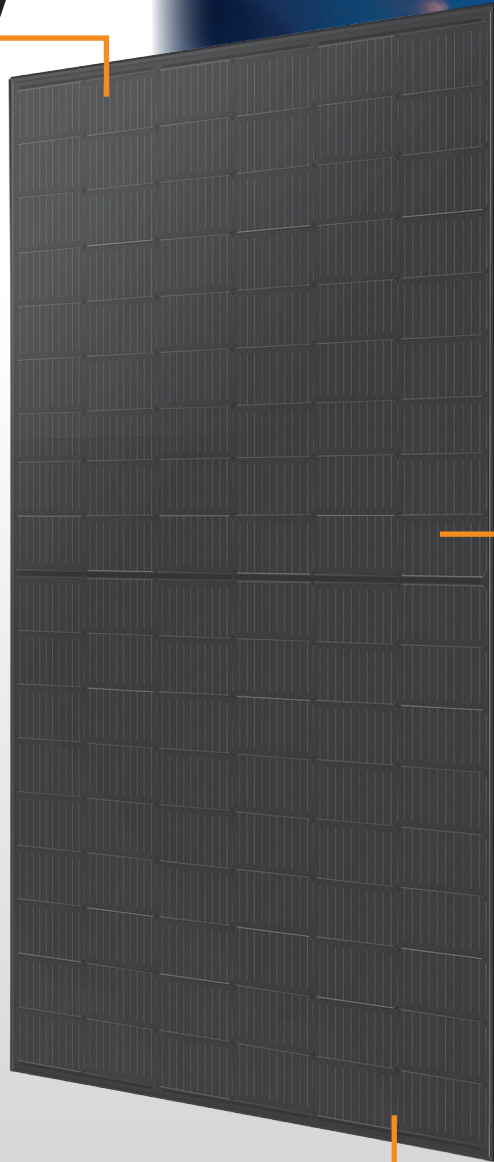
IEC 61215
IEC 61730
UL 61730

ISO9001:2015
(Quality Management System)

ISO14001
(Environmental Management System)

ISO45001
(Occupational Health and Safety Management System)

ISO50001
(Energy Management System)



Black PV Technology

The module is made of black cells and black auxiliary materials. All-black appearance can be more integrated with the building, bringing charming visual impact.

21%

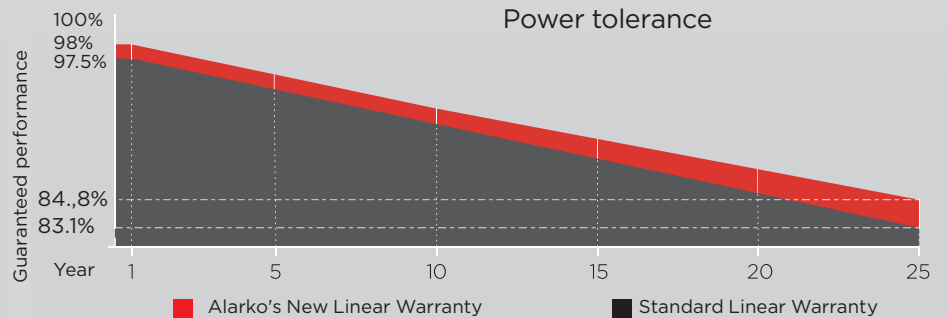
Maximum efficiency

Multi Bus-bar Technology

Ability to benefit more from the Sunlight and collect stronger current with 10 Busbar (BB) Cell Technology. Improved effect on output power and reliability.

0~+5W

Power tolerance



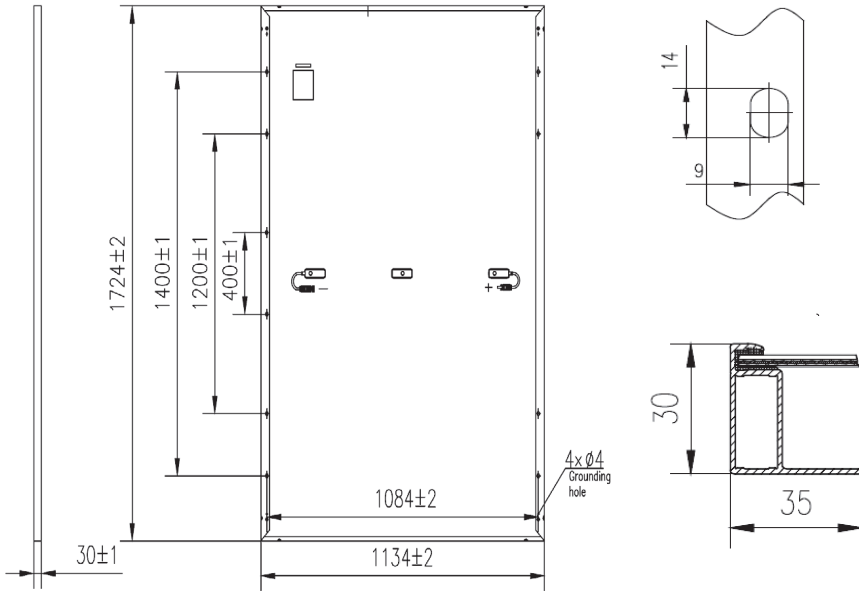
21.0%
MAKS. MODULE
EFFICIENCY

0~+5W
POWER
TOLERANCE

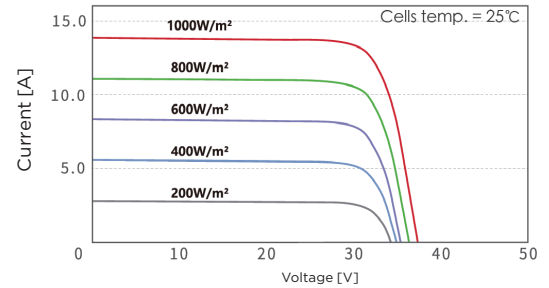
<2.0%
FIRST YEAR
POWER DEGRADATION

0.55%
2- 25 YEAR
POWER DEGRADATION

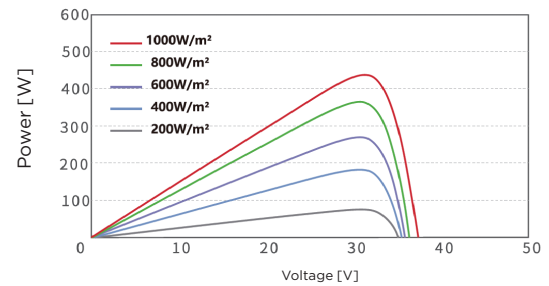
PV Module Dimensions (mm)



I - V Curves of PV Module



P - V Curves of PV Module



ELECTRICAL PARAMETERS (STC)

Model	390B	395B	400B	405B	410B
Maximum Power (Pmp) STC	390	395	400	405	410
Working Point Voltage (Vmp)	30.64	30.81	31.08	31.32	31.54
Working Point Current (Imp)	12.73	12.81	12.87	12.93	13.00
Open Circuit Voltage (Voc)	36.43	36.63	36.83	37.03	37.23
Short Circuit Current (Isc)	13.52	13.59	13.64	13.70	13.77
PV Module Efficiency	19.99%	20.25%	20.50%	20.76%	21.01%
Standart Test Conditions	Atmospheric quality Am 1.5, Irradiance 1000w/m ² , Cell Temperature 25°C				

MECHANICAL SPECIFICATIONS

Module Dimensions	1724 x 1134 x 30 mm
Number of Solar Cells & Cell Dimensions	108 PCS (2x6x9)
Weight	21.5 kg
Junction Box	IP68
Solar Cables	4mm ² , + 300mm & -400 mm (Customizable)
Front Plate Glass	3,2 mm, Ultra white AR coated toughened glass
Static load on the front	5400 Pa
Static load on the back	2400 Pa

ELECTRICAL PARAMETERS (NMOT)

Model	390B	395B	400B	405B	410B
Maximum Power (Pmp) STC	285	288	292	296	300
Working Point Voltage (Vmp)	27.2	27.4	27.6	27.8	28.1
Working Point Current (Imp)	10.48	10.52	10.58	10.64	10.69
Open Circuit Voltage (Voc)	34.6	34.7	34.8	35.1	35.5
Short Circuit Current (Isc)	11.03	11.08	11.13	11.19	11.24

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 ~ +80°C
Maximum system voltage	1500VDC
Maximum fuse rated current	25A

PACKAGING & TRANSPORT

40'HQ Container	36 Pcs/Box x 20 Box = 1008 Pcs
17.5m Truck	36 Pcs/Box x 40 Box = 1440 Pcs