

MBB Monocrystalline

Half-cell Module

540-560W

Output power

21.7%

Maximum efficiency

10-year

Warranty for product

25-year

Warranty for linear
power output

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)



PID Resistant Guarantee

Strict selection of encapsulation
materials eliminates PID risk.

Hot-spot Resistance

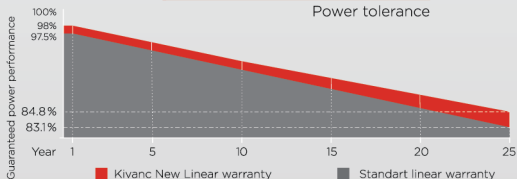
Lower internal current and power
to effectively reduce hot-spot

Multi Busbar Technology

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

0~+5W

Power tolerance



KIVANÇ

KVNC-xxxM-72H-GBF

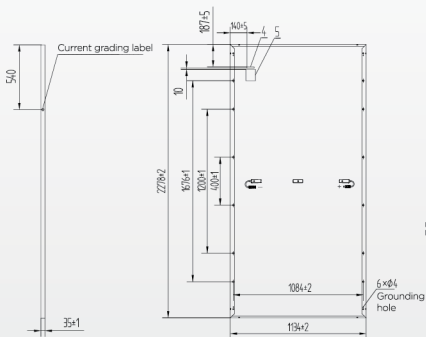
21.7%
MAX MODULE
EFFICIENCY

0~+5W
POWER
TOLERANCE

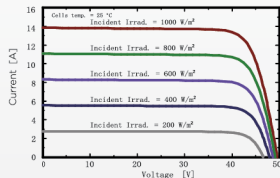
<2.0%
FIRST YEAR
POWER DEGRADATION

0.55%
YEAR 2-25
POWER DEGRADATION

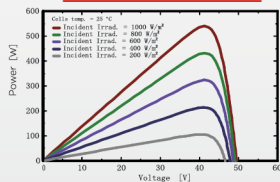
PV Module Dimension(mm)



I-V Curves of PV Module



P-V Curves of PV Module



Electrical Parameter (STC)

Model	540M	545M	550M	555M	560M
Maximum Power	540	545	550	555	560
Working point voltage	41.65	41.80	41.95	42.10	42.25
Working point current	12.97	13.04	13.12	13.19	13.26
Open circuit voltage	49.50	49.65	49.80	49.95	50.10
Short circuit current	13.85	13.92	13.98	14.05	14.12
PV module efficiency	20.92%	21.12%	21.31%	21.50%	21.70%
Standart test conditions	Atmospheric quality Am 1.5, Irradiance 1000w/m², Cell Temperature 25°C				

Mechanical Parameters

Module size	2278x1134x35mm
Number of solar cells	144PCS (2x6x12)
Weight	27Kg ± 5%
Junction Box	IP68, MC4
Cables	4mm², +300mm&-200mm (Customizable)
Front plate glass	3.2mm, Ultra white&Minus reflection film toughened glass
Static load on the front	5400Pa
Static load on the back	2400Pa

Electrical Parameter (NMOT)

Model	540M	545M	550M	555M	560M
Maximum Power	402	405	409	413	416
Working point voltage	38.25	38.39	38.57	38.71	38.85
Working point current	10.52	10.57	10.62	10.67	10.72
Open circuit voltage	46.10	46.20	46.40	46.50	46.60
Short circuit current	11.19	11.24	11.29	11.34	11.39
NMOT	The irradiance is 800W/m², the ambient temperature is 20 degree, 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 Parameter

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

13.5m truck transport	31 Pcs/box x 22 box = 682 Pcs
40HQ container transport	31Pcs/box*20box=620Pcs