

KIVANÇ

Black Series

KVNC-xxxM-54B-GBF

Half-cell Module

390-410W

Output power

21.0%

Maximum efficiency

12-year

Warranty for product

25-year

power output
Warranty for linear

IEC 61215

IEC 61730

UL 61730

ISO9001:2015

(Quality Management System)

ISO14001

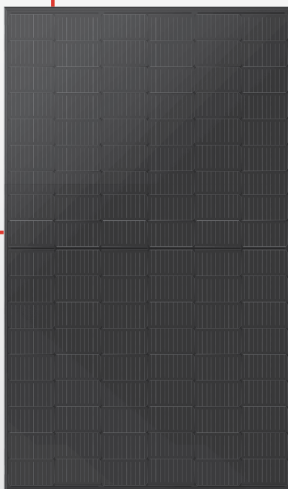
(Environmental Management System)

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.

PID Resistant Guarantee

Strict selection of encapsulation materials eliminates PID risk.

Black Design

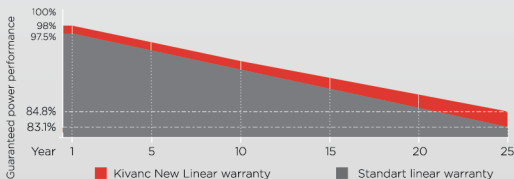
All-black appearance can be more integrated with the building, bringing charming visual impact.

Better Reliability

Reduce Shading & Risk of Micro Crack

0~+5W

Power tolerance



www.kivancsolar.com



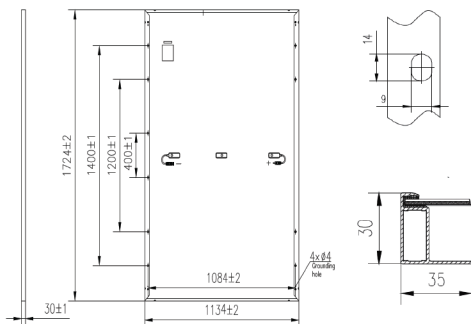
21.0 %
MAX MODULE
EFFICIENCY

0~+5W
POWER
TOLERANCE

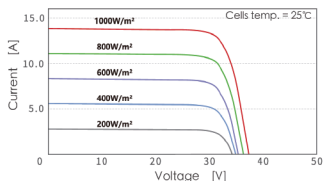
<2.0%
FIRST YEAR
POWER DEGRADATION

0.55%
YEAR 2-30
POWER DEGRADATION

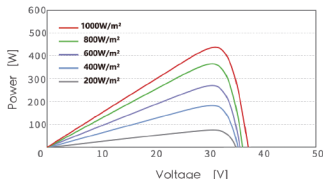
PV module dimensions (mm)



I-V Curves of PV Module



P-V Curves of PV Module



Electrical Parameter(STC)

Model	390B	395B	400B	405B	410B
Maximum Power	390	395	400	405	410
Working point voltage	30.64	30.81	31.08	31.32	31.54
Working point current	12.73	12.81	12.87	12.93	13.00
Open circuit voltage	36.43	36.63	36.83	37.03	37.23
Short circuit current	13.52	13.59	13.64	13.70	13.77
PV module efficiency	19.99	20.25%	20.50%	20.76%	21.01%
Standard test conditions	Atmospheric quality Am 1.5, Irradiance 1000w/m², Cell Temperature 25°C				

Electrical Parameter(NMOT)

Model	390B	395B	400B	405B	410B
Maximum Power	285	288	292	296	300
Working point voltage	27.2	27.4	27.6	27.8	28.1
Working point current	10.48	10.52	10.58	10.64	10.69
Open circuit voltage	34.6	34.7	34.8	35.1	35.5
Short circuit current	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 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 current(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 transport	36Pcs/box*26box=1008Pcs
17.5m truck transport	36Pcs/box*40box=1440Pcs

Mechanical Parameters

Module size	1724*1134*30mm
Number of solar cells	108PCS(2*6*9)
Weight	21.5kg
Junction Box	IP68
Cables	4mm, 300mm±400mm(Customizable)
Front plate glass	3.2mm Urtla white AR coated toughened glass
Static load on the front	5400 Pa
Static load on the back	2400 Pa