

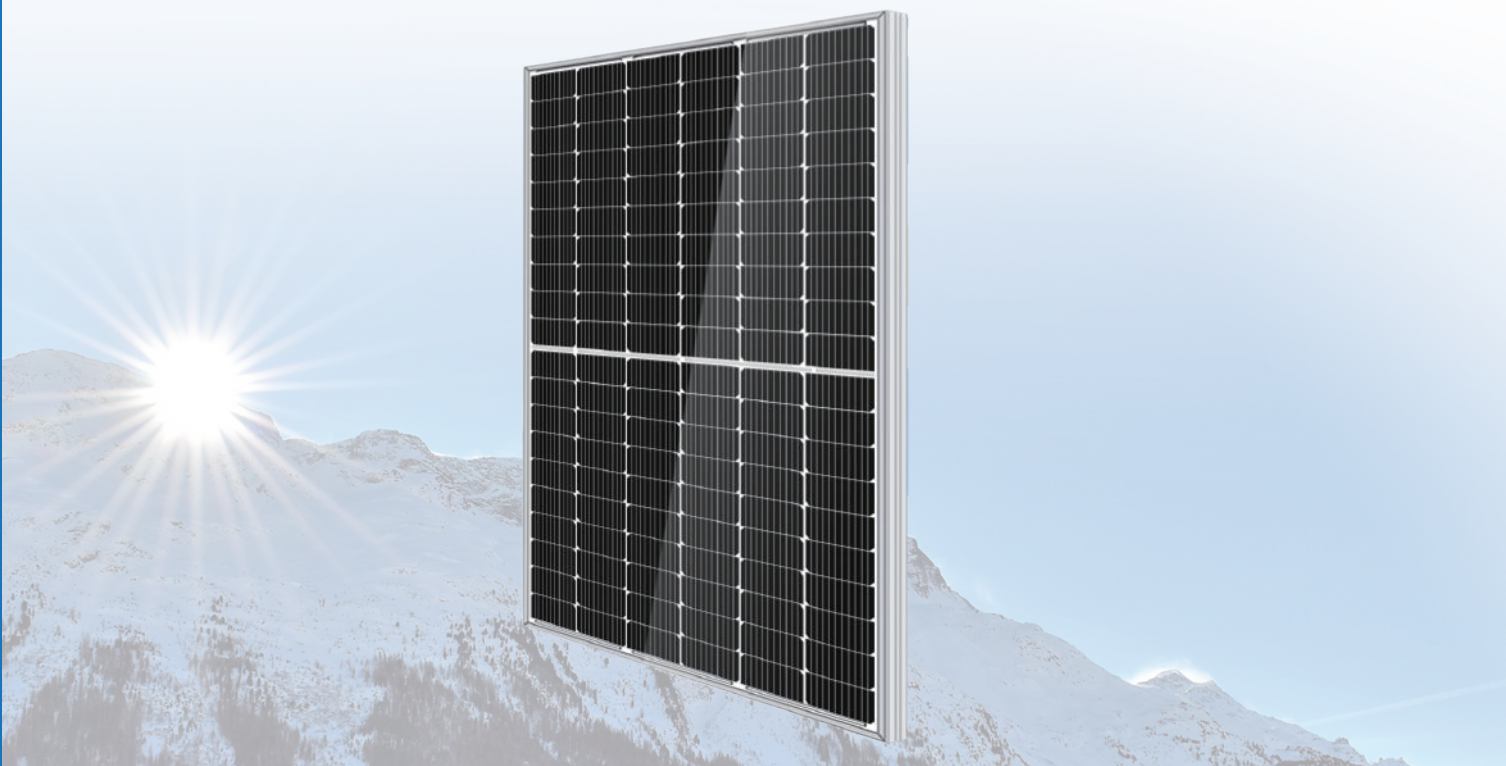
HoRay Solar

禾润电力

HS182*182-M-60-MH

Rated Power 440-460W

Monocrystalline



MBB Cell

New circuit design, lower internal current, lower internal resistance loss.



Low Light Features

Higher performance under low light environment.



Higher Output Power

Module adopts 120 pcs of 182*182mm half cells, the maximum power can reach 460W.



PID Protection

Ensure the attenuation probability caused by PID phenomenon is minimized.



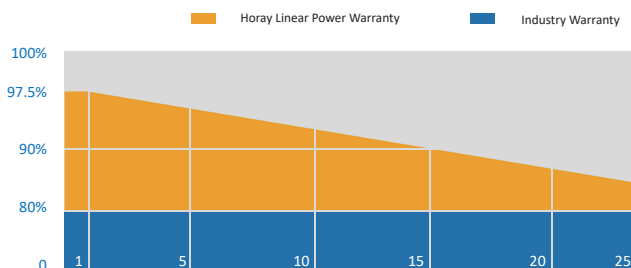
Harsh Environmental Adaptability

Strict salt spray and ammonia corrosion test by TUV Nord.



Load Capacity

Mechanical load tests including wind load 2400 Pa and snow load 5400 Pa done by TUV Nord.



IEC 61215
IEC 61730



IEC 61215 IEC 61730 with
China Standard GB/T9535-1995



TUV Standard



ISO 9001:2015

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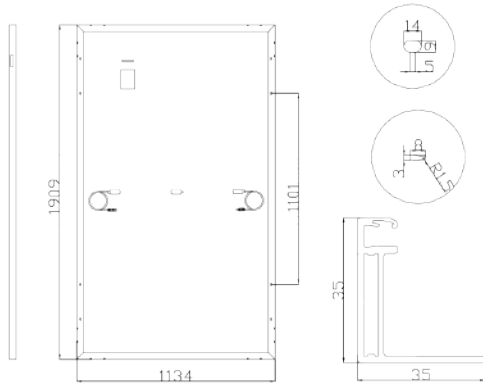
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MECHANICAL DIAGRAMS



SPECIFICATIONS

Weight	24kg
Dimensions	1909mm*1134mm*35mm
Cell Dimensions	182*182mm
Cell Amount	60 * 2 pcs
Maximum System Voltage	1500V
Junction Box	IP68
Frame	Aluminum Alloy
Cable	4mm ² ,Landscape:N 1200mm/P 1200mm Portrait:N 200mm/P 300mm
Connector	MC4 compatible
Application Level	Class A

ELECTRICAL PARAMETERS AT STC

Power	440W	445W	450W	455W	460W
Open Circuit Voltage	41.00V	41.20V	41.40V	41.60V	41.80V
Short Circuit Current	13.58A	13.63A	13.68A	13.73A	13.78A
Maximum Power Voltage	34.20V	34.40V	34.60V	34.80V	35.00V
Maximum Power Current	12.87A	12.94A	13.01A	13.08A	13.15A
Module Efficiency	20.50%	20.80%	21.00%	21.20%	21.50%

* Under Standard Test Conditions (STC) of irradiance of 1000 W/m², spectrum AM 1.5 and cell temperature of 25°C.

ELECTRICAL PARAMETERS AT NMOT

Power	324W	328W	331W	335W	339W
Open Circuit Voltage	38.28V	38.48V	38.68V	38.88V	39.08V
Short Circuit Current	10.68A	10.73A	10.78A	10.83A	10.88A
Maximum Power Voltage	31.94V	32.14V	32.34V	32.54V	32.74V
Maximum Power Current	10.14A	10.21A	10.24A	10.30A	10.35A
Module Efficiency	15.10%	15.30%	15.40%	15.60%	15.80%

* Under Nominal Module Operating Temperature (NMOT), irradiance of 800 W/m², spectrum AM 1.5, ambient temperature 20°C, wind speed 1 m/s.

TEMPERATURE CHARACTERISTICS

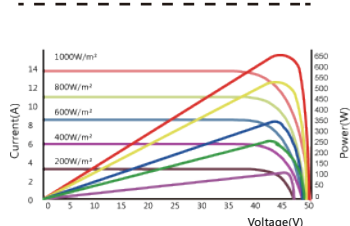
NMOT	45±2°C	Temp Coefficient of ISC	+0.05%/°C
Temp Coefficient of VOC	-0.28%/°C	Temp Coefficient of Pmax	-0.36%/°C

PACKING CONFIGURATION

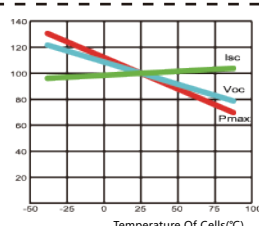
Modules/Pallet	31 Pieces	Modules/40'Container	744 Pieces
Packing Description	24 Pallets, Total=(31+31)x12= 744 Pieces		

CHARACTERISTICS

HS182-120M-530W



HS182-120M-530W



MAXIMUM RATING

Output Tolerance	0~±3%
Operating Temperature	-40°C~+85°C
Wind Load/Snow Load	2400pa/5400pa
Fuse Current	25A

15 YEARS
Quality Warranty

25 YEARS
Power Warranty