

For Global Market



MaysunSolar

Monocrystalline PV Module

MS(420-440)M-144 Series

6BB

- More uniform current collection ability, reduces the current and heat loss of the battery in the module; beautiful appearance, more suitable for roof installation.
- Using half-piece PERC structure technology (low resistance), the output of mono crystalline 144pcs series is up to 420W (module conversion efficiency is up to 19.80%).
- System voltage 1000V/1500V standard
- It can ensure that the components produced on a large scale can pass the PID (potential induced attenuation) test.
- Excellent performance in low light environment achieved by using excellent surface velvet technology of glass and cells.
- The whole module is certified by 2400Pa wind load and 5400Pa snow load.
- Certified by high salt spray and high ammonia corrosion test

420 425 430 435 440

ELECTRICAL SPECIFICATIONS

STC rated output (P _{mpp})*	420 Wp	425 Wp	430 Wp	435 Wp	440 Wp
PV Module size	2115*1052*35				
Standard sorted output	0/+5 Wp				
Warranted power output STC (P _{nominal})	420Wp	425Wp	430Wp	435Wp	440Wp
Rated voltage (V _{mpp}) at STC	40.20V	40.40V	40.60V	40.80V	41.00V
Rated current (I _{mpp}) at STC	10.45A	10.52A	10.60A	10.67A	10.74A
Open circuit voltage (V _{oc}) at STC	48.80V	49.00V	49.20V	49.40V	49.60V
Short circuit current (I _{sc}) at STC	11.04A	11.11A	11.19A	11.26A	11.33A
Module efficiency	18.9%	19.1%	19.3%	19.6%	19.8%
Rated output (P _{mpp}) at NOCT	311.1Wp	314.8Wp	318.5Wp	322.2Wp	326.0Wp
Rated voltage (V _{mpp}) at NOCT	37.10V	37.30V	37.50V	37.70V	37.90V
Rated current (I _{mpp}) at NOCT	8.38A	8.44A	8.50A	8.56A	8.61A
Open circuit voltage (V _{oc}) at NOCT	45.50V	45.70V	45.90V	46.10V	46.30V
Short circuit current (I _{sc}) at NOCT	8.90A	8.95A	9.02A	9.08A	9.13A

Temperature coefficient (P _{mpp})	- 0.380%/K	Maximum system voltage (IEC)	1000V _{DC} /1500V _{DC}
Temperature coefficient (I _{sc})	+0.042%/K	Number of diodes	3
Temperature coefficient (I _{mpp})	- 0.008%/K	Maximum series fuse rating	20 A
Temperature coefficient (V _{mpp})	- 0.373%/K	Operating Temperature	-40°C to +85°C
Temperature coefficient (V _{oc})	- 0.284%/K		
Normal operating cell temperature (NOCT)	46±2°C		

* Measurement tolerance +/- 3%



CE IEC 61701 Salt Spray test Severity (3) IEC 60068-2-68 Sand test IEC 62804 1500V PID test



MAYSUN SOLAR

RELATED PARAMETERS

Cell type	Monocrystalline	
Number of cells / cell arrangement	144 / 6*24	
Cells dimension	720	6.53"
Packing unit	30 modules	
Weight of packing unit (for container)	720/kg / 1858 lbs	

MECHANICAL SPECIFICATIONS

Outer dimensions (L x W x H)	2115*1052*35mm 83.27*41.42*1.38 in
Frame technology	Aluminum,silver anodized
Module composition	Glass/EVA /Backsheet(white)
Weight (module only)	20.5kg/42.82 lbs
Front glass thickness	3.2mm/0.13 in
Junction box IP rating	IP 65/67
①Cable length(IEC)	300/400mm/11.81/15.75 in
Cable diameter (IEC)	12 AWG/ 4mm ²
②Maximum load capacity	5400 Pa
Fire performance (IEC)	Class C
Connector type (IEC)	MC4 compatible

Refer to Maysun Solar crystalline installation manual.

MODULE DIMENSION DETAILS

Front view	Side view	Rear view	Frame cross section

Maysun Solar Reserves the right of final interpretation.
Specifications and designs included in this datasheet are subject to change without notice.

MAYSUN SOLAR CO.,LTD
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QUALIFICATION AND LINEAR WARRANTIES

Product standard	IEC61215, 61730
Extended product warranty	12 years
Output decline 3%/year performance P _{mpp} (STC)	1 st year
Output decline 0.7%/year performance P _{mpp} (STC)	2 nd -25 th years

I-V Curves of PV module MS 430M-144 at various solar irradiance

