



SUNOVA SOLAR
POWERING THE FUTURE

SS-450-72MD 144cells

430-450W

High Efficiency Half-Cell Mono PERC Module



Half-cut cell technology
New circuit design,
lower internal current,
lower Rs loss



Special circuit design
with much lower hot spot
temperature



Fire safety
(Class C, certified to TÜV
Rheinland and Rheinland
test standards)



Resistance to power
attenuation passed TÜV
Rheinland system voltage
endurance test

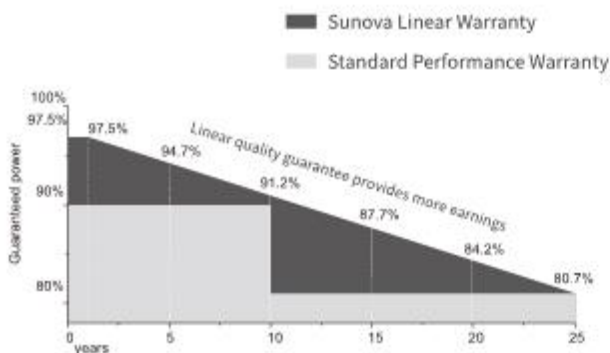


Resistance to salt-spray
corrosion
(IEC61701, certified to TÜV
Rheinland test standard)



100% double EL test
enabling remarkable
reduction of hidden crack
rate of modules.

LINEAR PERFORMANCE WARRANTY



15
YEARS

Product quality
& process guarantee

25
YEARS

Linear power
guarantee

COMPREHENSIVE CERTIFICATES



ISO 9001: Quality Management System
 ISO 14001: Environmental Management System Standard
 OHSAS 18001: International Occupational Health and
 Safety Assessment System Standard

PRODUCT INSURANCE



SS-450-72MD 144cells

ELECTRIC CHARACTERISTICS

Model of modules	SS-430-72MD SS-430-72MDH		SS-435-72MD SS-435-72MDH		SS-440-72MD SS-440-72MDH		SS-445-72MD SS-445-72MDH		SS-450-72MD SS-450-72MDH	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum power — P_{mp} (W)	430	326	435	330	440	334	445	338	450	342
Open-circuit voltage — V_{oc} (V)	49.77	47.12	50.04	47.38	50.08	47.44	50.24	47.59	50.40	47.76
Short-circuit current — I_{sc} (A)	11.19	8.99	11.26	9.05	11.33	9.10	11.40	9.16	11.47	9.22
Maximum power voltage — V_{mp} (V)	40.81	38.45	40.87	38.51	40.97	38.61	41.17	38.81	41.30	38.94
Maximum power current — I_{mp} (A)	10.56	8.48	10.66	8.57	10.74	8.66	10.81	8.71	10.90	8.79
Module efficiency — η_m (%)	19.50%		19.73%		19.96%		20.18%		20.41%	
Power tolerance (W)	(0,+5)									
Maximum system voltage (V)	1000V/1500V									
Maximum rated fuse current (A)	20									
Current operating temperature (°C)	-40~+85 °C									

STC (Standard Testing Conditions): Irradiance 1000W/m², Cell Temperature 25 °C, Spectra at AM1.5

NOCT (Nominal Operating Cell Temperature): Irradiance 800W/m², Ambient Temperature 20°C, Spectra at AM1.5, Wind at 1m/s

STRUCTURAL CHARACTERISTICS

Module dimensions (L*W*H)	2108 x 1046 x 40mm
Weight	24.0 kg
Number of cells	144 cells (6x24)
Cell	PERC Monocrystalline 166x83mm
Glass	Tempered, 3.2mm AR, High transmittance, Low iron
Frame	Anodized aluminum alloy
Junction box	IP67
Output wire	4.0 mm ² , wire length: 1200mm or Customized Length
Connector	MC4 Compatible
Mechanical load	5400 Pa

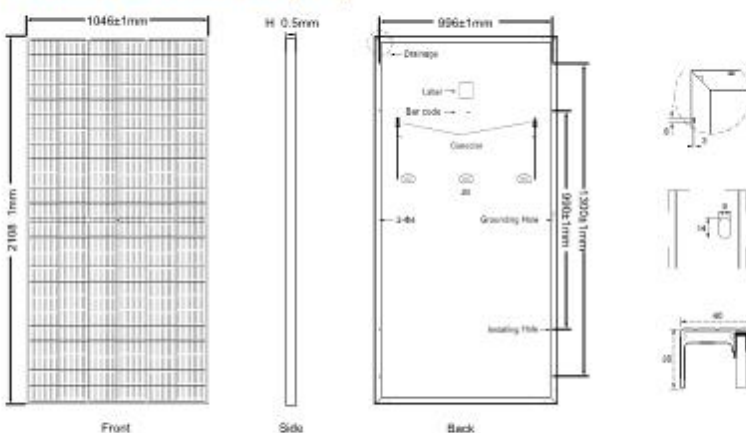
TEMPERFORMANCE RATINGS

Temperature coefficient (P_{max})	-0.37 %/°C
Temperature coefficient (V_{oc})	-0.29 %/°C
Temperature coefficient (I_{sc})	+0.05 %/°C
Nomial operating cell temperature	45±2 °C

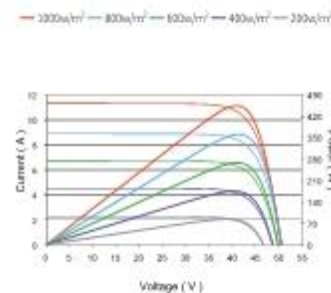
PACKAGING CONFIGURATION

Container	20GP	40HQ
Quantity/pallet	27	27
Pallets/container	10	22
Quantity/container	270	616

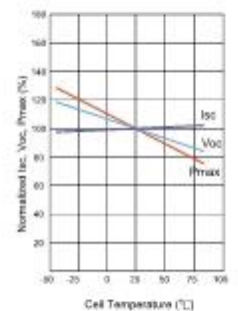
MODULE DIMENSIONS (mm)



Current-Voltage & Power-Voltage Curves (450W)



Temperature Dependence of I_{sc} , V_{oc} , P_{max}



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* Sunova Solar Technology Co., Ltd reserves the right to make any adjustment to the information described herein without further notice. Please contact our company to use the latest version for contract.