



TPS 144 CELL

HalfCell -Double Glass Module

Topsola TPS***M-144H1-DG series modules, using the best quality P-type Mono cell with professional manufacturing technology to provide reliable quality assurance for the system power generation



Higher Durability

More reliable materials ensure the durability of the products.



High power Output

The new generation of TPS Mono series products can achieve high power output by reducing resistance loss.



Half cell design

The half-cut technology reduced the outdoor operating and hot spot temperature, which decrease the loss under the shade



Advanced Glass

Our high-transmission glass features a unique anti-reflective coating that directs more light on the solar cells, resulting in a higher energy yield.

Topsolar enters the photovoltaic industry very first in China. It is a modern high-tech photovoltaic enterprise integrating research and development, sales, production and service, Company's brand "Topsola" founded in 2002 by the leading team, senior managers and technicians of the photovoltaic industry and registered in 16 different countries. Topsolar will adhere to the Chinese and worldwide market combining with the characteristics of open innovation, excellent operation management, first-class service, technology and products to fully build the company's core competitiveness, in order to achieve excellent industry reputation by provide valuable services to all clients

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(182CELL)

Electrical parameters at Standard Test Conditions (STC)

Outputs	Pmax[W]	535	540	545	550
Maximum power voltage	Vmp[V]	40.94	41.13	41.32	41.51
Maximum power current	Imp[A]	13.07	13.13	13.19	13.25
Open circuit voltage	Voc[V]	49.54	49.73	49.92	50.11
Short circuit current	Isc[A]	13.83	13.89	13.95	14.01
Module efficiency	%	20.7	20.9	21.1	21.3
Power of tolerance	[W]	0~+5			

*Standard test conditions : (air mass AM1.5, irradiance 1000W/m², cell temperature 25°C)

Thermal Characteristics

Nominal operating cell temperature	NOCT	°C	45±2
Temperature coefficient of Pmax	γ	%/°C	-0.345
Temperature coefficient of Voc	β	%/°C	-0.263
Temperature coefficient of Isc	α	%/°C	0.049

Operating conditions

Maximum system voltage	1500VDC
Maximum fuse rating	30 A
Operating temperature	-40°C to 85°C
Maximum front static load (snow load)	5400Pa
Maximum back static load (wind load)	2400Pa
Max.hailstone impact (diameter/velocity)	25 mm/ 23m/s

*Do not parallel two modules in the same box fuse

Construction materials

Front Glass(thickness)	2.0mm
Back Glass(thickness)	2.0mm
Cell (quantity /type)	144/Mono
Aluminum frame	Anodic alumina
Junction box (protection class)	≥ IP68
Cable (length / conductor cross-sectional area)	300mm/4mm ²

General features

Size (length/ width/height)	2274 mm / 1134 mm / 30 mm
Weight	32kg±3%



Qualification and certification

IEC 61215, IEC 61730, CE, MCS, GB/T19001:2016, GB/T24001:2016, ISO45001:2018

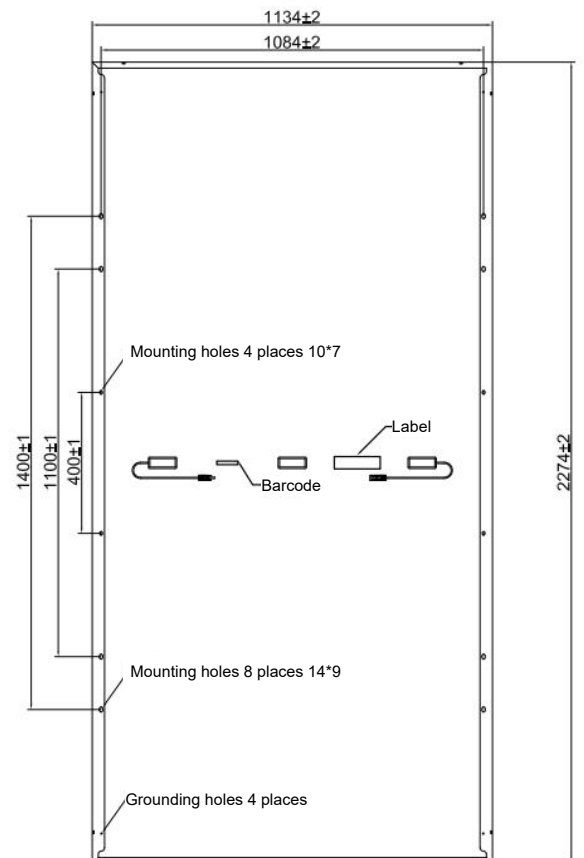
Packing specification

The mode of transportation	Total per container	Numbers per palle
Container 40HQ	720	36

•Due to continuous innovation, research and product upgrades.The contents of specification can be changed slightly without prior notice.

•These data are not specific to a single module, but used to compare different models.

Engineering Drawings



Warning: read the component installation instructions carefully before operating, installing, and running the Topsola modules.

Topsola

江西泰博绿色能源科技有限公司
Jiangxi Topsolar Green energy technology Co.,Ltd