



TPS 144 CELL

HalfCell ----- Module

Topsola TPS***M-144H1 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.



25 year linear warranty

Topsola linear quality assurance
Industry P type mono quality assurance

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

TPS 144 CELL

HalfCell-Module
(182CELL)

Electrical parameters at Standard Test Conditions (STC)

| Outputs | Pmax[W] | 535 | 540 | 545 | 550 |
|-----------------------|---------|-------|-------|-------|-------|
| Maximum power voltage | Vmp[V] | 40.63 | 40.70 | 40.80 | 40.90 |
| Maximum power current | Imp[A] | 13.17 | 13.27 | 13.36 | 13.45 |
| Open circuit voltage | Voc[V] | 49.34 | 49.42 | 49.52 | 49.62 |
| Short circuit current | Isc[A] | 13.79 | 13.85 | 13.94 | 14.03 |
| 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 | -0.356 |
| Temperature coefficient of Voc | β | %/°C | -0.271 |
| Temperature coefficient of Isc | α | %/°C | 0.050 |

Operating conditions

| | |
|--|---------------|
| Maximum system voltage | 1500VDC |
| Maximum fuse rating | 25 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

| | |
|---|---|
| Glass (material/thickness) | Anti-Reflection Coating, High Transmission, Tempered Glass /3.2mm |
| 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 | 27.5kg±3% |

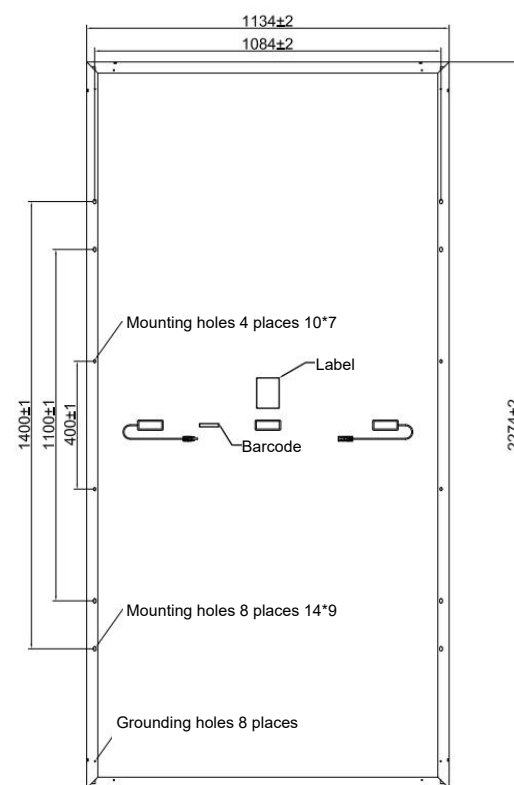
Packing specification

| 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.



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

Topsola

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