

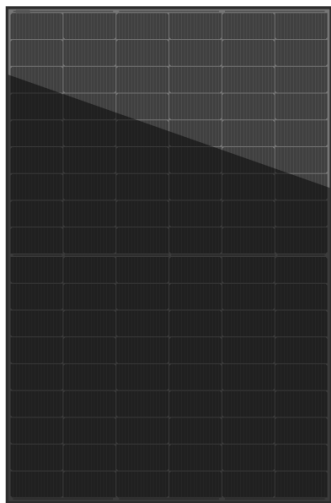
HT54-18X(ND)-F

Double Glass TOPCon PV Module

HIGH High power

445W/450W

455W/460W/465W



- Module Efficiency: 23.3%
- No. of Cells 108(6×18)
- Weight 25.0(±0.5)kg
- Dimensions 1762×1134×30mm
- Bifaciality 80(±5)%



Shanghai Aerospace Automobile
Electromechanical Co., Ltd.
Website: www.ht-saae.com
E-mail: pvmarketing@ht-saae.com



Factory:
Lianyungang Shenzhou New Energy CO., Ltd.



Half cut cell technology
can reduce the
internal power loss
and improve module
overall power.
Excellent heat
dissipation avoids hot
spot production.

15Ys

Products warranty

30Ys

Warranty on power output

EL

Microcrack resistant
Double glass structure
enhance reliability,
double EL tested of high
quality control.



Entire module certified to
with stand extreme
wind(2400 Pa) and snow
loads (5400 Pa)

TOPCon

Double glass, The optimized
number and width of main
gate lines, Maximize the light
receiving area of modules
and Reduce module power
consumption.



1500V

Designed for high voltage
systems of up to 1500 VDC,
increasing the string length
of solar systems and saving
on BoS costs.



2%

All the modules are
sorted and packaged by
amperage, reducing
mismatch losses and
maximizing system output.

0~+3%

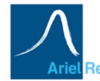
Positive tolerance
0~+3% guaranteed

Anti PID

PID resistant

**Comprehensive and first-rate
certification system**

IEC 61215, IEC 61730 Latest Standard
SA 8000, ISO 9001, ISO 14001 and ISO 45001
meeting the highest international standards
Strict quality control



Electrical Characteristics (STC)

Module Type	HT54-18X(ND)-F				
Maximum Power(Pmax)	445W	450W	455W	460W	465W
Open Circuit Voltage(Voc)	38.7V	38.9V	39.1V	39.3V	39.4V
Short Circuit Current(Isc)	14.47A	14.67A	14.72A	14.77A	14.87A
Maximum Power Voltage(Vmp)	32.4V	32.6V	32.8V	33.0V	33.2V
Maximum Power Current(Imp)	13.76A	13.83A	13.90A	13.96A	14.03A
Module Efficiency	22.3%	22.5%	22.8%	23.0%	23.3%
Power Tolerance	0 ~ +3%				
Maximum System Voltage	1500V DC(IEC)				
Maximum Series Fuse Rating	25A				
Operating Temperature	-40°C to +85°C				

* STC: AM 1.5, Irradiance 1000W/m², temperature 25°C

Electrical Characteristics (NMOT)

Module Type	HT54-18X(ND)-F				
Maximum Power(Pmax)	338W	342W	346W	350W	354W
Open Circuit Voltage(Voc)	37.2V	37.3V	37.5V	37.7V	37.8V
Short Circuit Current(Isc)	11.66A	11.82A	11.86A	11.90A	11.98A
Maximum Power Voltage(Vmp)	31.1V	31.3V	31.5V	31.7V	31.9V
Maximum Power Current(Imp)	10.87A	10.93A	10.98A	11.04A	11.10A

* NMOT: Irradiance 800W/m², temperature 20°C, wind speed 1m/s

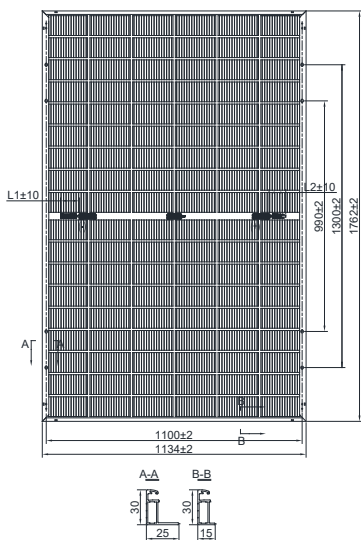
Bifacial output-rearside power gain

5%	Maximum Power(Pmax)	467W	473W	478W	483W	488W
	Module Efficiency	23.4%	23.6%	23.9%	24.2%	24.4%
15%	Maximum Power(Pmax)	512W	518W	523W	529W	535W
	Module Efficiency	25.6%	25.9%	26.2%	26.5%	26.8%
25%	Maximum Power(Pmax)	556W	563W	569W	575W	581W
	Module Efficiency	27.8%	28.2%	28.5%	28.8%	29.1%

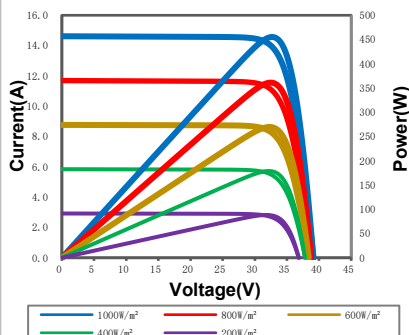
Nominal Module Operating Temperature(NMOT) 43±2°C

Temperature Coefficient of Pmax	γ (Pm)	-0.29%/°C
Temperature Coefficient of Voc	β (Voc)	-0.25%/°C
Temperature Coefficient of Isc	α (Isc)	0.046%/°C

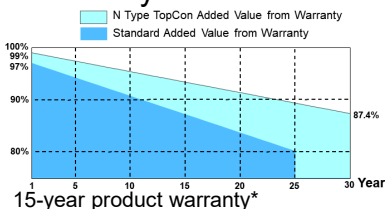
Solar Cells	Monocrystalline
No. of Cells	108 (6×18)
Dimensions	1762×1134×30mm
Weight	25.0 (±0.5) kg
Glass (Front /Back)	AR Coating glass/Heat strengthened glass
Frame	Anodized aluminum alloy
Junction Box	IP68
Cable	4mm ² (IEC) Length: (+) 200mm, (-) 300mm or customized
Connectors	MC4 / MC4 Compatible
Packaging Configuration	36 pcs/box: 936 pcs/ 40' HQ Container



IV Curves



Warranty



30-year warranty on power output*

* Specific information is referred to the product quality guarantee

*The module recycling should be carried out by the professional institutions at the end of module life cycle

*Copyright©2025V2 Specifications are subject to change without further notification