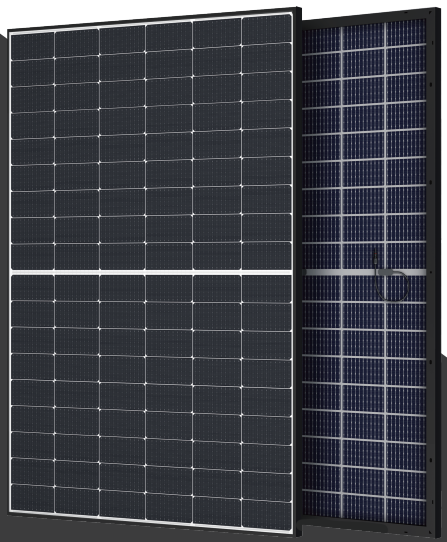
HANERSUN

TOPCon



Hitouch 5N

HN18N-54HT

420-440W

BLACK FRAME
Bifacial Module

22.53%
Maximum Efficiency

30 YEARS
Product Warranty

Higher Power Output

Higher module conversion efficiency benefit from bigger wafer and half-cell structure.

MBB technology enhances current collection with lower series resistance.

Excellent Temperature Coefficient

Lower operating temperature and temperature coefficient increases the power output.

Long-Term Reliability

Module certified to withstand extreme wind (2400 Pascal) and snow loads (5400 Pascal).

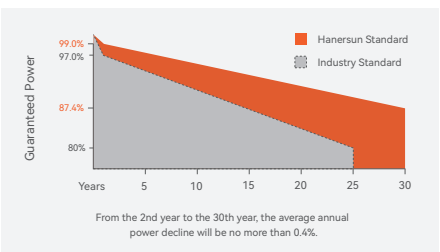
Excellent anti-PID performance to guarantee a better sustainability in harsh environment.

Lower Hot Spot and Crack Risk

Reduce hot-spot risk with optimized electrical design and lower operating current.

Reduce crack risk by MBB solar cell design.

Power Warranty



30 YEARS 30-year product warranty

30 YEARS 30-year linear power output warranty

Insurance

Munich RE

Certificates

About Hanersun

Hanersun is a world-leading energy technology company, with a business scope from the R&D and intelligent manufacturing of solar modules, energy storage products, to comprehensive energy solutions.

Electrical Characteristics

Module Type	HN18N-54HT420W		HN18N-54HT425W		HN18N-54HT430W		HN18N-54HT435W		HN18N-54HT440W	
Testing Condition	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power (Pmax)	420	318	425	322	430	326	435	330	440	334
Maximum Power Voltage (Vmp)	31.90	30.00	32.10	30.20	32.30	30.30	32.50	30.50	32.70	30.70
Maximum Power Current (Imp)	13.17	10.62	13.24	10.67	13.32	10.74	13.39	10.80	13.46	10.88
Open-circuit Voltage (Voc)	37.90	36.20	38.10	36.40	38.30	36.60	38.50	36.80	38.70	37.00
Short-circuit Current (Isc)	13.98	11.27	14.05	11.33	14.12	11.38	14.19	11.44	14.26	11.51
Module Efficiency(%)	21.50%		21.76%		22.02%		22.27%		22.53%	

STC: Irradiance 1000W/m², Cell Temperature 25℃, Air Mass AM1.5.
*Measuring tolerance: 0 ~ +5W

NMOT: Irradiance at 800W/m², Ambient Temperature 20℃, Wind Speed 1m/s.

Electrical Characteristics with 10% Solar Irradiation Ratio

Module Type	HN18N-54HT420W	HN18N-54HT425W	HN18N-54HT430W	HN18N-54HT435W	HN18N-54HT440W
Maximum Power (Pmax)	461	466	472	478	484
Maximum Power Voltage (Vmp)	31.90	32.10	32.30	32.50	32.70
Maximum Power Current (Imp)	14.48	14.54	14.64	14.70	14.80
Open-circuit Voltage (Voc)	37.90	38.10	38.30	38.50	38.70
Short-circuit Current (Isc)	15.37	15.45	15.53	15.61	15.69

Mechanical Parameters

Solar Cells	Monocrystalline (182mm)	No. of Cells	108 [2 x (9 x 6)]
Module Dimensions	1722*1134*30mm	Weight	24.5kg
Glass	2mm-2mm	Encapsulant Material	EVA/POE
Frame	Anodized Aluminium Alloy	J-Box	IP68
Output Cable	4.0mm², 300/300mm	Connector	MC4 Compatible

Temperature Ratings

NMOT (Nominal operating cell temperature)	42℃(±2℃)
Temperature Coefficient of Pmax	-0.310%/℃
Temperature Coefficient of Voc	-0.260%/℃
Temperature Coefficient of Isc	+0.046%/℃

(Do not connect Fuse in Combiner Box with two or more strings in parallel connection)

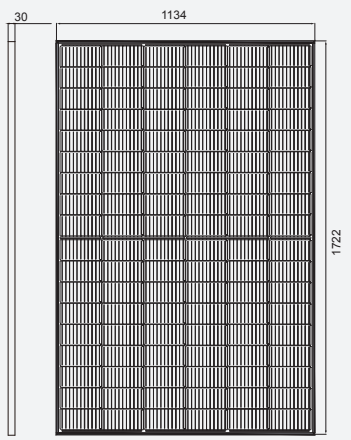
Operating Parameters

Operational Temperature	-40℃~+85℃
Maximum System Voltage	1500V DC (IEC)
Maximum Series Fuse Rating	30A
Bifacility	80%-85%

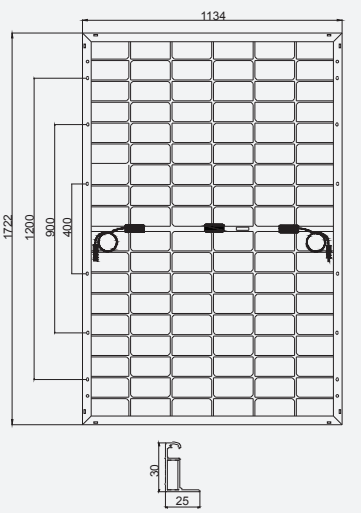
Packaging

Pcs per Pallet: 36	Pcs per 40' HC: 936

Dimensions (Unit: mm)

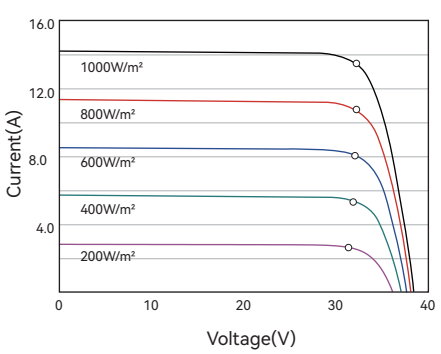


Front View

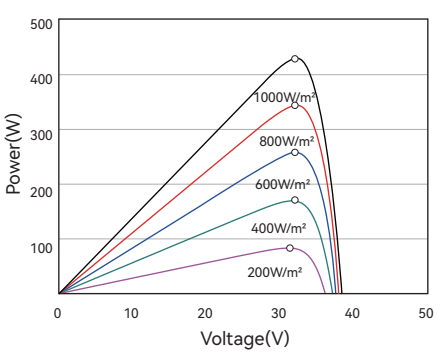


Back View

I-V Curves of PV Module (430W)



P-V Curves of PV Module (430W)



HANERSUN
Tel: +86-25-52791766 Email: sales@hanersun.com Website: www.hanersun.com