N-TOPCon







HN18N-54HT

415-440W

BIFACIAL

22.5%

Full Black Module

Maximum Efficiency



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.



Higher Power Output

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

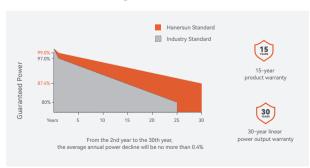
MBB technology enhances current collection with lower series resistance.



Excellent Temperature Coefficient

Lower operating temperature and temperature coefficient increases the power output.

Power Warranty



Certificates





















Warranty partner



About Hanersun

Hanersun is a world-leading clean energy company, focusing on R&D, manufacturing and distribution of solar module and energy storage system, as well as comprehensive clean energy solutions. Committed to high-efficiency technologies, the company is one of the first to launch PV modules of 600W+ and 700W+ in the industry.

Electrical Characteristics (STC)

Module Type	HN18N-54HT415W	HN18N-54HT420W	HN18N-54HT425W	HN18N-54HT430W	HN18N-54HT435W	HN18N-54HT440W
Maximum Power (Pmax)	415	420	425	430	435	440
Maximum Power Voltage (Vmp)	31.70	31.90	32.10	32.30	32.50	32.70
Maximum Power Current (Imp)	13.10	13.17	13.24	13.32	13.39	13.46
Open-circuit Voltage (Voc)	37.70	37.90	38.10	38.30	38.50	38.70
Short-circuit Current (Isc)	13.91	13.98	14.05	14.13	14.19	14.26
Module Efficiency(%)	21.3%	21.5%	21.8%	22.0%	22.3%	22.5%

STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5.

Power Tolerance: 0~+3%

Electrical Characteristics (BNPI)

Module Type	415W	420W	425W	430W	435W	440W
Maximum Power (Pmax)	460	465	471	476	482	488
Maximum Power Voltage (Vmp)	31.70	31.90	32.10	32.30	32.50	32.70
Maximum Power Current (Imp)	14.52	14.58	14.68	14.74	14.84	14.93
Open-circuit Voltage (Voc)	37.70	37.90	38.10	38.30	38.50	38.70
Short-circuit Current (Isc)	15.41	15.49	15.57	15.64	15.72	15.80

BNPI: Irradiance: Front 1000W/m², Rear 135W/m², Cell Temperature 25°C, AM=1.5

Mechanical Parameters

Solar Cells	N-TYPE Monocrystalline(182mm)
Module Dimensions	1722*1134*30mm
Glass	2mm-2mm
Frame	Anodized Aluminium Alloy
Output Cable	4.0mm²

No. of Cells	108 [2 x (9 x 6)]
Weight	23.6kg
J-Box	IP68
Connector	MC4-EVO 2A/Z4S-abcd/Others
Cable Length	300/300mm (can be customized)

Operating Parameters

Operational Temperature	-40°C~+85°C
Maximum System Voltage	1500V DC (IEC)
Maximum Series Fuse Rating	30A
Bifacility	80±5%
Fire Class Rating	Class C

Temperature Ratings

Temperature Coefficient of Pmax	-0.28%/°C
Temperature Coefficient of Voc	-0.23%/°C
Temperature Coefficient of Isc	+0.045%/°C

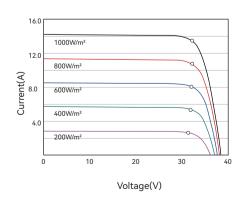
(Do not connect Fuse in Combiner Box with two or more strings in parallel connection)

Packaging

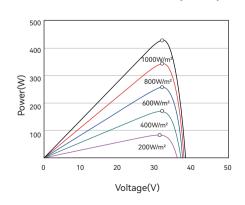
Pcs per Pallet: 37

Pcs per 40' HC: 962

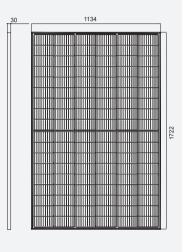
I-V Curves of PV Module (430W)



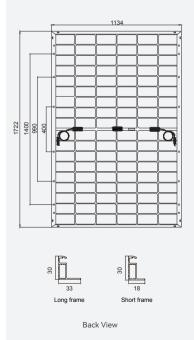
P-V Curves of PV Module (430W)



Dimensions (Unit: mm)



Front View





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