N-TOPCon







HN18N-54H

420-445W

MONOFACIAL

22.8%

High Efficiency Module

Maximum Efficiency



Long-Term Reliability

Module certified to withstand mechanical test load +5400Pa /-2400Pa.

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.

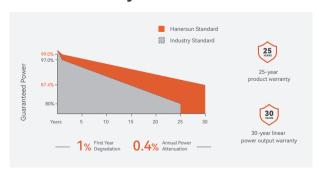
MBB technology enhances current collection with lower series resistance.



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-54H420W	HN18N-54H425W	HN18N-54H430W	HN18N-54H435W	HN18N-54H440W	HN18N-54H445W
Maximum Power (Pmax)*	420	425	430	435	440	445
Maximum Power Voltage (Vmp)	31.90	32.10	32.30	32.50	32.70	32.90
Maximum Power Current (Imp)	13.17	13.24	13.32	13.39	13.46	13.53
Open-circuit Voltage (Voc)*	37.90	38.10	38.30	38.50	38.70	38.90
Short-circuit Current (Isc)*	13.98	14.05	14.12	14.19	14.26	14.33
Module Efficiency(%)	21.5%	21.8%	22.0%	22.3%	22.5%	22.8%

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

*Measuring Tolerance: ±3% Power Binning Tolerance: 0~+5W

Mechanical Parameters

Solar Cells	N-TYPE Monocrystalline(182mm)		
No. of Cells	108 [2 x (9 x 6)]		
Module Dimensions	1722*1134*30/35mm		
Weight	20.2kg		
Glass	3.2mm, Anti-reflection Coating, High Transmission, Low Iron, Tempered Glass		
Backsheet	White		
Frame	Anodized Aluminium Alloy		
J-Box	IP68		
Output Cable	4.0mm²		
Cable Length	Length Portrait:300/300mm (can be customized)		
Connector	Zerun Co.,Ltd / Z4S-abcd Stäubli Electrical connectors AG / PV-KST4-EVO2A/xy, PV-KBT4-EVO2A/xy		

Operating Parameters

Operational Temperature	-40°C~+70°C
Maximum System Voltage	1500V DC (IEC)
Maximum Series Fuse Rating	25A
Bifacility	/
Fire Class Rating	Class C

Temperature Ratings

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

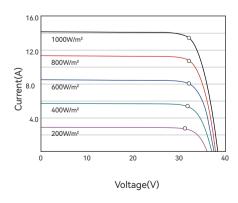
(Do not connect Fuse in Combiner Box with two or more strings in $\,$ parallel connection)

Packaging

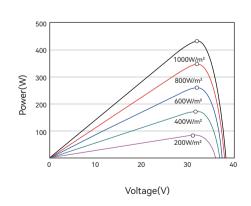
Pcs per Pallet: 37

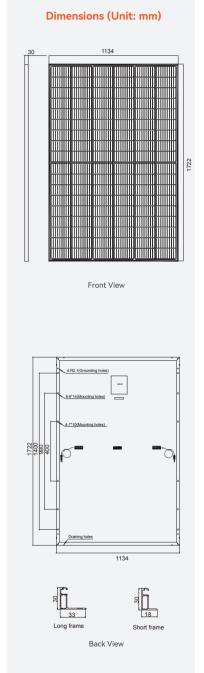
Pcs per 40' HC: 962

I-V Curves of PV Module (430W)



P-V Curves of PV Module (430W)







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