N-TOPCon

HANERSUN

Hitouch 5N

HN18N-54HT

420-445W

BIFACIAL
Full Black Module

22.8%
Maximum Efficiency

Long-Term Reliability

Module certified to withstand 5400 Pa positive static load and 2400 Pa negative static load.

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

Higher Power Output

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

Better light trapping and current collection to improve module power output and reliability.

Lower Hot Spot and Crack Risk

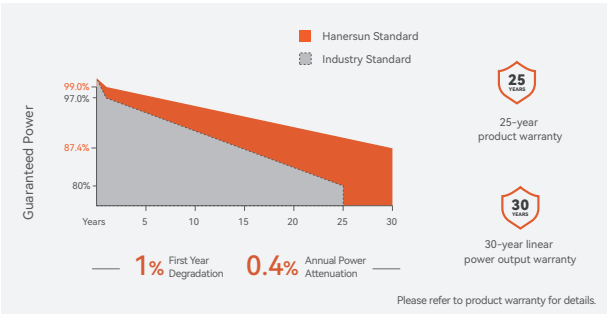
Reduce hot-spot risk with optimized electrical design and lower operating current.

Reduce crack risk by optimization of solar cell design.

Excellent Temperature Coefficient

Lower operating temperature and temperature coefficient increases the power output.

Power Warranty



Certificates

Warranty partner

Munich RE

15Y Product / 30Y Linear Power Warranty under Munich Re insurance.

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-54HT420W	HN18N-54HT425W	HN18N-54HT430W	HN18N-54HT435W	HN18N-54HT440W	HN18N-54HT445W
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℃, Air Mass AM1.5.

Power Tolerance: 0~+3%

Electrical Characteristics（BNPI）

Module Type	420W	425W	430W	435W	440W	445W
Maximum Power (Pmax)	465	471	476	482	488	493
Maximum Power Voltage (Vmp)	31.90	32.10	32.30	32.50	32.70	32.90
Maximum Power Current (Imp)	14.58	14.68	14.74	14.84	14.93	14.99
Open-circuit Voltage (Voc)	37.90	38.10	38.30	38.50	38.70	38.90
Short-circuit Current (Isc)	15.49	15.57	15.64	15.72	15.80	15.88

BNPI: Irradiance: Front 1000W/m², Rear 135W/m², Cell Temperature 25℃, Air Mass AM1.5.

Mechanical Parameters

Solar Cells	N-TYPE Monocrystalline(182mm)	No. of Cells	108 [2 x (9 x 6)]
Module Dimensions	1722*1134*30mm	Weight	23.3kg
Frame	Anodized Aluminium Alloy	J-Box	IP68
Front Glass	2.0 mm, AR Coating Heat Strengthened Glass	Connector	Z4S-abcd/MC4-EVO 2A/Others
Back Glass	2.0 mm, Heat Strengthened Glass	Cables	4.0mm², 300/300mm (can be customized)

Operating Parameters

Operational Temperature	-40℃~+70℃
Maximum System Voltage	1500V DC (IEC)
Maximum Series Fuse Rating	30A
Bifacial	80±5%
Fire Class Rating	Class C

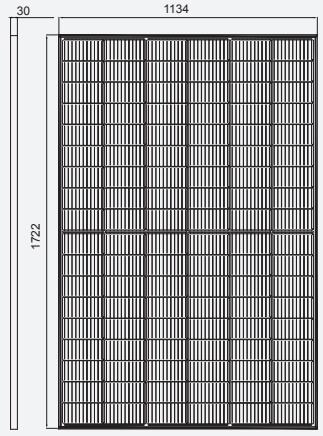
Temperature Ratings

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

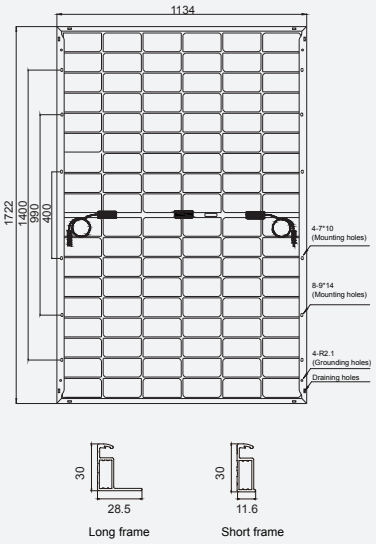
Packaging

Pcs per Pallet: 37	Pcs per 40' HC: 962

Dimensions (Unit: mm)

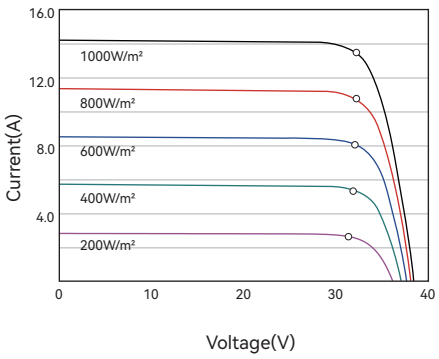


Front View

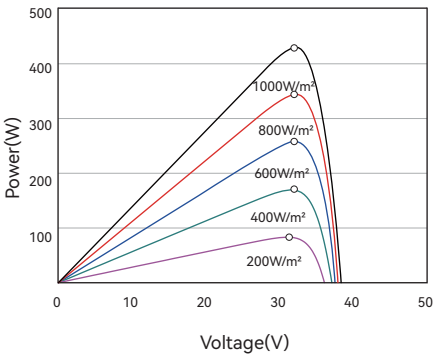


Back View

I-V Curves of PV Module (430W)



P-V Curves of PV Module (430W)



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