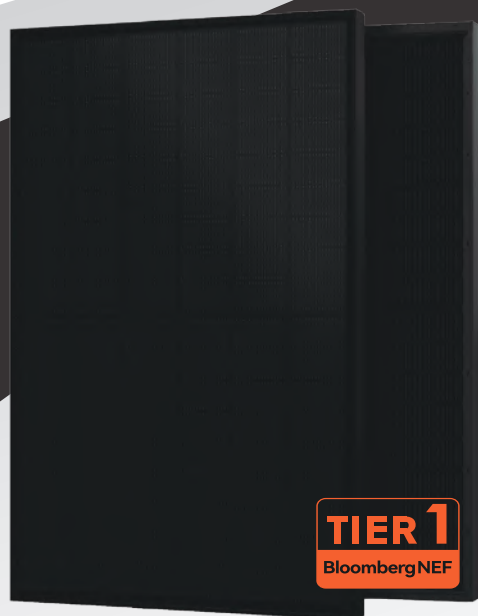




Hitouch^{5N}

HN18N-54HT

415-440W

BIFACIAL

Full Black Module

22.5%

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.



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.

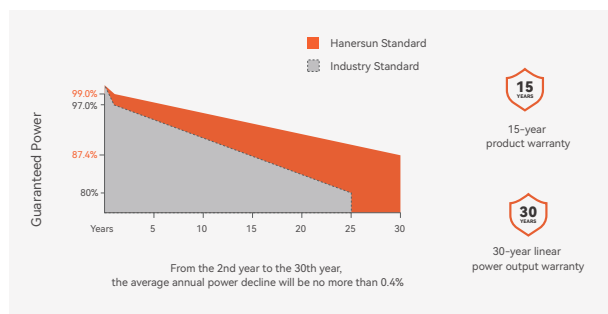
MBB technology enhances current collection with lower series resistance.



Excellent Temperature Coefficient

Lower operating temperature and temperature coefficient increases the power output.

Power Warranty



Certificates



Warranty partner

Munich RE 

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	13.30	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	14.12	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, 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
Glass	2mm-2mm	J-Box	IP68
Frame	Anodized Aluminium Alloy	Connector	Z4S-abcd/MC4-EVO 2A/Others
Output Cable	4.0mm²	Cable Length	300/300mm (can be customized)

Operating Parameters

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

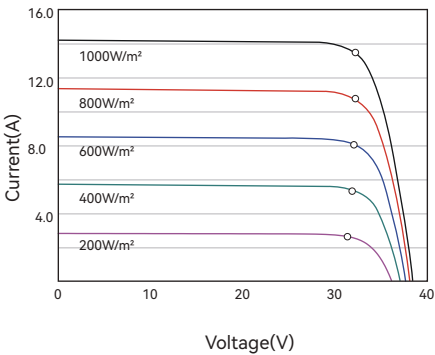
Temperature Ratings

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

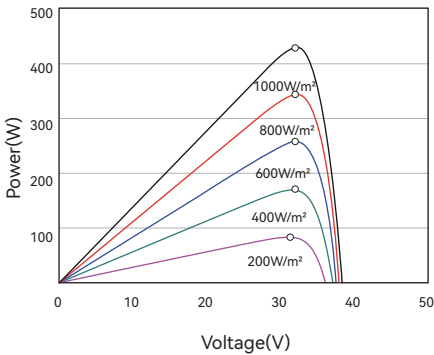
Packaging

Pcs per Pallet: 37	Pcs per 40' HC: 962
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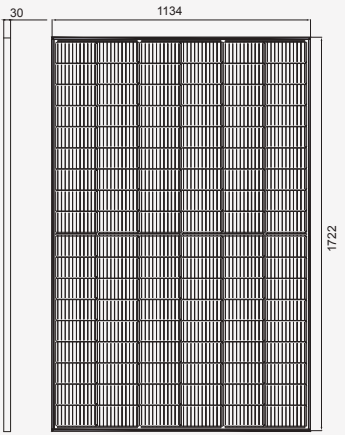
I-V Curves of PV Module (430W)



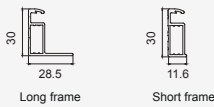
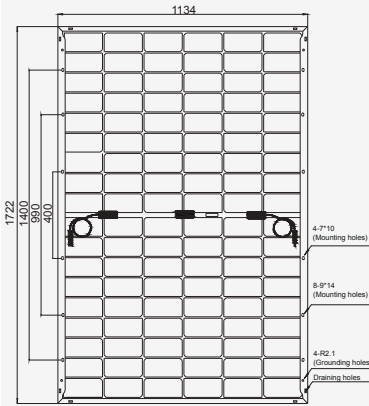
P-V Curves of PV Module (430W)



Dimensions (Unit: mm)



Front View



Back View