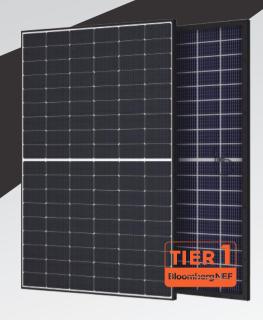
# **N-TOPCon**







HN18N-54HT

420-445W

**BIFACIAL** 

22.8%

Black Frame 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.



# **Higher Power Output**

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

MBB technology enhances current collection with lower series resistance.



### Lower Hot Spot and Crack Risk

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

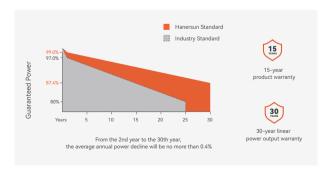
Reduce crack risk by MBB solar cell design.



### **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-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	13.60
Open-circuit Voltage (Voc)	37.90	38.10	38.30	38.50	38.70	39.10
Short-circuit Current (Isc)	13.98	14.05	14.13	14.19	14.26	14.40
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.

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°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%/℃
Temperature Coefficient of Isc	+0.045%/°C

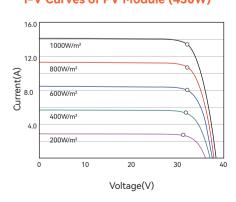
(Do not connect Fuse in Combiner Box with two or more strings in parallel connection)

### **Packaging**

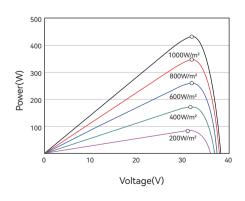
Pcs per Pallet: 37

Pcs per 40' HC: 962

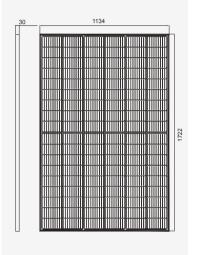
# I-V Curves of PV Module (430W)



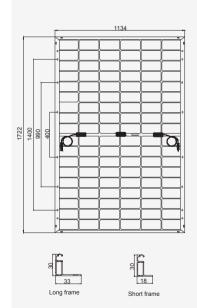
#### P-V Curves of PV Module (430W)



### Dimensions (Unit: mm)



Front View





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Back View