N-TOPCon

HANERSUN

Hitouch 6N

HN21RN-54HT

500-525W

BIFACIAL
High Efficiency Module

23.6%
Maximum Efficiency

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.

Excellent Temperature Coefficient

Lower operating temperature and temperature coefficient increases the power output.

Long-Term Reliability

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

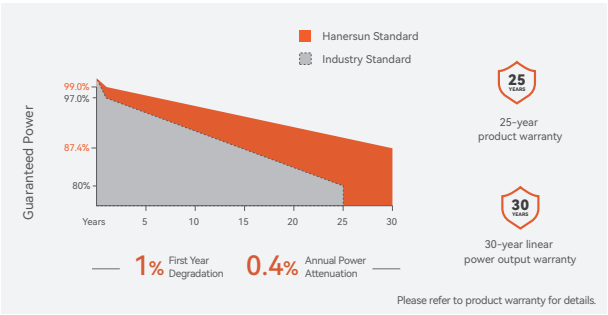
Excellent anti-PID performance to guarantee a better sustainability in harsh environment.

Lower Hot Spot and Crack Risk

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

Reduce crack risk by optimization of solar cell design.

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	HN21RN-54HT500W	HN21RN-54HT505W	HN21RN-54HT510W	HN21RN-54HT515W	HN21RN-54HT520W	HN21RN-54HT525W
Maximum Power (Pmax)	500	505	510	515	520	525
Maximum Power Voltage (Vmp)	33.24	33.42	33.60	33.78	33.96	34.14
Maximum Power Current (Imp)	15.05	15.12	15.18	15.25	15.32	15.38
Open-circuit Voltage (Voc)	39.90	40.10	40.30	40.50	40.70	40.90
Short-circuit Current (Isc)	15.95	16.02	16.10	16.17	16.25	16.32
Module Efficiency(%)	22.5%	22.7%	22.9%	23.2%	23.4%	23.6%

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

Power Tolerance: 0~+3%

Electrical Characteristics（BNPI）

Module Type	500W	505W	510W	515W	520W	525W
Maximum Power (Pmax)	554	560	566	571	577	582
Maximum Power Voltage (Vmp)	33.24	33.42	33.60	33.78	33.96	34.14
Maximum Power Current (Imp)	16.67	16.76	16.85	16.91	17.00	17.05
Open-circuit Voltage (Voc)	39.90	40.10	40.30	40.50	40.70	40.90
Short-circuit Current (Isc)	17.68	17.76	17.84	17.92	18.01	18.09

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

Mechanical Parameters

Solar Cells	N-TYPE Monocrystalline(210R)	No. of Cells	108 [2 x (9 x 6)]
Module Dimensions	1961*1134*30mm	Weight	26.4kg
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	35A
Bifaciality	80±5%
Fire Class Rating	Class C

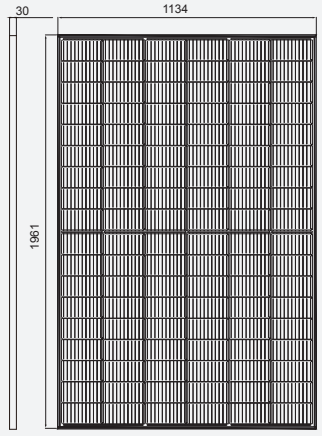
Temperature Ratings

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

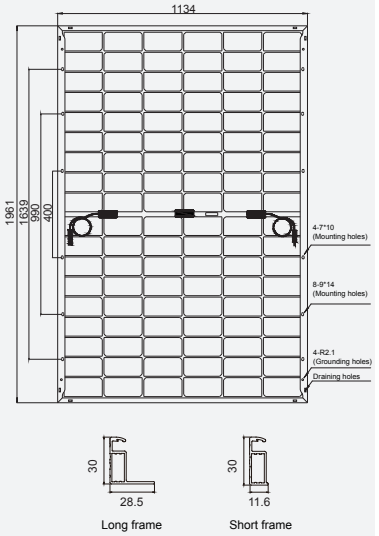
Packaging

Pcs per Pallet: 37	Pcs per 40' HC: 888

Dimensions (Unit: mm)

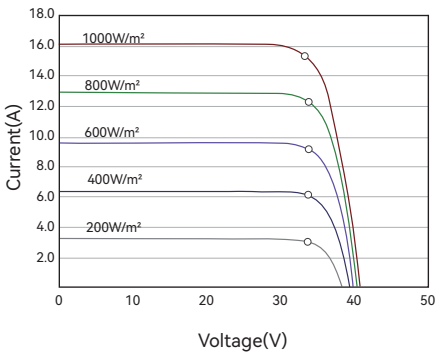


Front View

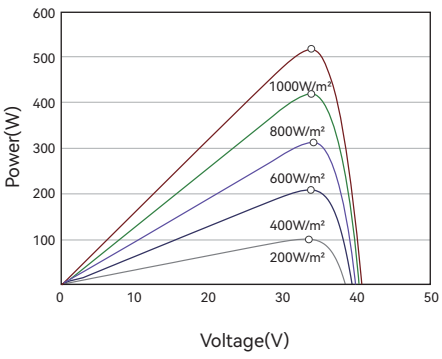


Back View

I-V Curves of PV Module (520W)



P-V Curves of PV Module (520W)



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