



ABC

All Back Contact Technology

23.0%

Maximum Efficiency

15 YEARS

Product Warranty

Hitouch 5A

HN18A-54H

430-450W



Simple and Aesthetic Appearance

Due to the glossy front of the cells, the module embodies a more modern aesthetic.



Higher Power Output

Higher module conversion efficiency benefit from all back contact structure, realizing the maximum utilization of the incident photon.



Long-Term Reliability

Module certified to withstand extreme wind (2400 Pascal) and snow loads (5400 Pascal).

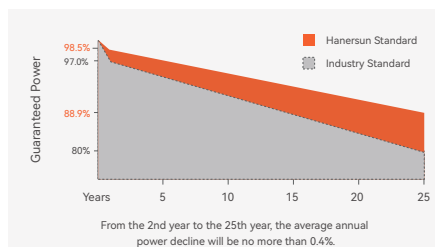
Resistant to harsh environments such as salt, ammonia, sand, high temperature and high humidity areas.



Lower Hot Spot and Crack Risk

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

Power Warranty



15 YEARS 15-year product warranty

25 YEARS 25-year linear power output warranty

Comprehensive Certificates

IEC 61215-1:2016, IEC 61215-1-1:2016
IEC 61215-2:2016, IEC 61730-1:2016
IEC 61730-2:2016



About Hanersun

Hanersun is a world-leading energy technology company, with a business scope from the R&D and intelligent manufacturing of solar modules, energy storage products, to comprehensive energy solutions.

Electrical Characteristics

Module Type	HN18A-54H430W		HN18A-54H435W		HN18A-54H440W		HN18A-54H445W		HN18A-54H450W	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power (Pmax)	430	321	435	325	440	329	445	332	450	336
Open-circuit Voltage (Voc)	39.13	36.74	39.33	36.93	39.53	37.11	39.73	37.30	39.93	37.49
Short-circuit Current (Isc)	14.15	11.43	14.22	11.49	14.30	11.55	14.37	11.61	14.45	11.67
Maximum Power Voltage (Vmp)	32.84	29.97	33.04	30.15	33.24	30.33	33.44	30.51	33.64	30.70
Maximum Power Current (Imp)	13.10	10.72	13.17	10.78	13.24	10.85	13.31	10.90	13.38	10.95
Module Efficiency(%)	22.0%		22.3%		22.5%		22.8%		23.0%	

STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5.
 *Measuring tolerance: 0 ~ +5W

NMOT: Irradiance at 800W/m², Ambient Temperature 20°C, Wind Speed 1m/s.

Mechanical Parameters

Solar Cells	Back Contact (182mm)
No. of Cells	108 [2 x (6 x 9)]
Module Dimensions	1722*1134*30mm
Weight	20.8kg
Glass	3.2mm, High Transmission, AR Coated Heat Strengthened Glass
Encapsulant Material	EVA/POE
Backsheet	White
Frame	Anodized Aluminium Alloy
J-Box	IP68
Output Cable	4.0mm ²
(Including Connector)	Length Portrait:+400/-200mm (can be customized)
Connector	MC4 Compatible

Temperature Ratings

NMOT (Nominal operating cell temperature)	45°C(±2°C)
Temperature Coefficient of Pmax	-0.290%/°C
Temperature Coefficient of Voc	-0.230%/°C
Temperature Coefficient of Isc	+0.050%/°C

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

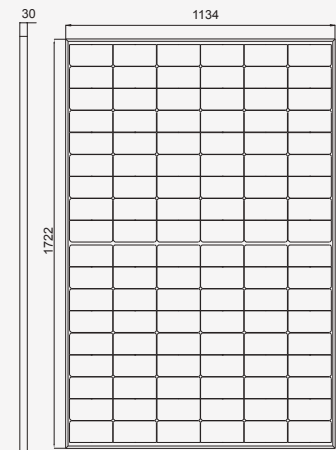
Packaging

Pcs per Pallet:	36
Pcs per 40' HC:	936

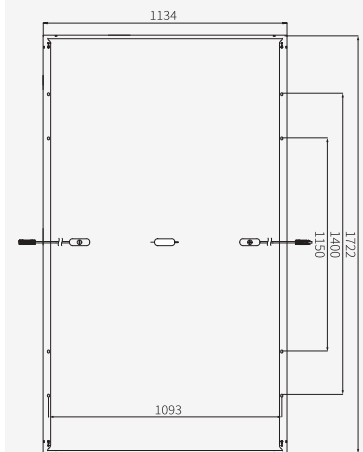
Operating Parameters

Operational Temperature	-40°C~+85°C
Maximum System Voltage	1500V DC (IEC)
Maximum Series Fuse Rating	25A
Fire Class Rating	Class C

Dimensions (Unit: mm)



Front View



Back View

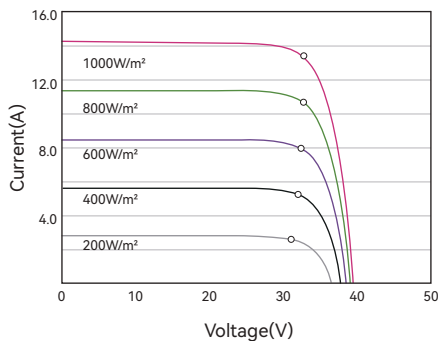


Long frame



Short frame

I-V Curves of PV Module (440W)



P-V Curves of PV Module (440W)

