

N-TYPE

MONOCRYSTALLINE SINGLE GLASS 560-595W

HAPV-144HN-182M

High efficiency and low LID
TOPCon monocrystalline technology
HALF-CELL technology

-  Excellent Anti-PID performance
-  Guaranteed power tolerance (0 ~+5W)
-  Excellent wind and snow loads up to 5400Pa under specific installation methods
-  Lower current, higher power generation, lower risk of hot spots
-  Excellent low irradiation performance
-  Higher component conversion efficiency (up to 23.02%)
-  12-year product quality warranty, 30-year linear output power warranty

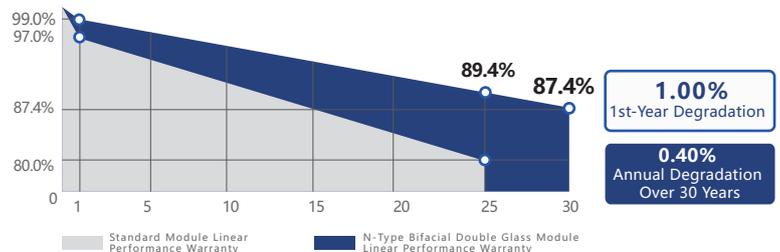


Comprehensive Product And System Certification

IEC 61215, IEC 61730
ISO 9001:2015: ISO Quality Management System Certification
ISO 14001:2015: ISO Environmental Management System Certification
ISO 45001:2018 Occupational Health and Safety Management System Certification



Linear Power Output Warranty



Electrical Performance Parameters

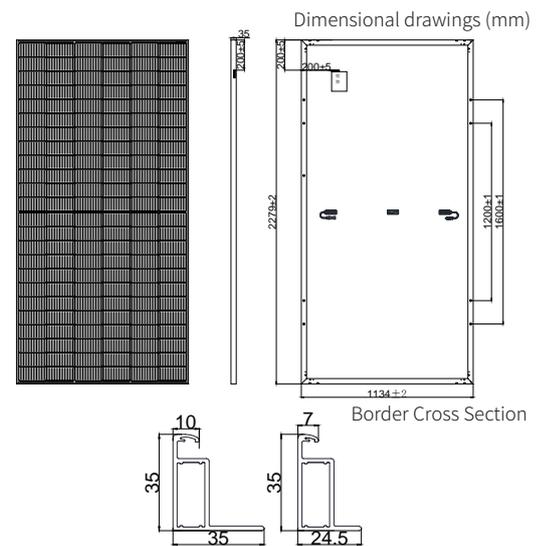
Maximum power test tolerance : ±3%

Component model	560W		565W		570W		575W		580W		585W		590W		595W	
	STC	NOCT														
Testing environment	STC	NOCT														
Maximum power [Pmax/W]	560	420	565	423	570	427	575	431	580	435	585	438	590	442	595	446
Maximum power voltage [Vmp/V]	44.70	41.92	44.85	41.97	45.00	42.12	45.15	42.30	45.30	42.44	45.45	42.53	45.60	42.67	45.74	42.85
Maximum power current [Imp/A]	12.53	10.02	12.60	10.08	12.67	10.14	12.74	10.19	12.81	10.25	12.88	10.30	12.95	10.36	13.01	10.41
Open circuit voltage [Voc/V]	51.40	48.15	51.55	48.24	51.65	48.35	51.80	48.53	51.95	48.67	52.10	48.75	52.25	48.89	52.40	49.08
Short circuit current [Isc/A]	13.26	10.61	13.33	10.66	13.40	10.72	13.47	10.78	13.54	10.83	13.61	10.89	13.68	10.94	13.75	11.00
Component efficiency [%]	21.67		21.86		22.06		22.25		22.44		22.64		22.83		23.02	

Maximum power test Common Standard Test Environment (STC) irradiance 1000W/m², atmospheric quality AM1.5, module temperature 25 ° C
 Nominal operating battery temperature (NOCT): irradiance 800W/m², ambient temperature 20 ° C, atmospheric quality AM1.5, wind speed 1m/s

Mechanical And Operating Parameters

Number of battery cells	144(6×24)
Junction box	IP68 Three diodes
Output cable	4mm ² , length 300mm, Customizable length
Glass	3.2mm Single layer coated tempered glass
Frame	Anodized aluminum alloy frame
Weight	27kg±3%
Size	2279×1134×35mm
Packing	31pcs per pallet 620pcs per 40'HC
Working temperature	-40°C ~ +85°C
Power tolerance	0~+5 W
Current and voltage tolerance	±4%/±3%
Maximum system voltage	DC1500V (IEC)
Maximum fuse current rating	25A
Nominal operating battery temperature	45±2°C
Safety level	Class II
Fire rating	Class C



Temperature Coefficient(STC)

Short circuit current temperature coefficient of frame section	+0.050%/°C
Open circuit voltage temperature coefficient	-0.263%/°C
Maximum power temperature coefficient	-0.343%/°C

Mechanical Load

Front maximum static load	5400Pa
Maximum back static load	2400Pa
Hail test	25mm hail, impact at 23 m/s

I-V Curve (REESUN144HN-182M-580W)

