

N-TYPE

MONOCRYSTALLINE SINGLE GLASS

420-445W

HSPV-108HN-182M

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

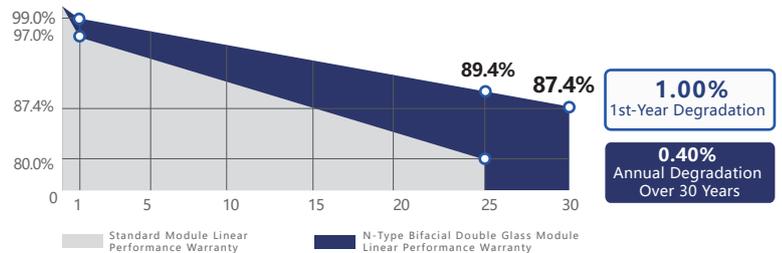
-  Excellent Anti-PID performance
-  Guaranteed power tolerance (0 ~+5W)
-  Excellent wind and snow loads up to 5400Pa under specific installation methods
-  Lower current, higher power generation, lower risk of hot spots
-  Excellent low irradiation performance
-  Higher component conversion efficiency (up to 22.7%)
-  12-year product quality warranty, 30-year linear out



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 : $\pm 3\%$

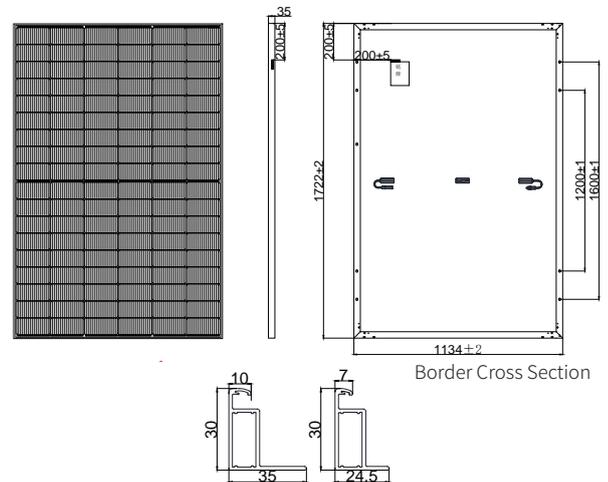
Component model	420W		425W		430W		435W		440W		445W	
	STC	NOCT										
Testing environment	STC	NOCT										
Maximum power [Pmax/W]	420	316	425	320	430	323	435	327	440	331	445	335
Maximum power voltage [Vmp/V]	31.75	29.65	31.94	29.83	32.12	29.88	32.31	30.06	32.50	30.24	32.69	30.42
Maximum power current [Imp/A]	13.23	10.66	13.31	10.73	13.39	10.81	13.47	10.88	13.55	10.95	13.62	11.02
Open circuit voltage [Voc/V]	37.59	35.09	37.83	35.35	38.05	35.45	38.27	35.66	38.49	35.86	38.71	36.05
Short circuit current [Isc/A]	13.97	11.26	14.05	11.32	14.13	11.39	14.21	11.45	14.29	11.51	14.37	11.57
Component efficiency [%]	21.51		21.76		22.02		22.28		22.53		22.79	

Maximum power test STC - Standard Test Conditions irradiance 1000W/m², atmospheric quality AM1.5, module temperature 25 °C
 NOCT - Nominal Operating Cell Temperature: irradiance 800W/m², ambient temperature 20°C, atmospheric quality AM1.5, wind speed 1m/s

Mechanical And Operating Parameters

Number of battery cells	108(6×18)
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	21.5kg $\pm 3\%$
Size	1722×1134×30mm
Packing	36pcs per pallet 936pcs per 40'HC
Working temperature	-40°C ~ +85°C
Power tolerance	0~+5 W
Current and voltage tolerance	$\pm 4\%/\pm 3\%$
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

Dimensional drawings (mm)



Temperature Coefficient(STC)

Mechanical Load

Short circuit current temperature coefficient of frame section	+0.050%/°C	Front maximum static load	5400Pa
Open circuit voltage temperature coefficient	-0.263%/°C	Maximum back static load	2400Pa
Maximum power temperature coefficient	-0.343%/°C	Hail test	25mm hail, impact at 23 m/s

I-V Curve (HSPV-108HN-182M-410W)

