










# MONOCRYSTALLINE DOUBLE GLASS 435-460W REESUN144HB-166M

High efficiency and low LID  
PERC 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 21.16%)
-  12-year product quality warranty, 30-year linear output power warranty

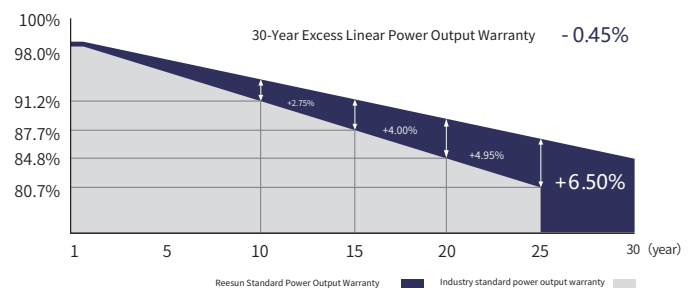
## Comprehensive Product And System Certification

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



\*Reesun Solar reserves the right to interpret technical changes and test specifications.

# REESUN144HB-166M 435-460W

## Electrical Performance Parameters

Maximum power test tolerance : ±3%

Component model	435W		440W		445W		450W		455W		460W	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Testing environment	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum power [Pmax/W]	435	326	440	330	445	334	450	338	455	341	460	345
Maximum power voltage [Vmp/V]	40.43	37.90	40.63	38.09	40.83	38.27	41.03	38.46	41.22	38.64	41.41	38.82
Maximum power current [Imp/A]	10.76	8.61	10.83	8.66	10.90	8.72	10.97	8.78	11.04	8.83	11.11	8.89
Open circuit voltage [Voc/V]	48.72	45.39	48.95	45.67	49.13	45.95	49.33	46.22	49.53	46.49	49.73	46.75
Short circuit current [Isc/A]	11.23	8.98	11.29	9.03	11.35	9.08	11.41	9.13	11.47	9.18	11.53	9.22
Component efficiency [%]	20.01		20.24		20.47		20.70		20.93		21.16	

Maximum power test Common Standard Test Environment (STC) irradiance 1000W/m<sup>2</sup>, atmospheric quality AM1.5, module temperature 25 ° C

Nominal operating battery temperature (NOCT): irradiance 800W/m<sup>2</sup>, ambient temperature 20 ° C, atmospheric quality AM1.5, wind speed 1m/s

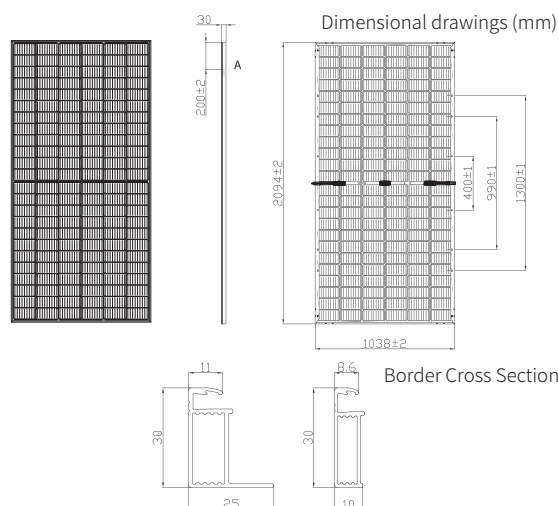
## Back Electrical Performance Parameters

Maximum power test tolerance : ±3%

	Component model	435W	440W	445W	450W	455W	460W
5%	Maximum power (pamx)	456	462	467	472	477	483
	Component efficiency (%)	21.0	21.2	21.4	21.7	21.9	22.2
15%	Maximum power (pamx)	500	506	511	517	523	529
	Component efficiency (%)	23.0	23.2	23.5	23.8	24.0	24.3
25%	Maximum power (pamx)	543	550	556	562	568	575
	Component efficiency (%)	25.0	25.3	25.5	25.8	26.1	26.4

## Mechanical And Operating Parameters

Number of battery cells	144(6×24)
Junction box	IP68 Three diodes
Output cable	4mm <sup>2</sup> , length 300mm, Customizable length
Glass	2.0mm Single layer coated tempered glass
Frame	Anodized aluminum alloy frame
Weight	27.5kg±3%
Size	2094×1038×30mm
Packing	36pcs per pallet 792pcs 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	20A
Nominal operating battery temperature	45±2°C
Safety level	Class II
Fire rating	Class A



## Temperature Coefficient(STC)

Short circuit current temperature coefficient of frame section	+0.048%/°C
Open circuit voltage temperature coefficient	-0.270%/°C
Maximum power temperature coefficient	-0.350%/°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 (REESUN144HB-166M-450W)

