

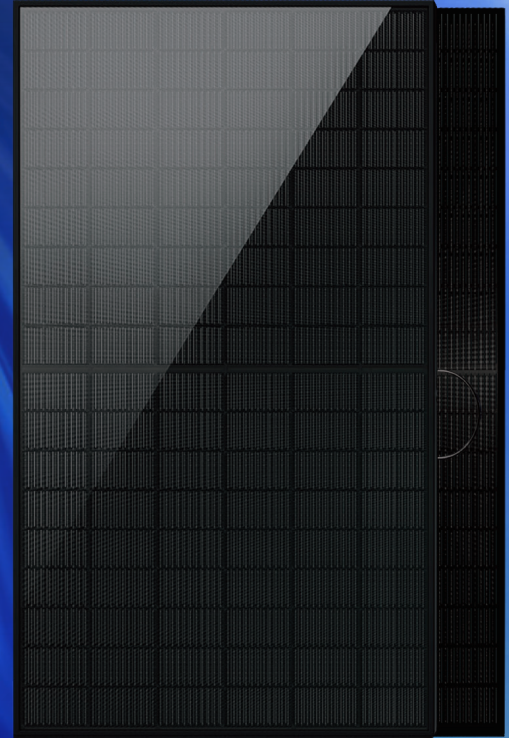


Bifacial Series
Full Black

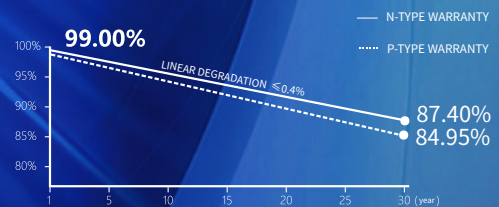


435~455W

HY-NT10/54BGDF



- Module Efficiency up to 23.3%
- Zero LID
- SMBB + Half-cell tech, reduce internal current loss, improve module efficiency, minimize micro-crack impacts, and improve module reliability
- Non-destructive Slicing Tech, reduce micro-crack risk
- Lower temperature coefficient (-0.29%/°C), lower operating temperature, increase the power generation
- Excellent low irradiance performance, higher power output
- 85% Bifaciality rate up to 80-85%, and up to 30% power gain from back side (depending on albedo)
- Resistant to harsh environments
- Anti PID
- More energy yield, lower BOS and LCOE
- All black Aesthetics Module



- 30-YEAR PRODUCT WORKMANSHIP WARRANTY
- 30-YEAR LINEAR POWER WARRANTY

Subject to the terms and conditions contained in the applicable HY Solar Limited Warranty Statement. Also this 30-year limited product warranty is available only for products installed and operating on residential rooftops in certain regions.

Comprehensive Products and System Certificates

IEC 61215, IEC 61730
ISO 9001:2015 Quality management systems
ISO 14001:2015 Environmental management systems
ISO 45001:2018 Occupational health and safety management systems



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The product specifications are subject to change without prior notice.
Please use our latest version.

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Electrical performance parameters

*STC: Irradiance 1000W/m², Cell Temperature 25° C, AM=1.5

Rated output (Pmpp / Wp)	435	440	445	450	455
Rated voltage (Vmpp / V)	32.84	33.04	33.24	33.44	33.64
Rated current (Impp / A)	13.25	13.32	13.39	13.46	13.53
Open circuit voltage (Voc / V)	38.92	39.08	39.24	39.44	39.64
Short-circuit current (Isc / A)	13.97	14.04	14.11	14.18	14.25
Module efficiency	22.3%	22.5%	22.8%	23.0%	23.3%
Power tolerance	0~+5W				

NMOT: Irradiance 800W/m², Ambient Temperature 20° C, AM=1.5, Wind Speed 1m/s

Rated output (Pmpp / Wp)	327.4	331.3	334.9	338.9	343.0
Rated voltage (Vmpp / V)	30.83	31.02	31.21	31.41	31.61
Rated current (Impp / A)	10.62	10.68	10.73	10.79	10.85
Open circuit voltage (Voc / V)	36.97	37.12	37.27	37.47	37.67
Short-circuit current (Isc / A)	11.20	11.26	11.31	11.37	11.42

Different rear power gains (435W as an example)

Power gains Pmpp/ Wp	Vmpp/V	Impp/A	Voc / V	Isc/A	
5%	457	32.84	13.91	38.92	14.67
15%	500	32.84	15.23	38.92	16.07
25%	544	32.84	16.56	38.92	17.46

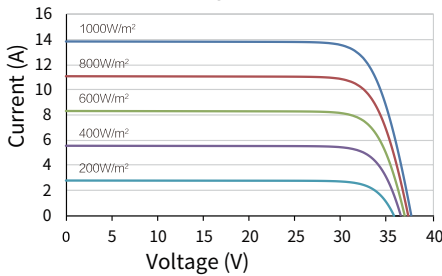
Temperature coefficient

Temperature coefficient (Pmpp)	-0.29%/°C
Temperature coefficient (Isc)	+0.043%/°C
Temperature coefficient (Voc)	-0.24%/°C
Nominal module operating temperature (NMOT)	42±2°C

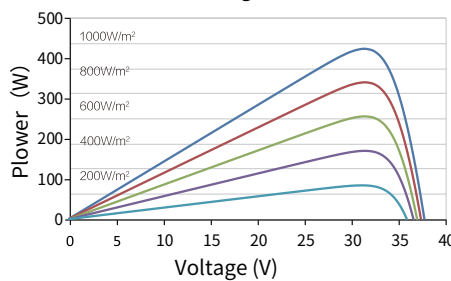
Operating parameters

Max. system voltage (IEC)	1500V _{oc}
Number of diodes	3
Junction box protection rating	IP 68
Max. series fuse rating	30 A
Operational temperature	-40~+85°C
Bifaciality rate	80±5%

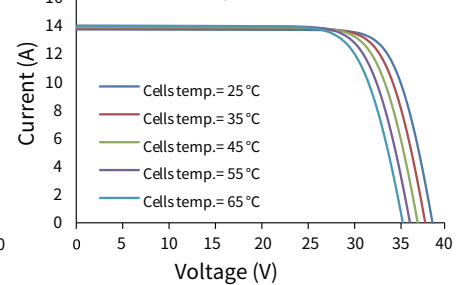
Current-Voltage (435W)



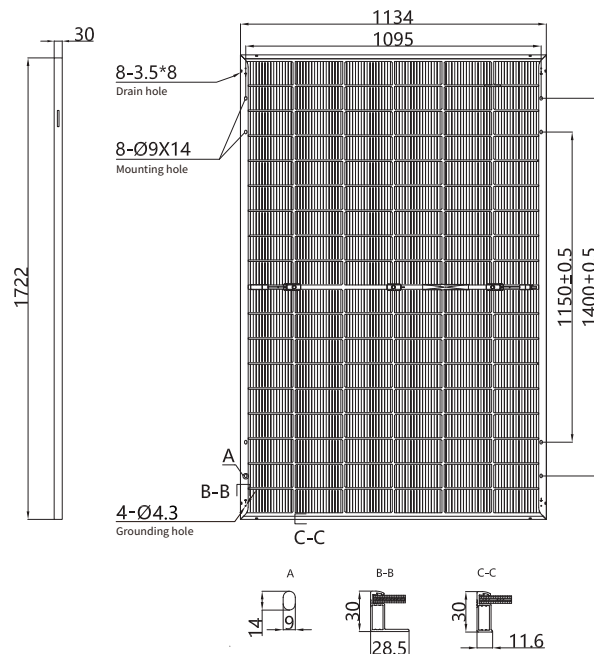
Power-Voltage(435W)



Current-Voltage (435W)



Mechanical parameters



Outer dimensions (L x W x H)	1722 x 1134 x 30 mm
Cell	N type mono-crystalline
Number of cells	108 (6*18)
Frame Type	Aluminum, black anodized
Glass thickness	2.0+2.0 mm (rear glass glazed in black)
Cable length (including connector)	Portrait: (+)300 mm, (-)300 mm; Customized length
Cable cross-sectional area (IEC)	4 mm ² / 12 AWG
① Maximum test mechanical load	5400Pa (front) /2400Pa(rear)
Connector type (IEC)	PV-HYC11xyz(standard)/MC4 EVO2(optional)
Module weight	23.7 kg
Packaging unit	36 pcs / box
Weight of packing unit	896 kg / box
Modules per 40' HQ container	936 pcs

① Please refer to the installation manual or contact us to confirm.
The maximum test mechanical load = 1.5 × maximum design mechanical load.

*The data above is for reference only and the actual data is in accordance with the practical testing. Power Measurement Tolerance ±3% under STC standard.