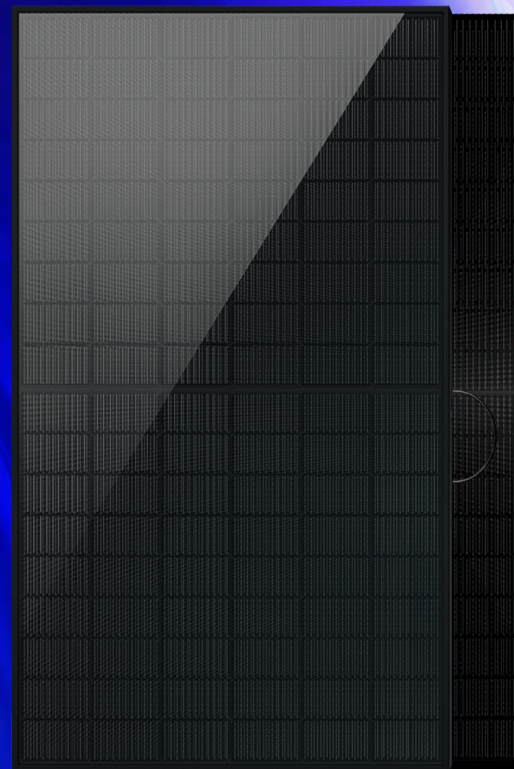
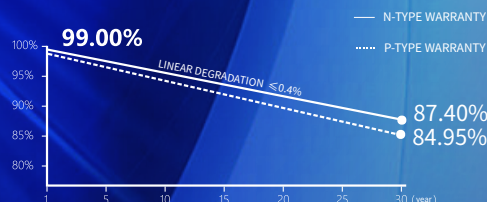


435~455W

HY-NT10/54BGDFP



-  Module Efficiency up to 22.8%
-  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 ($-0.29\%/^{\circ}\text{C}$), lower operating temperature, increase the power generation
-  Excellent low irradiance performance, higher power output
-  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



Electrical performance parameters

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

Rated output (P _{mpp} / Wp)	435	440	445	450	455
Rated voltage (V _{mpp} / V)	32.30	32.48	32.65	32.83	33.00
Rated current (I _{mpp} / A)	13.47	13.55	13.63	13.71	13.79
Open circuit voltage (V _{oc} / V)	38.70	38.90	39.10	39.30	39.50
Short-circuit current (I _{sc} / A)	14.23	14.31	14.40	14.48	14.56
Module efficiency	21.8%	22.0%	22.3%	22.5%	22.8%
Power tolerance	0~+5W				

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

Rated output (P _{mpp} / Wp)	327.5	331.1	334.8	338.4	342.0
Rated voltage (V _{mpp} / V)	30.32	30.49	30.66	30.82	30.98
Rated current (I _{mpp} / A)	10.80	10.86	10.92	10.98	11.04
Open circuit voltage (V _{oc} / V)	36.46	36.64	36.82	37.00	37.18
Short-circuit current (I _{sc} / A)	11.40	11.47	11.54	11.61	11.68

(435W as an example) Different rear power gains

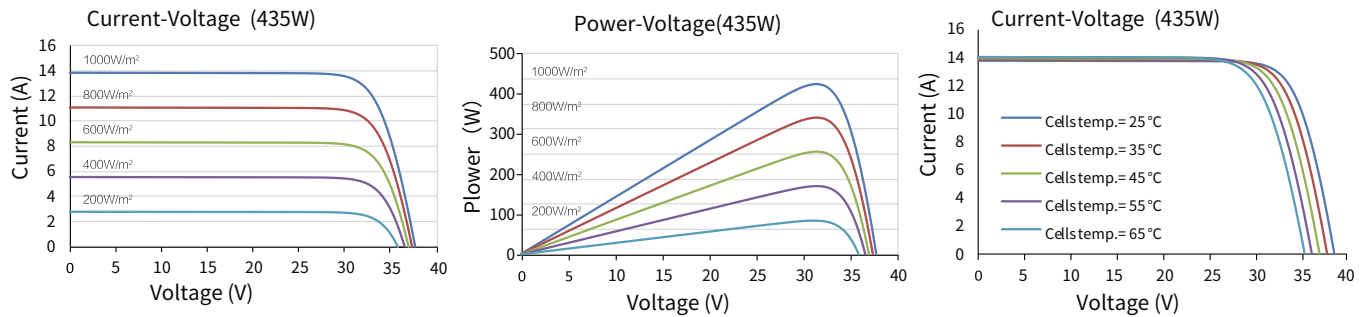
Power gains P _{mpp} /W _p	V _{mpp} /V	I _{mpp} /A	V _{oc} / V	I _{sc} /A	
5%	457	32.30	14.14	38.70	14.94
15%	500	32.30	15.49	38.70	16.36
25%	544	32.30	16.83	38.70	17.79

Temperature coefficient

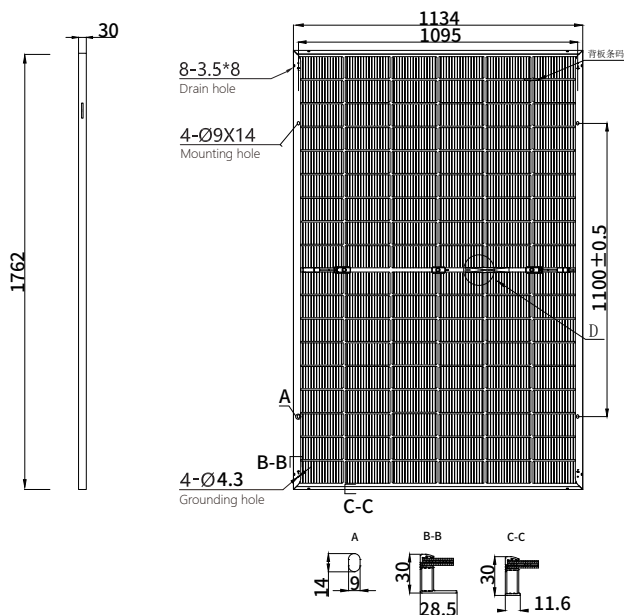
Temperature coefficient (P _{mpp})	-0.29%/°C
Temperature coefficient (I _{sc})	+0.043%/°C
Temperature coefficient (V _{oc})	-0.24%/°C
Nominal module operating temperature (NMOT)	42±2°C

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%



Mechanical parameters



Outer dimensions (L x W x H)	1762 x 1134 x 30 mm
Cell	N type mono-crystalline
Number of cells	108 (6*18)
Frame Type	Aluminum, black anodized
Glass thickness	1.6+1.6 mm (rear glass in glazed black/transparent)
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	21 kg
Packaging unit	36 pcs / box
Weight of packing unit	802 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.