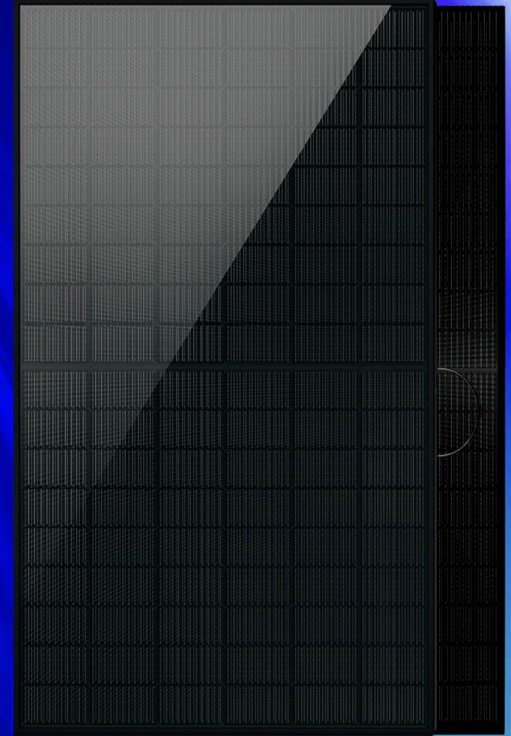











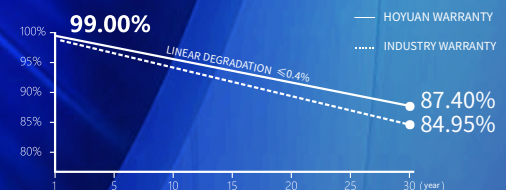


# 420~440W

## HY-NT10/54BGDF



-  Module Efficiency up to 22.5%
-  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
-  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.



## Electrical performance parameters

\*STC: Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25° C, AM=1.5

	420	425	430	435	440
Rated output (P <sub>mpp</sub> / Wp)	420	425	430	435	440
Rated voltage (V <sub>mpp</sub> / V)	32.21	32.42	32.63	32.84	33.04
Rated current (I <sub>mpp</sub> / A)	13.04	13.11	13.18	13.25	13.32
Open circuit voltage (V <sub>oc</sub> / V)	38.44	38.60	38.76	38.92	39.08
Short-circuit current (I <sub>sc</sub> / A)	13.76	13.83	13.90	13.97	14.04
Module efficiency	21.5%	21.8%	22.0%	22.3%	22.5%
Power tolerance	0~+5W				

NMOT: Irradiance 800W/m<sup>2</sup>, Ambient Temperature 20° C, AM=1.5, Wind Speed 1m/s

	316.0	319.9	323.8	327.4	331.3
Rated output (P <sub>mpp</sub> / Wp)	316.0	319.9	323.8	327.4	331.3
Rated voltage (V <sub>mpp</sub> / V)	30.24	30.44	30.63	30.83	31.02
Rated current (I <sub>mpp</sub> / A)	10.45	10.51	10.57	10.62	10.68
Open circuit voltage (V <sub>oc</sub> / V)	36.51	36.67	36.82	36.97	37.12
Short-circuit current (I <sub>sc</sub> / A)	11.03	11.09	11.14	11.20	11.26

## Different rear power gains (425W as an example)

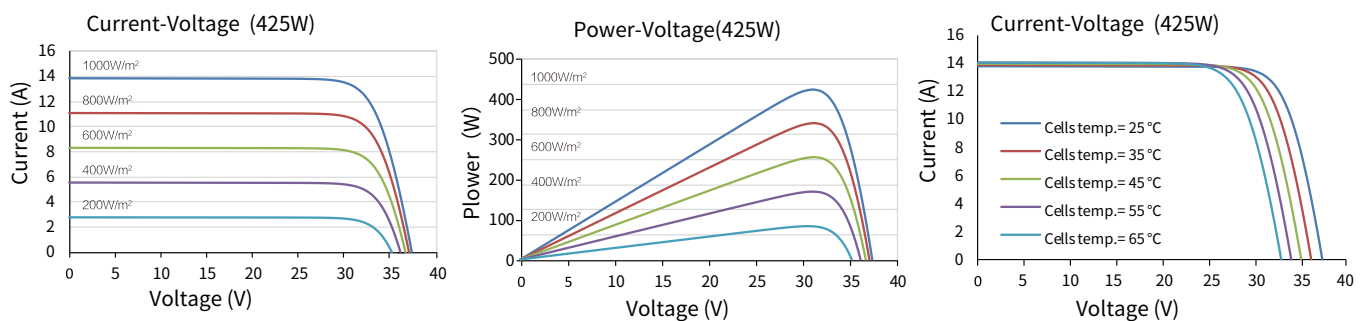
Power gains P <sub>mpp</sub> / Wp	V <sub>mpp</sub> /V	I <sub>mpp</sub> /A	V <sub>oc</sub> / V	I <sub>sc</sub> /A	
5%	446	32.42	13.76	38.60	14.52
15%	489	32.42	15.08	38.60	15.90
25%	531	32.42	16.39	38.60	17.29

## Temperature coefficient

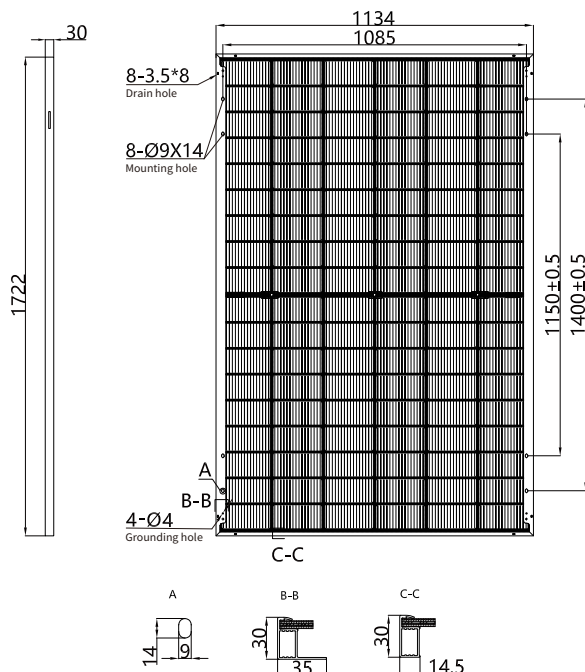
Temperature coefficient (P <sub>mpp</sub> )	-0.29%/°C
Temperature coefficient (I <sub>sc</sub> )	+0.043%/°C
Temperature coefficient (V <sub>oc</sub> )	-0.24%/°C
Nominal module operating temperature (NMOT)	42±2°C

## Operating parameters

Max. system voltage (IEC/UL)	1500V <sub>oc</sub>
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)	1722 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
Cable length (including connector)	Portrait: (+)300 mm, (-)300 mm; Customized length
Cable cross-sectional area (IEC/UL)	4 mm <sup>2</sup> / 12 AWG
① Maximum test mechanical load	5400Pa (front) /2400Pa(rear)
Connector type (IEC/UL)	MC4 EVO2 compatible/ MC4 EVO2 original (optional)
Module weight	21.8 kg
Packaging unit	36 pcs / box (Subject to sales contract)
Weight of packing unit	828 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.