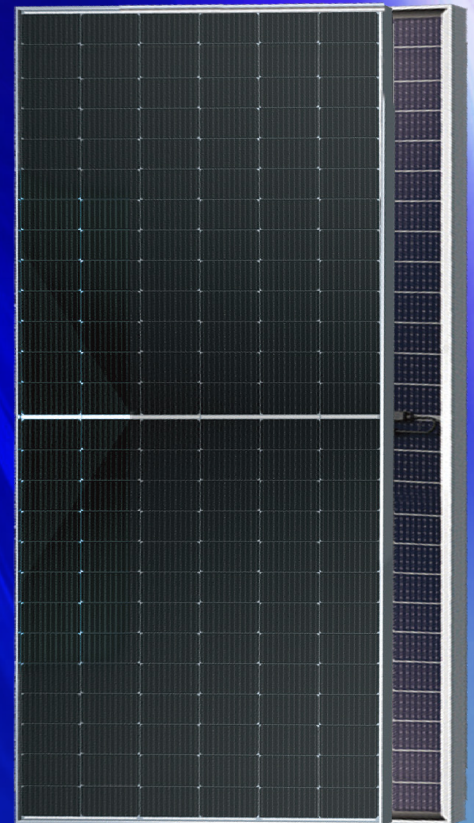










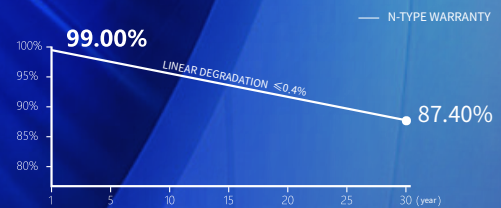


# 630~655W

## HY-NT10/78GDF



-  Module Efficiency up to 23.4%
-  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



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

### 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/m<sup>2</sup>, Cell Temperature 25° C, AM=1.5

Rated output (P <sub>mp</sub> / Wp)	630	635	640	645	650	655
Rated voltage (V <sub>mp</sub> / V)	46.57	46.75	46.95	47.15	47.35	47.55
Rated current (I <sub>mp</sub> / A)	13.53	13.59	13.64	13.68	13.73	13.78
Open circuit voltage (V <sub>oc</sub> / V)	56.41	56.61	56.81	57.01	57.21	57.41
Short-circuit current (I <sub>sc</sub> / A)	14.11	14.17	14.21	14.25	14.29	14.33
Module efficiency	22.5%	22.7%	22.9%	23.1%	23.3%	23.4%
Power tolerance	0~+5W					

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

Rated output (P <sub>mp</sub> / Wp)	469.0	473.1	476.7	480.3	483.9	487.5
Rated voltage (V <sub>mp</sub> / V)	43.31	43.48	43.65	43.82	43.99	44.16
Rated current (I <sub>mp</sub> / A)	10.83	10.88	10.92	10.96	11.00	11.04
Open circuit voltage (V <sub>oc</sub> / V)	53.58	53.77	53.96	54.15	54.34	54.53
Short-circuit current (I <sub>sc</sub> / A)	11.29	11.34	11.38	11.42	11.46	11.50

## Different rear power gains (635W as an example)

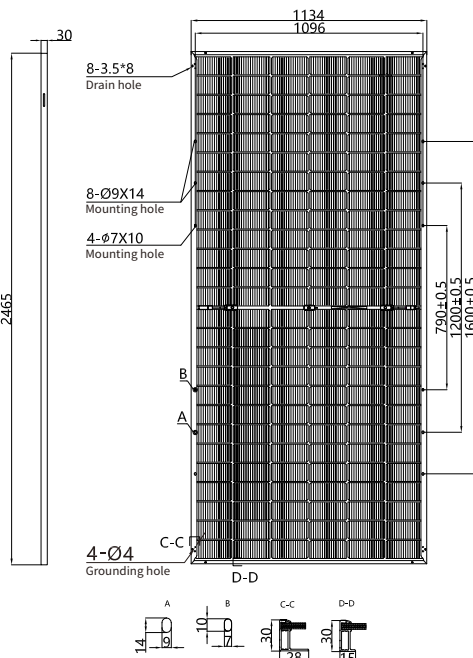
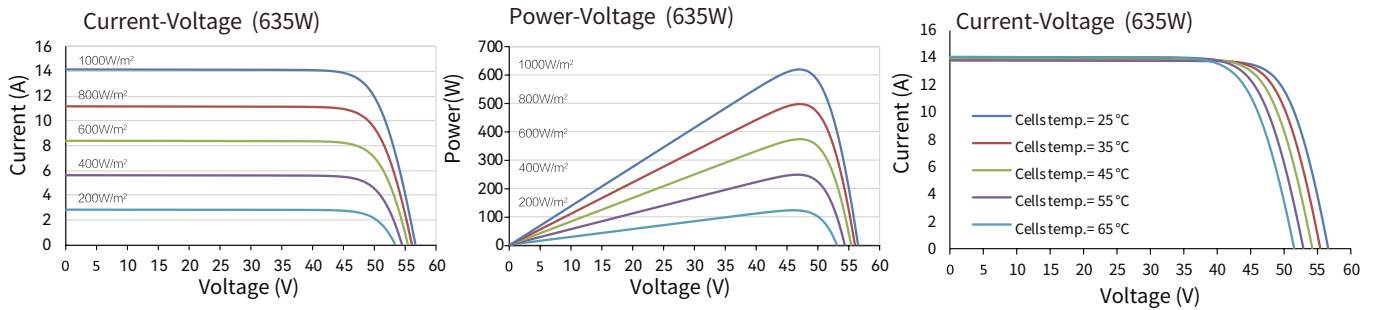
Power gains P <sub>mp</sub> /Wp	V <sub>mp</sub> /V	I <sub>mp</sub> /A	V <sub>oc</sub> /V	I <sub>sc</sub> /A	
5%	667	46.75	14.26	56.61	14.88
15%	730	46.75	15.62	56.61	16.30
25%	794	46.75	16.98	56.61	17.71

## Temperature coefficient

Temperature coefficient (P <sub>mp</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)	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%



Outer dimensions (L x W x H)	2465 x 1134 x 30 mm
Cell	N type mono-crystalline
Number of cells	156 (6*26)
Frame type	Aluminum, silver anodized
Glass thickness	2.0+2.0 mm
Cable length (including connector)	Portrait:( + )300 mm, (- )300 mm ; Customized length
Cable cross-sectional area (IEC)	4 mm <sup>2</sup> / 12 AWG
① Maximum test mechanical load	5400Pa (front) /2400Pa(rear)
Connector type (IEC)	PV-HYC11xyz(standard)/MC4 EVO2(optional)
Module weight	34.7 kg
Packaging unit	36 pcs / box
Weight of packing unit	1302kg / box
Modules per 40' HQ container	576 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.