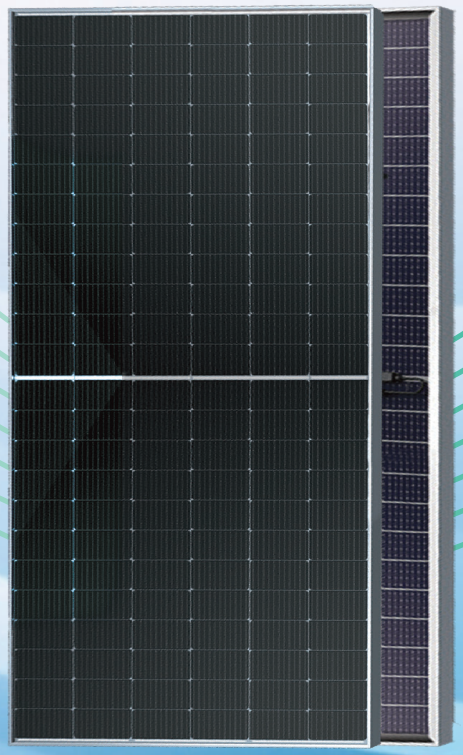
HY SOLAR

HT 182 TOPCon Bifacial Series (For Marine Applications)



590~610W

HY-NT10/72GDF

Main Features

N-TYPE TOPCON TECH
- Lower LID
- Excellent Low Irradiance Performance

SMBB + HALF-CELL TECH NON-DESTRUCTIVE CUTTING
- Reduced Internal Current Loss
- Minimized Micro-Crack Impact

RESISTANT TO HARSH MARINE ENVIRONMENTS
- Strong Wind Resistance, Wave Impact Resistance, Salt Mist Resistance
- UV Aging Resistance, Superior Waterproofing & Light Transmission

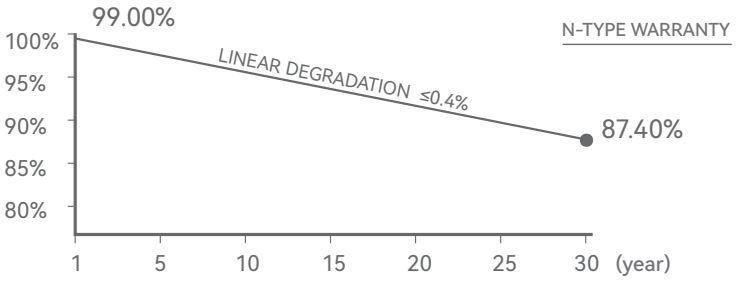
HIGH CONVERSION EFFICIENCY
- Module Conversion Efficiency Up to 23.6%
- Bifaciality Rate Up to 80-85%

SUPERIOR POWER GENERATION PERFORMANCE
- Low Temperature Coefficient: -0.29%/°C
- Lower Operating Temperature

LOWER LEVELIZED COST OF ELECTRICITY
- Lower BOS and LCOE
- Higher ROI

Comprehensive Products and System Certificates

- IEC 61215, IEC 61730
- ISO 9001:2015
- ISO 14001:2015
- ISO 45001:2018



15 YEAR Product Workmanship Warrant

30 YEAR Linear Power Warranty

≤1% First - year power attenuation

≤0.4% Linear power attenuation

© HONGYUAN GREEN ENERGY CO.,LTD. all rights reserved.
The product specifications are subject to change without prior notice.
Please use our latest version.

HONGYUAN GREEN ENERGY CO.,LTD.
Group Headquarter: Building 7, Changguangxi Wetland Park, Lihu Avenue,Binhu District, Wuxi City, Jiangsu Province, China
Tel: +86 0510-85958787
E-mail: info@hysolar.com
Web: https://www.hysolar.com

N-Type Bifacial Series
HY-NT10/72GDF (For Marine Applications)

590~610W	23.6%	0~+5W
POWER RANGE	EFFICIENCY	POWER SORTING

ELECTRICAL PERFORMANCE PARAMETERS

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

Rated output (Pmpp/Wp)	590	595	600	605	610
Rated voltage (Vmpp/V)	44.15	44.34	44.54	44.74	44.94
Rated current (Impp/A)	13.37	13.42	13.48	13.53	13.58
Open circuit voltage (Voc/V)	52.20	52.35	52.55	52.75	52.95
Short-circuit current (Isc/A)	14.13	14.19	14.25	14.31	14.37
Module efficiency	22.8%	23.0%	23.2%	23.4%	23.6%

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

Rated output (Pmpp/Wp)	444.9	449.5	453.4	457.6	461.9
Rated voltage (Vmpp/V)	41.50	41.70	41.90	42.10	42.30
Rated current (Impp/A)	10.72	10.78	10.82	10.87	10.92
Open circuit voltage (Voc/V)	49.64	49.84	50.04	50.24	50.44
Short-circuit current (Isc/A)	11.41	11.46	11.51	11.56	11.61

DIFFERENT REAR POWER GAINS (600W)

Power gains	Pmpp/Wp	Vmpp/V	Impp/A	Voc/V	Isc/A
5%	630	44.54	14.14	52.55	14.96
15%	690	44.54	15.49	52.55	16.39
25%	750	44.54	16.84	52.55	17.81

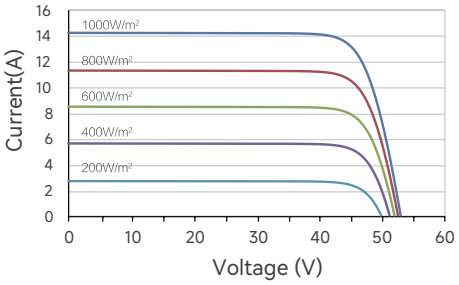
TEMPERATURE COEFFICIENT

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

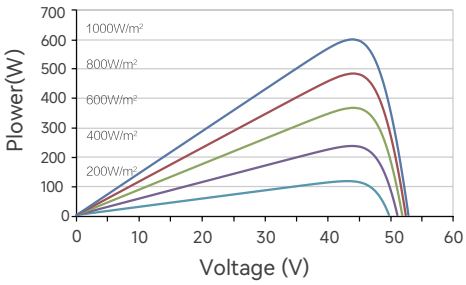
OPERATING PARAMETERS

Max. system voltage (IEC)	1500VDC
Number of diodes	3
Junction box protection rating	IP 68
Max. series fuse rating	30A
Operational temperature	-40~+85℃
Bifaciality rate	80±5%

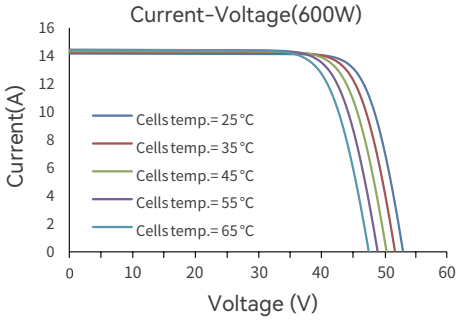
Current-Voltage(600W)



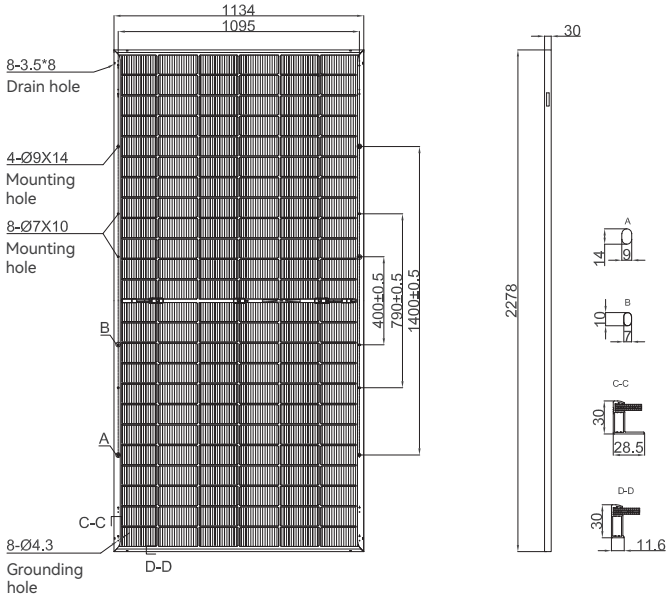
Power-Voltage(600W)



Current-Voltage(600W)



MECHANICAL PARAMETERS



Outer dimensions (L x W x H)	2278x 1134 x 30 mm
Cell	N type mono-crystalline
Number of cells	144 (6*24)
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 mm² / 12 AWG
① Maximum test mechanical load	5400Pa (front) /2400Pa(rear)
Connector type (IEC)	PV-HYC11xyz(standard)/MC4 EVO2(optional)
Module weight	32.1 kg
Packaging unit	36 pcs / box
Weight of packing unit	1215 kg / box
Modules per 40' HQ container	720 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 pratical testing. Power Measurement Tolerance ±3% under STC standard.