



# M10 SERIES

## DT144HBG 575~595W

N-type TOPCon Bifacial  
Double-Glass PV Module

### M10 series

Utilizing N-type TOPCon battery technology and integrating SMBB with half-cell module technology, these modules offer enhanced reliability and lower LID/ETID degradation.

### Product Features



Utilizing N-type TOPCon Multi-busbar (SMBB) cell technology to achieve lower resistance and effectively enhance product power output.



Enhanced reliability and lower LID (Light Induced Degradation) effects.



Superior temperature coefficient ensuring higher power generation in extreme temperature regions.



Adoption of 40.24mm ribbon to effectively reduce shading and improve module efficiency.



Half-cell technology for better mechanical load performance.



The entire module has passed certification for a front-side snow load of 5400Pa and a wind load of 2400Pa.

### Management System



ISO9001:2015

ISO14001:2015

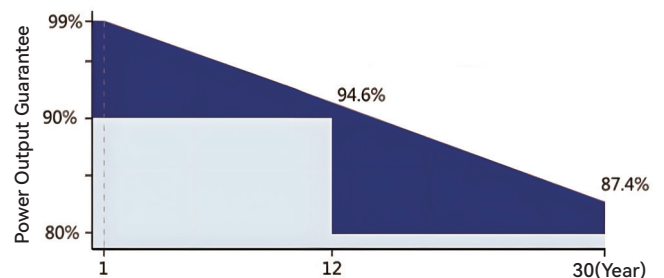
ISO45001:2018

### Product Certification



Our products are widely used in residential, commercial, and ground-mounted photovoltaic power generation systems. We adhere to strict quality inspection standards and continuously strive for zero-defect products to ensure that our solar modules deliver superior power output and high reliability.

### Product Warranty



**12-year** product quality and workmanship warranty

**30-year** linear power output warranty

**1%** first-year degradation, **0.4%** subsequent annual power degradation

## Electrical Parameters @ STC

Maximum Power	P <sub>max</sub> ( Wp )	575	580	585	590	595
Power Tolerance	( % )			0~+3		
Maximum Power Voltage	V <sub>mp</sub> ( V )	42.22	42.37	42.52	42.67	42.82
Maximum Power Current	I <sub>mp</sub> ( A )	13.62	13.69	13.76	13.83	13.90
Open Circuit Voltage	V <sub>oc</sub> ( V )	50.88	51.02	51.16	51.30	51.44
Short Circuit Current	I <sub>sc</sub> ( A )	14.39	14.47	14.55	14.63	14.71
Module Efficiency	( % )	22.26	22.45	22.65	22.84	23.03
Bifacial Factor Reference	( % )			80±5%		
5% P <sub>max</sub>	P <sub>max</sub> ( Wp )	604	609	614	620	625
5% Module Efficiency	( % )	23.37	23.57	23.78	23.98	24.18
15% P <sub>max</sub>	P <sub>max</sub> ( Wp )	661	667	673	679	684
15% Module Efficiency	( % )	25.60	25.82	26.04	26.27	26.49
25% P <sub>max</sub>	P <sub>max</sub> ( Wp )	719	725	731	738	744
25% Module Efficiency	( % )	27.82	28.07	28.31	28.55	28.79

STC: Irradiance 1000 W/m<sup>2</sup>, Module Temperature 25°C, Air Mass 1.5.

## Electrical Parameters @ NMOT

Maximum Power	P <sub>max</sub> ( Wp )	434	438	442	446	449
Maximum Power Voltage	V <sub>mp</sub> ( V )	39.49	39.63	39.77	39.91	40.05
Maximum Power Current	I <sub>mp</sub> ( A )	11.00	11.05	11.11	11.17	11.22
Open Circuit Voltage	V <sub>oc</sub> ( V )	48.43	48.57	48.70	48.83	48.97
Short Circuit Current	I <sub>sc</sub> ( A )	11.62	11.68	11.75	11.81	11.88

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

## Temperature Coefficients

Temperature Coefficient of Maximum Power (P <sub>max</sub> )	-0.29%/°C
Temperature Coefficient of Open Circuit Voltage (V <sub>oc</sub> )	-0.24%/°C
Temperature Coefficient of Short Circuit Current (I <sub>sc</sub> )	+0.04%/°C

## Mechanical Parameters

Cell Type	N-type TOPCon Mono 182×91mm
Number of Cells	144 ( 6×24 )
Module Dimensions (Length x Width x Height)	2278×1134×30mm
Module Weight	32kg
Frame Material	Anodized Aluminum Frame
Junction Box	Ip68
Cable Cross-Section/Length	4mm <sup>2</sup> /300mm

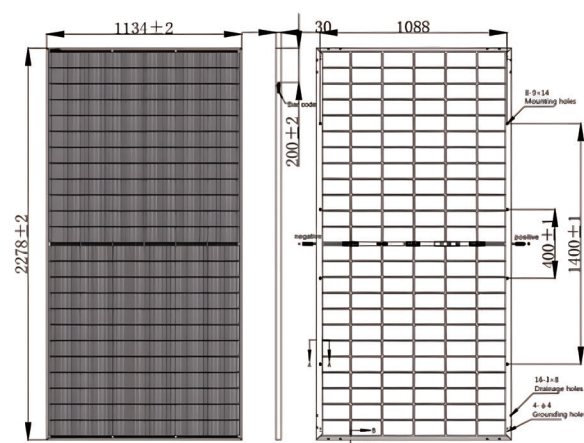
## Operating Conditions

Maximum System Voltage	1500V DC
Operating Temperature	-40~+85 °C
Maximum Wind Load / Snow Load	2400/5400 Pa
Maximum Protection Current	25A
Application Class	Class A
Fire Rating	Class B
Nominal Module Operating Temperature (NMOT)	42±3 °C

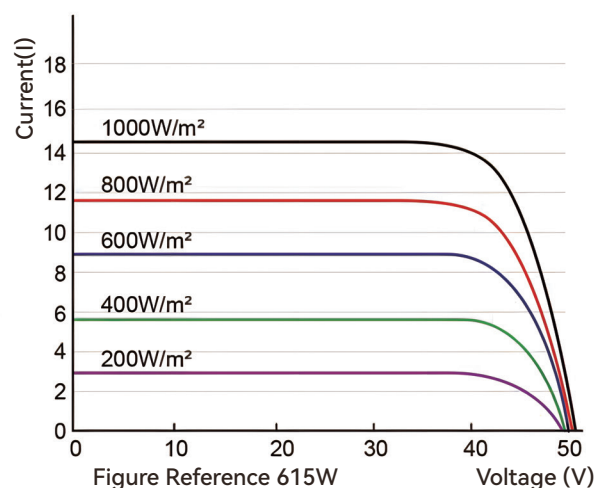
## Packaging Information

Single Package	36 pcs/pallet
17.5m / 13.5m / 40HQ	900 pcs / 792 pcs / 720 pcs

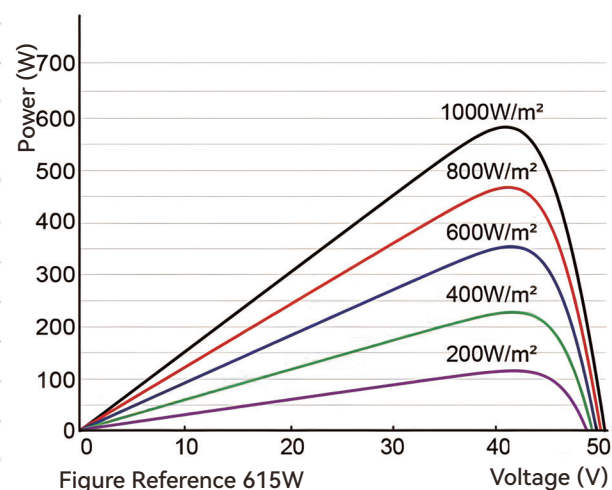
## Module Dimensions (mm)



## Current-Voltage Curve / I-V Curve



## Power-Voltage Curve / P-V Curve



\*Power measurement tolerance: ±3%

\*Product specifications are subject to change without prior notice.