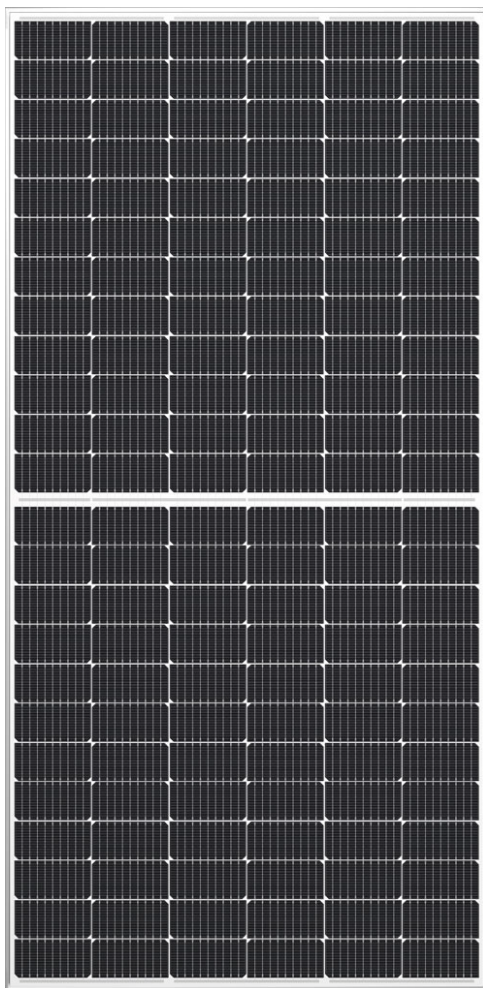


Beyondsun Solar Panels

DuDrive Series

TSHM-144HW



Nominal Power: 440-450Wp



Wind/Snow Load: 2400/5400Pa



Dimension: 2094×1038×35mm



Efficiency: Up to 20.70%

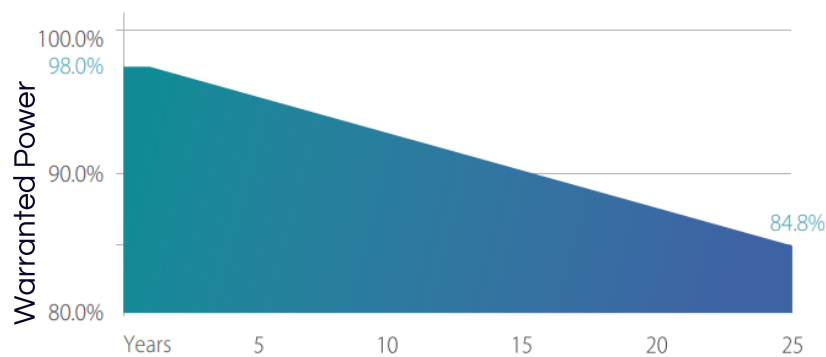


Maximum System Voltage: 1500 V



Weight: 26 kg

Industry Leading Warranty



Comprehensive Certificates



IEC 61215 / IEC 61730

ISO 9001: Quality Management System

ISO 14001: Environmental Management System

OHSAS 18001: Occupational Health and Safety

25 Years

Linear Performance Warranty

12 Years

Product Material & Workmanship Warranty

LLOYD'S

Product & Performance Insured by LLOYD'S



ELECTRICAL PARAMETERS @ STC*

Module Type	TSHM440-144HW	TSHM445-144HW	TSHM450-144HW
Max. Power Output Pmax (W)	440	445	450
Power Tolerance	0~+3%	0~+3%	0~+3%
Max. Power Voltage Vmp (V)	41.67	41.87	42.06
Max. Power Current Imp (A)	10.56	10.63	10.70
Open Circuit Voltage Voc (V)	50.05	50.26	50.43
Short Circuit Current Isc (A)	11.22	11.29	11.36
Module Efficiency (%)	20.24	20.47	20.70

*STC (Standard Test Condition): Irradiance 1000W/m², Cell Temperature 25 °C, Air Mass 1.5

ELECTRICAL PARAMETERS @ NMOT*

Max. Power Output Pmax (W)	331	334	338
Max. Power Voltage Vmp (V)	38.82	39.01	39.19
Max. Power Current Imp (A)	8.52	8.57	8.63
Open Circuit Voltage Voc (V)	47.57	47.77	47.93
Short Circuit Current Isc (A)	9.05	9.10	9.16

*NMOT (Nominal Module Operating Temperature), Irradiance of 800W/ m², Spectrum AM 1.5, Ambient Temperature 20°C, Wind Speed 1m/s

TEMPERATURE COEFFICIENTS

Temperature Coefficients of Pmp	-0.36%/°C
Temperature Coefficients of Voc	-0.29%/°C
Temperature Coefficients of Isc	+0.048 %/°C
NMOT	41°C±3°C

MECHANICAL PARAMETERS

Cell Type	Mono, 166x83mm
Cell Arrangement	144 pcs (2x(6x12))
Dimension (LxWxH)	2094x1038x35mm
Weight	26kg
Front Cover	3.2mm Tempered Glass
Frame	Anodized Aluminium Alloy
Junction Box	IP68, 3 bypass diodes
Cable	4mm ² solar cable, 350mm (customizable)
Connector	MC4 compatible

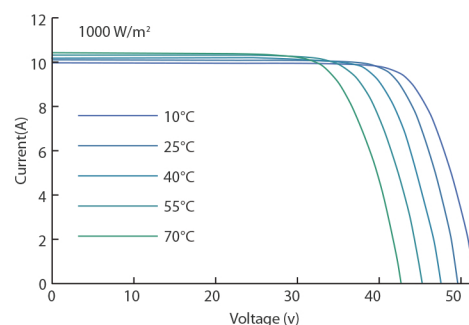
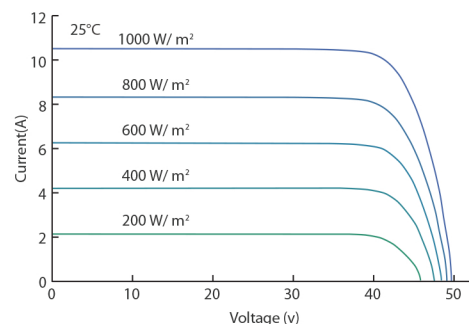
OPERATING PARAMETERS

Maximum System Voltage(V)	1500(DC)
Operating Temperature(°C)	-40~+85
Max. Wind Load / Snow Load(Pa)	2400/5400
Max. Over Current(A)	25
Application Class	Class A
Fire Rating	Class C

PACKAGE INFORMATION

Quantity / Pallet	30 pcs
Container 40'HQ	22 pallets, 660 pcs

I-V CURVES



TECHNICAL DRAWINGS

