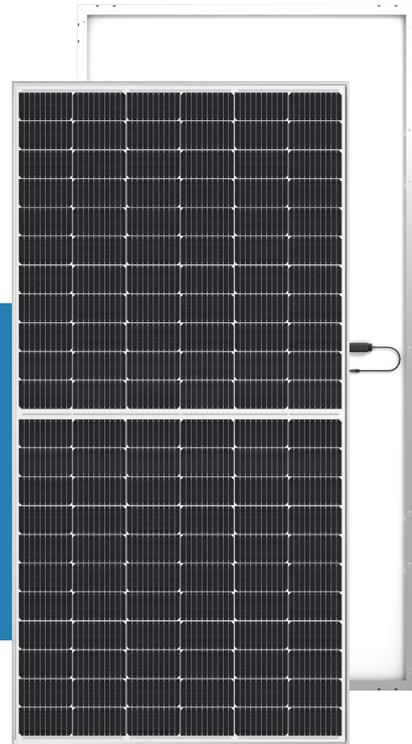


DuDrive Series TSHM-132HW TSHM-132W

High Efficiency Mono PERC Half-cell Solar Module (166)



ABOUT BEYONDSUN

Founded in 2008, Beyondsun is the world's leading PV manufacturer and one-stop solution provider. With multiple manufacturing bases and more than 8 branches around the world, our business covers cells, modules, aluminum frame and PV projects. With its advantages of continuous technological innovation, strong financial performance, and well-established global sales and service networks, Beyondsun has been highly recognized by its global partners. Until now, Beyondsun has distributed more than 8 GW PV products to over 30 countries all over the world. We are committed to collaborate with our partners in driving renewable energy together.



HIGHER MODULE EFFICIENCY

Brings 5-10W power gain due to half-cut production system



MORE ENERGY YIELD

Lower NMOT and better temperature coefficient by lower cell series resistance, helps boost energy yield



LOWER OPERATING TEMPERATURE, MORE RELIABLE

Lower operating temperature and hot spot temperature during the sunny day, making the module prevail during the sunny days



BETTER SHADING TOLERANCE

Thanks to paralleling circuit design, more power generated under shading condition and during morning & evening time



BETTER MICRO CRACK RESISTANCE

Minimize the impact by micro crack by limiting cell damage and potentially extending area by half-cut module architecture

THE IDEAL SOLUTION FOR



Ground-mounted projects



Commercial / industrial rooftop projects

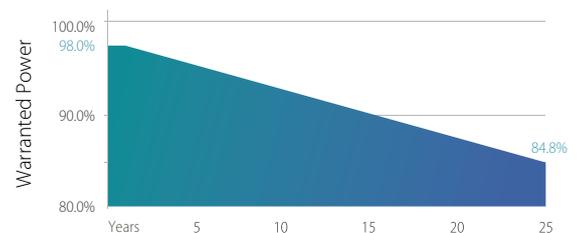
QUALIFICATIONS & CERTIFICATES

- IEC 61215 / IEC 61730
- ISO 9001: Quality Management System
- ISO 14001: Environment Management System
- OHSAS 18001: Occupational Health and Safety



INDUSTRY LEADING WARRANTY

- 25-Year** Linear Performance Warranty
- 12-Year** Product Material & Workmanship Warranty
- LLOYD'S** Product & Performance Insured by LLOYD'S



DuDrive Series TSHM-132HW/TSHM-132W

ELECTRICAL PARAMETERS @ STC*

Module Type	TSHM400-132HW TSHM400-132W	TSHM405-132HW TSHM405-132W	TSHM410-132HW TSHM410-132W	TSHM415-132HW TSHM415-132W	TSHM420-132HW TSHM420-132W
Max. Power Output Pmax (W)	400	405	410	415	420
Power Tolerance	0~+3%	0~+3%	0~+3%	0~+3%	0~+3%
Max. Power Voltage Vmp (V)	38.03	38.25	38.47	38.65	38.86
Max. Power Current Imp (A)	10.52	10.59	10.66	10.74	10.81
Open Circuit Voltage Voc (V)	45.72	45.93	46.14	46.35	46.56
Short Circuit Current Isc (A)	11.18	11.25	11.32	11.40	11.47
Module Efficiency (%)	20.02	20.27	20.52	20.77	21.02

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

ELECTRICAL PARAMETERS @ NMOT*

Max. Power Output Pmax (W)	300	304	308	312	316
Max. Power Voltage Vmp (V)	35.38	35.60	35.82	36.03	36.24
Max. Power Current Imp (A)	8.48	8.54	8.60	8.66	8.72
Open Circuit Voltage Voc (V)	43.47	43.67	43.87	44.07	44.27
Short Circuit Current Isc (A)	9.02	9.08	9.14	9.20	9.26

*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, 166×83mm
Cell Arrangement	132 pcs (2×(6×11))
Dimension (L×W×H)	1925×1038×35mm
Weight	23.5kg
Front Cover	3.2mm Tempered Glass
Frame	Anodized Aluminium Alloy
Junction Box	IP68, 3 bypass diodes, FT50xy with 25A
Cable	4mm ² solar cable, 350mm (customizable)
Connector	Zhejiang Renhe 05-8 for 1500V and 05-6 for 1000V

OPERATING PARAMETERS

Maximum System Voltage(V)	1500/1000(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	24 pallets, 720 pcs

*Power measurement tolerance: ±3%

*Voc measurement tolerance: ±3%

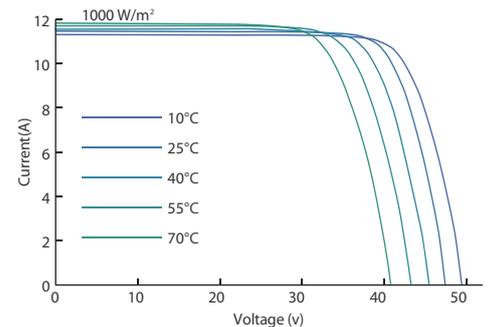
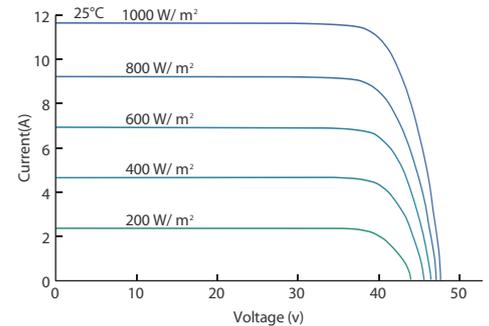
*Isc measurement tolerance: ±4%

*Power Sorting: 5W

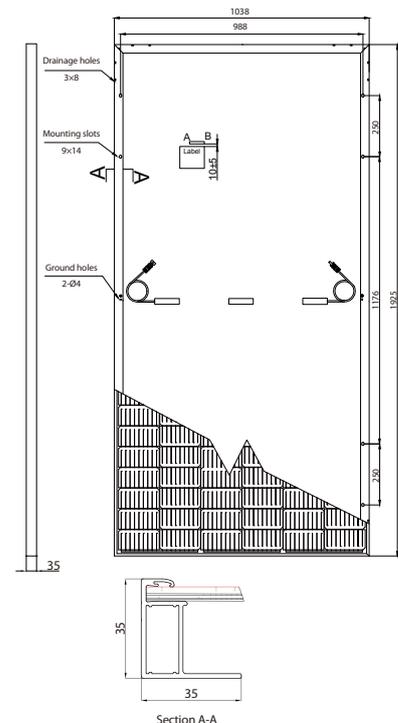
*Modules Shipped to AU are made in China

The specification and key features described in this datasheet may deviate slightly and are not guaranteed. Due to ongoing innovation, R&D enhancement, Zhejiang Beyondsun Green Energy Technology Co., Ltd. reserves the right to make any adjustment to the information described herein at any time without notice. Please always obtain the most recent version of the datasheet which shall be duly incorporated into the binding contract made by the parties governing all transactions related to the purchase and sale of the products described herein.

I-V CURVES



TECHNICAL DRAWINGS



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