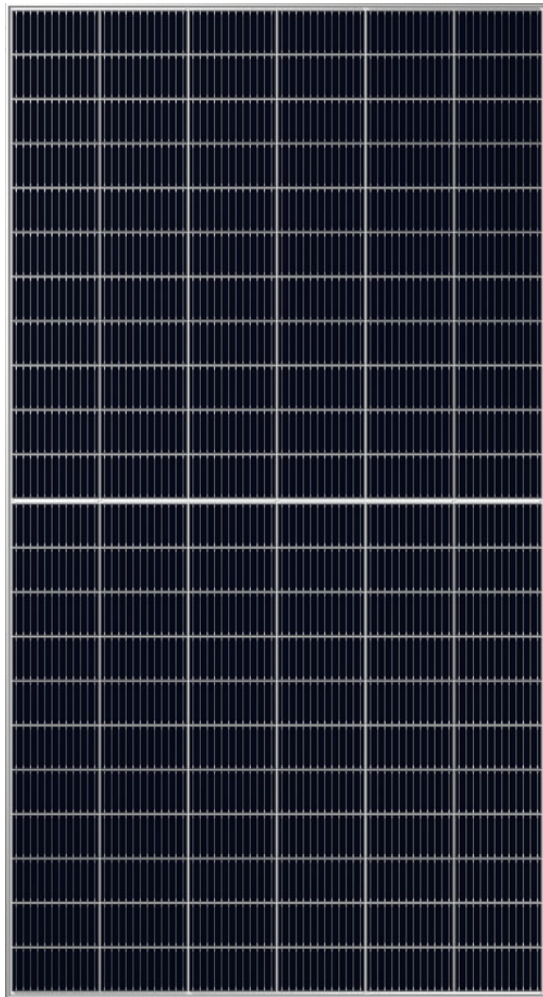


# Beyondsun Solar Panels

## DuDrive UltraMax Series

### TSHM-132HS



Nominal Power: 645-655 Wp



Wind/Snow Load: 2400/5400Pa



Dimension: 2384x1303x35 mm



Efficiency: Up to 21.10%

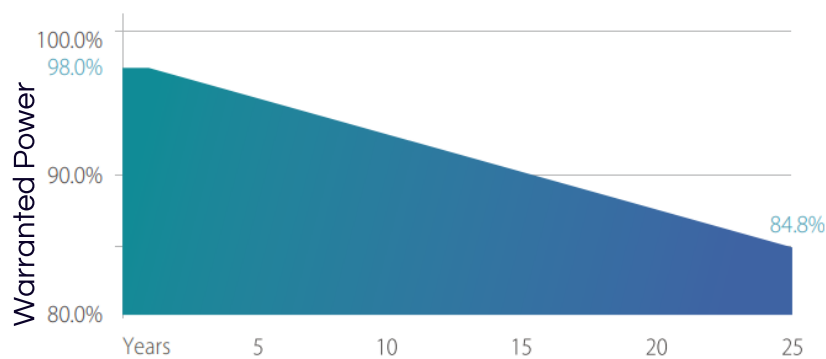


Maximum System Voltage: 1500 V



Weight: 34.5 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	TSHM645-132HS	TSHM650-132HS	TSHM655-132HS
Max. Power Output Pmax (W)	645	650	655
Power Tolerance	0~+3%	0~+3%	0~+3%
Max. Power Voltage Vmp (V)	37.72	37.93	38.13
Max. Power Current Imp (A)	17.10	17.14	17.18
Open Circuit Voltage Voc (V)	44.82	45.02	45.22
Short Circuit Current Isc (A)	18.34	18.38	18.42
Module Efficiency (%)	20.76%	20.92%	21.09%

\*STC (Standard Test Condition): Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25 °C, Air Mass 1.5

### ELECTRICAL PARAMETERS @ NMOT\*

Max. Power Output Pmax (W)	484	488	492
Max. Power Voltage Vmp (V)	35.10	35.32	35.50
Max. Power Current Imp (A)	13.79	13.82	13.86
Open Circuit Voltage Voc (V)	42.61	42.81	42.99
Short Circuit Current Isc (A)	14.79	14.83	14.86

\*NMOT (Nominal Module Operating Temperature), Irradiance of 800W/ m<sup>2</sup>, 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	42°C±3°C

### MECHANICAL PARAMETERS

Cell Type	Mono, 210×105mm
Cell Arrangement	132pcs 2x(6×11)
Dimension (L×W×H)	2384×1303×35mm
Weight	34.5kg
Front Cover	3.2mm Tempered Glass
Frame	Anodized Aluminium Alloy
Junction Box	IP68, 3 Bypass Diodes
Cable	4mm <sup>2</sup>
Connector	PV Connector

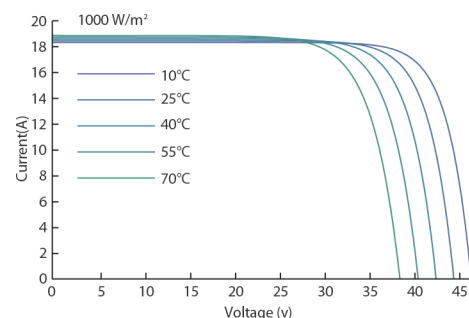
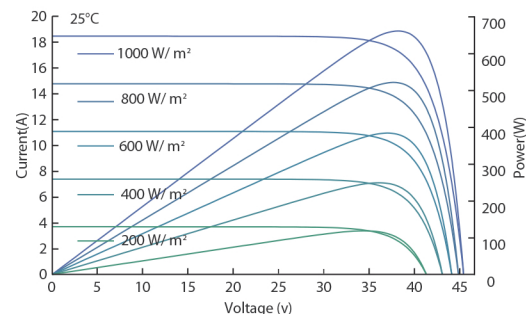
### OPERATING PARAMETERS

Maximum System Voltage(V)	1500V
Operating Temperature(°C)	-40°C ~ +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	31 pcs
Container 40'HQ	17 pallets, 527 pcs

### I-V CURVES



### TECHNICAL DRAWINGS

