



# DAKAR

Solar Tubular Battery

## Heterojunction Hyper-ion Series Bifacial Module

**RSM132-8-700-725BHDG**

### Hyper-link Interconnection

Patented Technology

**700-725 Wp**

Power Output Range

**23.3%**

Higher Efficiency

**0~+3%**

Positive Power Tolerance



The module picture is for reference only



No B-O caused LID



Ultra-high bifacial factor



Ultra-high power generation, ultra-low carbon emission



Most stable power temperature coefficient



Lead technology of metallization process



Excellent anti-LID & anti-PID performance

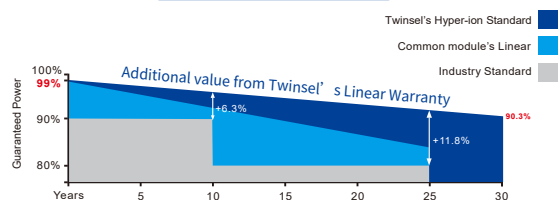


\* As there are different certification requirements in different markets, please contact your local Risen Energy sales representative for the specific certificates applicable to the products in the region in which the products are to be used.

### LINEAR PERFORMANCE WARRANTY

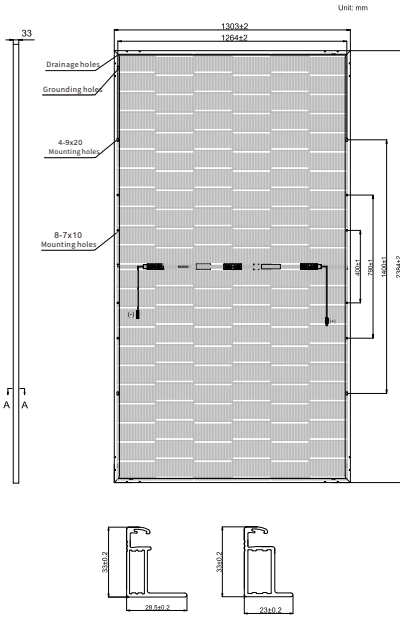
15 years product warranty / 30 years linear power warranty

0.3% Annual Degradation over 30 years



\*Please check the valid version of Limited Product Warranty which is officially released by Twinsel

### Dimensions of PV Module



### ELECTRICAL DATA (STC)

Model Type	TSM132-8-700-725BHDG					
Rated Power in Watts-Pmax(Wp)	700	705	710	715	720	725
Open Circuit Voltage-Voc(V)	49.83	49.92	50.01	50.09	50.18	50.26
Short Circuit Current-Isc(A)	17.82	17.91	18.00	18.10	18.19	18.29
Maximum Power Voltage-Vmpp(V)	41.78	41.86	41.93	42.00	42.08	42.14
Maximum Power Current-Imp(A)	16.77	16.86	16.95	17.05	17.13	17.23
Module Efficiency (%) *	22.5	22.7	22.9	23.0	23.2	23.3

STC: Irradiance 1000 W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM1.5 according to EN 60904-3.  
Bifacial factor: 85±10(%) \* Module Efficiency (%): Rounding to the nearest number

### Electrical characteristics with 10% rear side power gain

Total Equivalent power -Pmax (Wp)	770	776	781	787	792	798
Open Circuit Voltage-Voc(V)	49.83	49.92	50.01	50.09	50.18	50.26
Short Circuit Current-Isc(A)	19.60	19.70	19.80	19.91	20.01	20.12
Maximum Power Voltage-Vmpp(V)	41.78	41.86	41.93	42.00	42.08	42.14
Maximum Power Current-Imp(A)	18.44	18.55	18.65	18.76	18.85	18.95

Rear side power gain: The additional gain from the rear side compared to the power of the front side at the standard test condition. It depends on mounting (structure, height, tilt angle etc.) and albedo of the ground.

### ELECTRICAL DATA (NMOT)

Model Type	TSM132-8-700-725BHDG					
Maximum Power-Pmax (Wp)	534.5	538.5	542.3	546.2	550.1	553.9
Open Circuit Voltage-Voc (V)	46.69	46.78	46.86	46.93	47.02	47.09
Short Circuit Current-Isc (A)	14.61	14.68	14.76	14.84	14.92	15.00
Maximum Power Voltage-Vmpp (V)	39.07	39.14	39.21	39.27	39.34	39.40
Maximum Power Current-Imp (A)	13.68	13.76	13.83	13.91	13.98	14.06

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

### MECHANICAL DATA


Solar cells	n-type HJT
Cell configuration	132 cells (6×11×6×11)
Module dimensions	2384×1303×33mm
Weight	37.5kg
Superstrate	High Transmission, AR Coated Heat Strengthened Glass
Substrate	Heat Strengthened Glass
Frame	Anodized Aluminium Alloy, Silver Color
J-Box	Potted, IP68, 1500VDC, 3 Schottky bypass diodes
Cables	4.0mm <sup>2</sup> , Positive(+)350mm, Negative(-)230mm (Connector Included), or customized length
Connector	Risen Twinsel PV-SY02, IP68

### TEMPERATURE & MAXIMUM RATINGS

Nominal Module Operating Temperature (NMOT)	43°C ± 2°C
Temperature Coefficient of Voc	-0.22%/°C
Temperature Coefficient of Isc	0.047%/°C
Temperature Coefficient of Pmax	-0.24%/°C
Operational Temperature	-40°C ~ +85°C
Maximum System Voltage	1500VDC
Max Series Fuse Rating	35A
Limiting Reverse Current	35A

### PACKAGING CONFIGURATION

	40ft(HQ)
Number of modules per container	594
Number of modules per pallet	33
Number of pallets per container	18
Packaging box dimensions (LxWxH) in mm	1320×1125×2520
Box gross weight[kg]	1289

	<b>Rated Maximum Power(Pmax)</b> 700W <b>Voltage at Pmax</b> 41.78V <b>Current at Pmax</b> 16.77A <b>Open-Circuit Voltage(Voc)</b> 49.83V <b>Short-Circuit Current(Isc)</b> 17.82A <b>Open Circuit Voltage tolerance</b> ±3% <b>Short Circuit Current tolerance</b> ±4%	<b>Maximum System Voltage</b> DC1500V <b>Dimensions</b> 2384*1303*33mm <b>Weight</b> 37.5kg <b>Safety class</b> Class II <b>Maximum overcurrent protect rating</b> 35A
	<b>Model Type:</b> TSM132-8-700BHDG <b>STC:</b> AM1.5 E=1000W/m <sup>2</sup> Tc=25°C <b>Power Sorting:</b> 0~4.99W <b>Bifaciality:</b> 85%	<b>HEZI DARYA GENERAL TRADING LTD.</b> Add: ERBIL - IRAQ Web: www.dakarenergy.com Mobile: +9647727131818 Grade A Made in China
