



GOLDEN SOLAR

**Make Solar Energy More Efficient!**

# JGDN144

## HJT Bifacial Module



Based on 182 mm wafer, N-type HJT half-cut cells



Module power up to 590W; module efficiency up to 22.80%



Use super MBB half-cut cell technology to minimize micro-crack impacts, so no cutting loss on modules



Power output from the front is 4.1% more than that of TOPCon module, and power output from the back is 14.76% more than that of TOPCon module



No Boron-Oxygen-Induced Degradation (BO-LID), excellent anti-LeTID & anti-PID performance. Low power degradation, and high energy yield



Bifaciality up to 90%

# 570W~590W



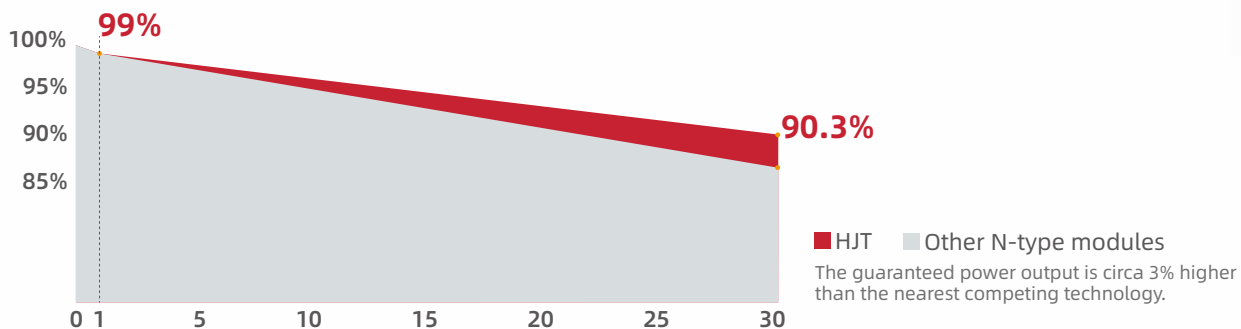
Size > 2 m<sup>2</sup>



15-Year Warranty for Materials and Processing



30-Year Warranty for Extra Linear Power Output



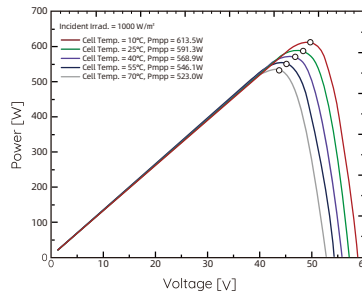
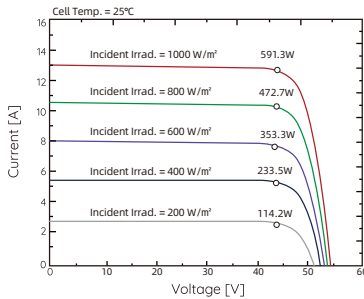
**STC** STC (Standard Test Conditions): Irradiance 1000 W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass 1.5.

Model	JGDN144-570	JGDN144-575	JGDN144-580	JGDN144-585	JGDN144-590
Power Tolerance (0~+5W)	STC	STC	STC	STC	STC
Pmax (W)	570	575	580	585	590
Vmp (V)	44.82	45.02	45.22	45.42	45.62
Imp (A)	12.72	12.77	12.83	12.88	12.93
Voc (V)	54.31	54.41	54.51	54.61	54.71
Isc (A)	13.15	13.20	13.25	13.30	13.35
Panel Efficiency (%)	22.10	22.30	22.50	22.60	22.80

**BSTC** BSTC (Bifacial Standard Test Conditions): Front Side Irradiation 1000 W/m<sup>2</sup>, Back Side Reflection Irradiation 135 W/m<sup>2</sup>, Air Mass 1.5, Ambient Temperature 25°C.

Model	JGDN144-570	JGDN144-575	JGDN144-580	JGDN144-585	JGDN144-590
Power Tolerance (0~+5W)	BSTC	BSTC	BSTC	BSTC	BSTC
Pmax (W)	630	635	640	645	650
Vmp (V)	44.82	45.02	45.22	45.42	45.62
Imp (A)	14.06	14.10	14.15	14.20	14.25
Voc (V)	54.31	54.41	54.51	54.61	54.71
Isc (A)	14.62	14.67	14.72	14.77	14.82

### Electrical Curves (590W):



### Mechanical Specification

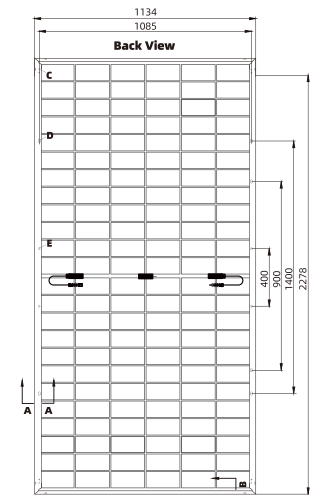
Solar Cell Type	144 half-cut, N-type, HJT cells
Module Dimensions	2278x1134x30 mm
Module Weight	31.8 kg
Front Side	Anti-reflective coated solar glass, 2.0 mm thick
Back Side	Solar glass, 2.0 mm thick
Frame	Anodized aluminum
Junction Box	3 bypass diodes, IP68 rated to IEC 62790
Cable	4 mm <sup>2</sup> PV cable, 0.3 m long (lengths can be customized), complies with EN 50618
Connector	MC4 EVO2 compatible

### Properties of System Design

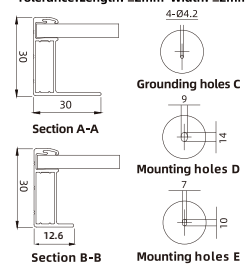
Maximum System Voltage	1500V
Maximum Series Fuse Rating	25A
Max. Test Load +/- (incl. Safety Factor of 1.5)	5400/2400Pa
Fire Class	IEC Class C, UL Class C, UNI Class 1
Protection Class	Class II
Operating Temperature	-40 to + 85°C

### Temperature Coefficients

Temperature Coefficient of Isc	+0.033 %/°C
Temperature Coefficient of Voc	-0.243 %/°C
Temperature Coefficient of Pmax	-0.254 %/°C
Nominal Module Operating Temperature (NMOT)	43 ± 3/ °C



Unit:mm  
Tolerance:Length: ±2mm Width: ±2mm

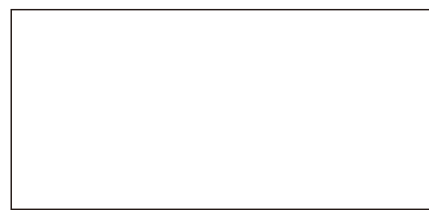


### Comprehensive Certificates

- IEC 61215, IEC 61730
- UNI 9177, UL 790, MCS
- ISO 9001, ISO 14001, ISO 45001

### Packing

36 pcs/pallet, 720 pcs/40'HQ container



\*The specifications and key features contained in this datasheet may deviate slightly from our actual products due to the ongoing innovation and product enhancement. Golden Solar reserves the right to make necessary adjustments to the information described herein at any time without further notice.