



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



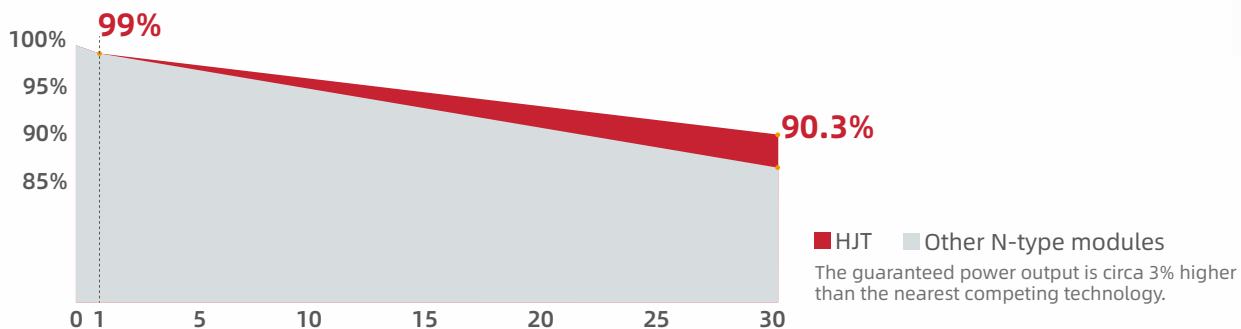
Size > 2 m<sup>2</sup>



15-Year Warranty for Materials and Processing



30-Year Warranty for Extra Linear Power Output



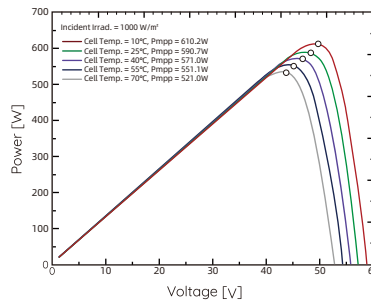
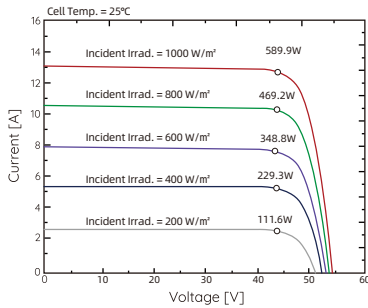
**STC** STC (Standard Test Conditions): Irradiance 1000 W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass 1.5.

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 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 according to IEC 61730	CLASS C (UL 790)
Operating Temperature	-40 to +85°C

### Temperature Coefficients

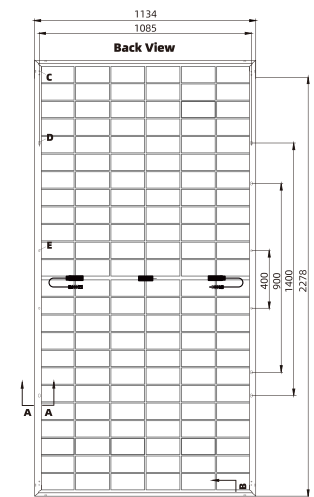
Temperature Coefficient of Isc	+0.033 %/°C
Temperature Coefficient of Voc	-0.243 %/°C
Temperature Coefficient of Pmax	-0.243 %/°C
Nominal Module Operating Temperature (NMOT)	43 ± 3/ °C

### Comprehensive Certificates

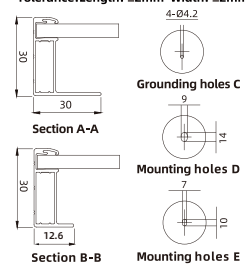
- IEC 61215, IEC 61730
- ISO 9001: 2015 Quality management systems
- ISO 14001: 2015 Environmental management systems
- ISO 45001: 2018 Occupational health and safety management systems

### Packing

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



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



\*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.